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*Date*: DEC 15 2015
*Refer To*: ADESH-15-170
*LAUR*: 15-29321; 15-29322
*Locates Action No.*: U1600209

John Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

**Subject: Submittal of the Response to the Disapproval for the Investigation Report for the Technical Area 57 Aggregate Area (Fenton Hill) and Revision 1 of the Report**

Dear Mr. Kieling:

Enclosed please find two hard copies with electronic files of the Response to the Disapproval for the Investigation Report for the Technical Area 57 Aggregate Area (Fenton Hill) and Revision 1 of the report.

The U.S. Department of Energy Environmental Management and Los Alamos National Security, LLC, respectfully request a meeting with the New Mexico Environment Department to further discuss the issues identified in Specific Comment 4 of the disapproval of the Investigation Report for Technical Area 57 Aggregate Area (Fenton Hill).

If you have any questions, please contact Todd Haagenstad at (505) 665-2936 (hth@lanl.gov) or Arturo Duran at (505) 665-7772 (arturo.duran@em.doe.gov).

Sincerely,

Alison M. Dorries, Division Leader
Environmental Protection Division
Los Alamos National Laboratory

Sincerely,

David S. Rhodes, Supervisor
Environmental Management
Los Alamos Field Office

37346

AD/DR/BR/TH:sm

Enclosures: Two hard copies with electronic files:
(1) Response to the Disapproval for Investigation Report for the Technical Area 57 Aggregate Area (Fenton Hill) (EP2015-0202)
(2) Cross-reference table of NMED NOD comments and revisions to the report
(3) Investigation Report for the Technical Area 57 Aggregate Area (Fenton Hill), Revision 1 (EP2015-0203)
(4) An electronic copy of the redline-strikeout version of the report that includes all changes and edits to the document

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**Response to the Disapproval for the Investigation Report for Technical Area 57 Aggregate Area (Fenton Hill), Los Alamos National Laboratory, EPA ID No. NM0890010515, HWB-LANL-15-007, Dated October 28, 2015**

## INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. The comments are divided into general and specific categories, as presented in the notice of disapproval. Los Alamos National Laboratory's (LANL's or the Laboratory's) responses follow each NMED comment.

## GENERAL COMMENTS

### NMED Comment

1. *The last sentence of Section 5.1 states that "Organic chemicals that are clearly present from sources other than releases from a site (e.g., polycyclic aromatic hydrocarbons) may be eliminated as COPCs [constituents of potential concern]." While the statement is true, the exclusion of organic COPCs may be considered only if sufficient evidence (e.g., analytical data, trend analysis) and justification is provided to demonstrate that the contamination is not related to site activities and is from an off-site source. If it is determined and approved by NMED that an organic compound may be dropped as a COPC, the potential risks must still be addressed in the uncertainty section of the risk assessment. No response to this comment is necessary.*

### LANL Response

1. Comment noted.

### NMED Comment

2. *Population area use factors (PAUF) were used for refining the ecological risks. As noted in Tables G-5.5-1 and G-5.5-4, home ranges are cited (EPA 1993). However, the home ranges listed in these tables are not consistent with either the home ranges listed in EPA 1993 or the NMED guidance (Volume II). For example, the home range for the deer mouse is listed in the tables as 0.077 hectares (0.19 acres). The NMED guidance lists the home range for the deer mouse as 0.3 acres. None of the mean ranges listed in EPA 1993 are equivalent to the ranges listed in the Tables G-5.5-1 and G-5.5-4. Please clarify how the home ranges were derived and revise the IR for consistency with the NMED guidance.*

**LANL Response**

2. The Laboratory used the home range data presented in U.S. Environmental Protection Agency (EPA) guidance (EPA 1993, 059384) for the kestrel, robin, deer mouse, shrew, cottontail, and red fox. Table 3.3-1, Measures Required for the Wildlife Exposure Model, of the Laboratory's screening level ecological risk assessment (SLERA) methods document (LANL 2012, 226715) presents how the EPA data were used to derive the home ranges for each receptor. Below are the excerpted rows from the table for each receptor.

| | | | | | |
|---|---|---|---|---|---|
| American kestrel | Home range | 106 | ha | EPA 1993, 059384 | Average of all HR data for woods, forests, and agricultural areas |
| American robin | Home range | 0.42 | ha | EPA 1993, 059384, p. 2-199 | HR data represent average territory size in an open, semiurban environment |
| Deer mouse | Home range | 0.077 | ha | EPA 1993, 059384, p. 2-298 | Average of data from representative environments |
| Desert cottontail | Home range | 3.1 | ha | EPA 1993, 059384, p. 2-357 | Average of all HR data for a woodlot and for mixed habitats (used eastern cottontail as surrogate) |
| Montane shrew | Home range | 0.39 | ha | EPA 1993, 059384, p. 2-214 | Reported average HR for one environment. |
| Red fox | Home range | 1038 | ha | EPA 1993, 059384, p. 2-226 | Average of all HR data over a variety of unspecified environments |

The SLERA methods document referenced in the investigation report has been approved by NMED (2013, 521921) and the approach used to assign home ranges is the same as in the previous approved version of the SLERA methods document (LANL 2004, 087630). As a result, the approach used to assign home ranges for this investigation report is identical to the approach used in all other investigation reports previously submitted to and approved by NMED under the Compliance Order on Consent (Consent Order). No revision to the investigation report is necessary.

**NMED Comment**

3. *For the vapor intrusion calculations, the Johnson and Ettinger model appears to be applying an out of date inhalation reference concentration ($RfC_i$) for trichloroethene. The output files list an $RfC_i$ of 4.0E-02 milligrams per cubic meter ($mg/m^3$), while Integrated Risk Information System (IRIS) lists the $RfC_i$ as 2.0E-03 $mg/m^3$. Please revise the Johnson and Ettinger calculations accordingly.*

**LANL Response**

3. The Johnson and Ettinger model spreadsheets for trichloroethene have been revised to include the current reference concentration ($RfC_i$) of 0.002 $mg/m^3$ (Attachment G-2 on CD). The revised vapor-intrusion screening values have been included in Table G-4.3-1 for Area of Concern (AOC) 57-006 and Tables G-4.3-2 and G-4.3-3 for AOC 57-007. The text in sections G-4.3.1 and G-4.3-2 has also been revised accordingly.

## SPECIFIC COMMENTS

**NMED Comment**

***4. Section 1.1, General Site Information, page 1:***

***Permittees Statement:*** *"The 5 AOCs [Areas of Concern] used to manage geothermal exploration wastes were not subject to regulation under the Resource Conservation and Recovery Act (RCRA). These sites were closed under a discharge plan issued by the New Mexico Oil Conservation Division (NMOCD). Following termination of the discharge plan by NMOCD, no additional corrective actions are required for NMOCD-regulated sites and activities."*

***NMED Comment:*** *NMED acknowledges that solid waste associated with the exploration or production of geothermal energy is not considered hazardous because of the exemption provided at 40 CFR 261.4.b.5. However, release of the hazardous constituents to the environment is not exempt from RCRA requirements. NMOCD terminated the discharge plan GW-031 on August 29, 2003. These 5 AOCs located at TA-57 (i.e., AOC 57-001(b), AOC 57-001(c), AOC 57-002, AOC 57-004(a), and AOC 57-004(b)) were added on Table K-1, Appendix K of the Permittees' RCRA Permit in 2010 when the permit was renewed. The justification for adding these sites to the Permit was provided in the Factsheet issued with the public notice. The Permittees did not provide comments related to these sites during the public comment period indicating concurrence with listing of these sites in the Permit.*

*The Discharge Plan GW-031 was associated with 1-MG service pond (AOC 57-004(a)) and removal of the EE-2A well head. The February 14, 2003 letter from OCD to the Permittees states that "[N]MOCD approval does not relieve Los Alamos National Laboratory of responsibility for compliance with other federal, state, or local laws and/or regulations".*

*A RCRA Facility Investigation (RFI) Report for four of these sites was submitted to NMED in April, 1996. NMED could not locate any document that indicates these sites were approved for corrective action complete by either NMED or the U.S. Environmental Protection Agency (EPA). Based on the results of the investigations, the RFI Report proposed Phase II investigations for AOC 57-001(b) and a Voluntary Corrective Action (VCA) for AOC 57-002. No documents regarding these additional activities are included in NMED's Administrative Record. In addition, the ecological risk assessments were deferred at TA-57 until the sites could be assessed through the new Ecological Exposure Unit (Ecozone) approach. Please clarify whether the Phase II RFI, the VCA, and ecological risk assessments have been conducted for these sites. Pending evaluation of the information in the above-referenced documents, these sites will remain on the Permit until justification is provided that corrective action is complete at these sites and the sites do not pose unacceptable risk to the human health and the environment.*

*On a site visit on September 9, 2015, NMED staff noticed that the Milagro Pond (AOC 57-004(b)), the fifth AOC, still contains water and has not been closed. The site needs to be investigated, remediated as necessary, and confirmatory samples must be collected to demonstrate that corrective action is complete and the site does not pose unacceptable risk to the human health and the environment.*

**LANL Response**

4. No investigation or remediation activities were conducted at the Fenton Hill site between submittal of the 1996 Resource Conservation and Recovery Act facility investigation (RFI) report and execution of the 2014 investigation. Therefore, the Phase II RFI, voluntary corrective action, and ecological risk assessment referenced in NMED's comment were not conducted. As discussed at the meeting following the September 9, 2015, site visit, the U.S. Department of Energy (DOE)/National Nuclear Security Administration are currently coordinating decommissioning of the Milagro Pond, including the collection of confirmation samples, with the U.S. Forest Service. Confirmation sampling results will be used to determine whether further actions are needed following decommissioning of the pond. Finally, DOE and Los Alamos National Security, LLC, request an opportunity to meet with NMED to fully discuss these five AOCs before additional actions are implemented under the current regulatory framework.

**NMED Comment**

***5. Section 6.3.3, Summary of Previous Investigations, page 21:***

*It is not clear from the text whether the drainline from the trailer to the leach field that was located in 1994 was removed or left in place. The investigation work plan proposed to collect samples beneath the drainline from three depth intervals. Deviations from the work plan (Appendix B, Section B-9.0, page B-5) indicate that the drainline could not be located and samples were collected from 0.0-1.0 feet below ground surface (ft bgs) instead of 0.0-1.0 feet beneath the drainline, as proposed in the work plan. Please provide information on the depth at which the drainline was located to ensure that the samples collected from three depth intervals targeted the potential contamination beneath the drainline.*

**LANL Response**

5. The 1994 RFI (LANL 1996, 053801) found and exposed the drainline leading from the trailer to the leach field at AOC 57-007. According to the RFI report, during the removal of the trailer, the end of the drainline leading to the leach field was exposed. A bobcat with a front-end loader as well as hand excavation was used to expose the line in an effort to locate the leach field. The leach field was found to be only 1.0−2.0 ft below the ground surface (bgs) and the RFI sample was collected at "the 0- to 1-ft depth from the area beneath the end of the drainline" (i.e., 0.0–1.0 ft below the end of the drainline). Because the bottom of the drainline would be located at the top of the leach field, the bottom of the drainline appears to have been at a depth of 1.0 ft bgs.

   In 2014, potholing was undertaken to locate the drainline before sampling was performed at locations 57-4011, 57-4012, and 57-4013 (the investigation work plan proposed field locations 7-1, 7-2, and 7-3, respectively), which were along the expected alignment of the drainline as determined during the 1994 RFI. The drainline could not be located in 2014, indicating it had been removed at some point, and bedrock was encountered at about 2 ft bgs at all three locations. Location 57-4012 was moved from the original proposed location by approximately 5 ft downslope/downgradient of the marked existing utility lines. It was necessary to move this sampling location to provide clearance from the utility lines, as required by the excavation permit. At locations 57-4011 and 57-4013, fill material was encountered from 0.0–1.0 ft bgs, but no fill was encountered at any depth at the new location 57-4012, where native soil was encountered from the surface to the top of bedrock. Based on the presence of fill at 0.0–1.0 ft bgs at two locations (used as a bed to lay the drainline), the native soil found at 0.0–1.0 ft bgs at new location 57-4012 (i.e., indirect evidence that locations 57-4011 and 57-4013 were

within the footprint of the former drainline), and the information from the RFI report, it was concluded that the former drainline depth was no more than 1 ft bgs.

Samples were collected in 2014 at location 57-4011 from 0.0–1.0 ft, 1.0–2.0 ft, and 3.0–4.0 ft bgs; at location 57-4012 from 0.0–1.0 ft, 1.25–2.25 ft, and 4.25–5.25 ft bgs; and at location 57-4013 from 0.0–1.0 ft, 1.0–2.0 ft, and 4.0–5.0 ft bgs. The investigation work plan specified collection of samples at intervals of 0–1 ft below the drainline, 1 ft above tuff, and 2–3 ft into tuff. Based on a drainline depth of 1 ft bgs and the depth to tuff of 2 ft bgs, the sampling interval of 1.0–2.0 ft bgs encompasses both the intervals 0–1 ft below the drainline and 1 ft above tuff. Rather than collect samples from only two intervals, the uppermost sample interval was revised to be from 0.0–1.0 ft bgs to encompass the interval of the drainline. In addition, the sampling intervals represent a near-continuous profile from the surface to approximately 1 ft above the tuff (contact at approximately 2 ft bgs) and 2.0–3.0 ft into tuff, fulfilling the sampling proposed in the investigation work plan to define vertical extent at locations 57-4011, 57-4012, and 57-4013. Although location 57-4012 was moved from the proposed location for health and safety reasons, it is still close enough to the location of the former drainline to characterize potential releases.

The explanation of sample depths in section 6.3.4.1 and in Appendix B, section B-9.0, Deviations from the Work Plan, have been revised for clarity.

**NMED Comment**

***6. Appendix G, Section G-2.3, Determination of COPCs, page G-2:***

*An exposure interval of 0-5 ft bgs was applied for the ecological risk screenings. In accordance with Section 3.3 of Volume II of the 2015 NMED Risk Assessment Guidance for Investigations and Remediation, the maximum detected concentration from the 0-10 feet bgs should be used as the exposure interval for the initial Tier 1 ecological screening assessment. As a result of using the smaller exposure interval, risks were not estimated for the following:*

- *AOC 57-006: barium, chromium, copper, selenium, and bis(2-ethylhexyl)phthalate, and*
- *AOC 57-007: perchlorate.*

*In addition, as a less conservative exposure interval was applied in the screening assessments, the initial hazards were underestimated for the following constituents:*

- *AOC 57-006: zinc (NMED notes that antimony and trichloroethene were only minimally underestimated and the difference would not change the results of the risk screen), and*
- *AOC 57-007: arsenic.*

*The Permittees must revise the screening level assessment to assess the correct exposure interval in accordance with the current NMED guidance.*

**LANL Response**

6. No revision is necessary. As noted in the response to General Comment 2, the Laboratory uses NMED-approved SLERA methods to conduct ecological risk screening assessments. The Laboratory's methods use the depth interval of 0.0–5.0 ft bgs as the exposure interval for ecological receptors. The 0.0–5.0 ft bgs exposure interval used in this investigation report is the same as the exposure interval used to conduct ecological risk screening assessments in all other investigation reports previously submitted to and approved by NMED under the Consent.

## REFERENCES


EPA (U.S. Environmental Protection Agency), December 1993. "Wildlife Exposure Factors Handbook," Vol. I of II, EPA/600/R-93/187a, Office of Research and Development, Washington, D.C. (EPA 1993, 059384)

LANL (Los Alamos National Laboratory), April 1996. "RFI Report for Potential Release Sites at TA-57, 57-001(b), 57-001(c), 57-002, 57-004(a), 57-006, 57-007 (located in former Operable Unit 1154)," Los Alamos National Laboratory document LA-UR-96-1062, Los Alamos, New Mexico. (LANL 1996, 053801)

LANL (Los Alamos National Laboratory), December 2004. "Screening-Level Ecological Risk Assessment Methods, Revision 2," Los Alamos National Laboratory document LA-UR-04-8246, Los Alamos, New Mexico. (LANL 2004, 087630)

LANL (Los Alamos National Laboratory), November 2012. "Screening-Level Ecological Risk Assessment Methods, Revision 3," Los Alamos National Laboratory document LA-UR-12-24152, Los Alamos, New Mexico. (LANL 2012, 226715)

NMED (New Mexico Environment Department), January 28, 2013. "Approval, Screening-Level Ecological Risk Assessment Methods, Revision 3," New Mexico Environment Department letter to P. Maggiore (DOE-LASO) and J.D. Mousseau (LANL) from J.E. Kieling (NMED-HWB), Santa Fe, New Mexico. (NMED 2013, 521921)

## Cross-Reference of NMED NOD Comments and Revisions to the Technical Area 57 (aka Fenton Hill) Investigation Report

| NMED NOD Comment No. | Summary of NOD Comment | Section(s) in Original Report | Section(s) in Revised Report | Nature of Revision |
|---|---|---|---|---|
| **General Comments** | | | | |
| 1 | Organic chemicals of potential concern (COPCs) may be excluded only if sufficient evidence (e.g., analytical data, trend analysis) and justification are provided to demonstrate the contamination is not related to site activities and is from an off-site source. No response to this comment is necessary. | Section 5.1 | n/a* | Comment noted. |
| 2 | The home ranges listed in these tables are not consistent with either the home ranges listed in 1993 U.S. Environmental Protection Agency (EPA) data or New Mexico Environment Department (NMED) guidance (Volume II). Clarify how the home ranges were derived and revise the report for consistency with NMED guidance. | Appendix G, Tables G-5.5-1 and G-5.5-4 | n/a | The response to Comment 2 presents how the home ranges used in the report were developed from the 1993 EPA data. No revision to report is necessary. |
| 3 | For the vapor-intrusion calculations, the Johnson and Ettinger model appears to be applying an out of date inhalation reference concentration for trichloroethene. Revise the Johnson and Ettinger calculations accordingly. | Appendix G | Appendix G, Sections G-4.3-1 and G-4.3-2<br>Tables G-4.3-1, G-4.3-2, and G-4.3-3<br>Attachment G-2 (on CD), Johnson and Ettinger model spreadsheets for trichloroethene for Areas of Concern (AOCs) 57-006 and 57-007 | The Johnson and Ettinger model spreadsheets for trichloroethene were revised to include the current reference concentration ($RfC_i$) of 0.002 mg/m$^3$. The Appendix G text and tables were revised to incorporate the updated results. |

| NMED NOD Comment No. | Summary of NOD Comment | Section(s) in Original Report | Section(s) in Revised Report | Nature of Revision |
|---|---|---|---|---|
| **Specific Comments** | | | | |
| 4 | Clarify whether the Phase II Resource Conservation and Recovery Act facility investigation (RFI), voluntary corrective action (VCA), and ecological risk assessments have been conducted for the sites under investigation. In addition, during a site visit, NMED staff noticed that the Milagro Pond [AOC 57-004(b)], the fifth AOC, still contains water and has not been closed. The site needs to be investigated and remediated as necessary, and confirmatory samples must be collected to demonstrate corrective action is complete and the site poses no unacceptable risk to human health and the environment. | Section 1.1, p. 1 | n/a | The response to Comment 4 clarifies that the Phase II RFI, VCA, and ecological risk assessment have not been conducted. No revision to report was necessary.<br>The response to the comment notes that the decommissioning and confirmatory sampling at Milagro Pond discussed after the NMED site visit are currently being coordinated between the U.S. Department of Energy/National Nuclear Security Administration and the U.S. Forest Service.<br>No revision to report is necessary. |
| 5 | It is not clear from the text whether the drainline from the trailer to the leach field that was located in 1994 was removed or left in place. Provide information on the depth at which the drainline was located to ensure samples collected from three depth intervals targeted the potential contamination beneath the drainline. | Section 6.3.3, p. 21 | Section 6.3.4.1;<br>Appendix B, Section B-9.0 | The response to Comment 5 provides additional details on the depth of the former drainline and the sampling depths in relation to the depth of the drainline. The text and Appendix B have been revised to clarify the status of the drainline and the sampling depths. |
| 6 | An exposure interval of 0–5 ft below ground surface was used for ecological risk screenings. As a result of using the smaller exposure interval, risks were not estimated or were underestimated for numerous COPCs at AOCs 57-006 and 57-007. Revise the screening-level assessment to assess the correct exposure interval in accordance with the current NMED guidance. | Appendix G,<br>Section G-2.3, p. G-2 | n/a | NOD comment response explains that the exposure interval used in the report is consistent with the NMED-approved screening-level ecological risk assessment methods and has previously been used by Los Alamos National Labotarory and approved by NMED. No revision to report was necessary. |

| NMED NOD Comment No. | Summary of NOD Comment | Section(s) in Original Report | Section(s) in Revised Report | Nature of Revision |
|---|---|---|---|---|
| n/a | n/a | Throughout | Throughout | Minor editorial changes were made throughout the document for the sake of correctness and clarity. |

*n/a = Not applicable.

LA-UR-15-29322
December 2015
EP2015-0203

# Investigation Report for Technical Area 57 Aggregate Area (Fenton Hill), Revision 1

Los Alamos
NATIONAL LABORATORY
EST. 1943

Prepared by the Environmental Programs Directorate

Los Alamos National Laboratory, operated by Los Alamos National Security, LLC, for the U.S. Department of Energy under Contract No. DE-EM0003528, has prepared this document pursuant to the Compliance Order on Consent, signed March 1, 2005. The Compliance Order on Consent contains requirements for the investigation and cleanup, including corrective action, of contamination at Los Alamos National Laboratory. The U.S. government has rights to use, reproduce, and distribute this document. The public may copy and use this document without charge, provided that this notice and any statement of authorship are reproduced on all copies.

EP2015-0203

# Investigation Report for the Technical Area 57 Aggregate Area (Fenton Hill), Revision 1

December 2015

Responsible project manager:

| Printed Name | Signature | Title | Organization | Date |
|---|---|---|---|---|
| Todd Haagenstad | Todd Haagenstad | Project Manager | Environmental Remediation Program | 12/8/15 |

Responsible LANS representative:

| Printed Name | Signature | Title | Organization | Date |
|---|---|---|---|---|
| for Randall Erickson | | Associate Director | Environmental Programs | 12/9/15 |

Responsible DOE representative:

| Printed Name | Signature | Title | Organization | Date |
|---|---|---|---|---|
| David S. Rhodes | | Supervisor | DOE-EM-LA | 12-15-2015 |

## EXECUTIVE SUMMARY

This investigation report presents the investigation activities at two areas of concern (AOCs) in the Technical Area 57 (TA-57) Aggregate Area, located at Fenton Hill, which lies on the western side of the Jemez Mountains, approximately 12 mi west of Los Alamos National Laboratory (LANL or the Laboratory). Two AOCs within the TA-57 Aggregate Area were addressed during the 2014 investigation because these sites are potentially contaminated with hazardous chemicals and/or radionuclides, and final assessments of site contamination, associated risks, and recommendations for additional corrective actions were incomplete.

The objectives of this investigation were to define the nature and extent of contamination associated with AOCs 57-006 and 57-007 and to obtain data to support decisions regarding the need to remediate or remove contamination at these sites. This report presents the results of site characterization activities conducted during the 2014 investigation, as directed by the approved investigation work plan for the TA-57 Aggregate Area.

The 2014 investigation activities included surface and subsurface characterization sampling at AOCs 57-006 and 57-007. Analysis of sampling data identified two locations of arsenic-contaminated soil above the residential soil screening level at AOC 57-007. Soil removal was completed at two locations, and additional step-out characterization samples were collected to define extent.

Based on the evaluation of the data, the extent of contamination has been defined or no further sampling for extent is warranted at AOCs 57-006 and 57-007. After soil removal, human health and ecological risk assessments were performed for both AOCs, and no potential unacceptable risks exist for any receptors.

Based on the evaluation of the sampling data and risk assessments, the Laboratory recommends corrective action complete without controls for both sites.

## CONTENTS

**1.0 INTRODUCTION ..... 1**
1.1 General Site Information ..... 1
1.2 Purpose of the Investigation ..... 2
1.3 Document Organization ..... 2

**2.0 AGGREGATE AREA SITE CONDITIONS ..... 3**
2.1 Surface Conditions ..... 3
2.1.1 Soil ..... 3
2.1.2 Surface Water ..... 3
2.1.3 Land Use ..... 3
2.2 Subsurface Conditions ..... 4
2.2.1 Stratigraphic Units ..... 4
2.2.2 Hydrogeology ..... 5

**3.0 SCOPE OF ACTIVITIES ..... 6**
3.1 Site Access and Premobilization Activities ..... 6
3.2 Field Activities ..... 6
3.2.1 Geodetic Survey ..... 6
3.2.2 Field Screening ..... 7
3.2.3 Surface and Subsurface Soil Investigation ..... 7
3.2.4 Soil Removal ..... 7
3.2.5 Equipment Decontamination ..... 8
3.2.6 Chemical and Radiological Sample Analyses ..... 8
3.2.7 Health and Safety Measures ..... 8
3.2.8 IDW Storage and Disposal ..... 8
3.3 Deviations ..... 8

**4.0 REGULATORY CRITERIA ..... 8**
4.1 Current and Future Land Use ..... 9
4.2 Screening Levels ..... 9
4.3 Ecological Screening Levels ..... 10
4.4 Cleanup Standards ..... 10

**5.0 DATA REVIEW METHODOLOGY ..... 10**
5.1 Identification of COPCs ..... 10
5.1.1 Inorganic Chemical and Radionuclide Background Comparisons ..... 11
5.1.2 Statistical Methods Overview ..... 12
5.2 Extent of Contamination ..... 13

**6.0 TA-57 BACKGROUND AND FIELD-INVESTIGATION RESULTS ..... 14**
6.1 Background of TA-57 ..... 15
6.1.1 Operational History ..... 15
6.1.2 Summary of Releases ..... 15
6.1.3 Current Site Usage and Status ..... 16
6.2 AOC 57-006, Former Waste Storage Drum ..... 16
6.2.1 Site Description and Operational History ..... 16
6.2.2 Relationship to Other SWMUs and AOCs ..... 16
6.2.3 Summary of Previous Investigations ..... 16
6.2.4 Site Contamination ..... 16

6.2.5 Summary of Human Health Risk Screening ..... 20
6.2.6 Summary of Ecological Risk Screening ..... 20
6.3 AOC 57-007, Leach Field ..... 21
6.3.1 Site Description and Operational History ..... 21
6.3.2 Relationship to Other SWMUs and AOCs ..... 21
6.3.3 Summary of Previous Investigations ..... 21
6.3.4 Site Contamination ..... 21
6.3.5 Summary of Human Health Risk Screening ..... 27
6.3.6 Summary of Ecological Risk Screening ..... 28

**7.0 CONCLUSIONS ..... 28**
7.1 Nature and Extent of Contamination ..... 28
7.1.1 TA-57 Aggregate Area ..... 28
7.2 Summary of Risk-Screening Assessments ..... 28
7.2.1 Human Health Risk-Screening Assessments ..... 28
7.2.2 Ecological Risk-Screening Assessment ..... 28

**8.0 RECOMMENDATIONS ..... 29**
8.1 Additional Field Characterization Activities ..... 29
8.2 Recommendations for Corrective Actions Complete ..... 29

**9.0 REFERENCES AND MAP DATA SOURCES ..... 29**
9.1 References ..... 29
9.2 Map Data Sources ..... 32

**Figures**

Figure 1.1-1 Location of TA-57 Aggregate Area with respect to the Laboratory and surrounding area ..... 33
Figure 2.1-1 Geologic and surface water features in the vicinity of the TA-57 Aggregate Area ..... 34
Figure 6.2-1 Site map of AOCs 57-006 and 57-007 with sample locations ..... 35
Figure 6.2-2 Inorganic chemicals detected or detected above BVs at AOC 57-006 ..... 36
Figure 6.2-3 Organic chemicals detected at AOC 57-006 ..... 37
Figure 6.2-4 Radionuclides detected above BVs at AOC 57-006 ..... 38
Figure 6.3-1 Inorganic chemicals detected or detected above BVs at AOC 57-007 ..... 39
Figure 6.3-2 Organic chemicals detected at AOC 57-007 ..... 40
Figure 6.3-3 Radionuclides detected above BVs at AOC 57-007 ..... 41

**Tables**

Table 1.1-1 Sites Included in the TA-57 Aggregate Area Investigation ..... 43
Table 3.2-1 Surveyed Coordinates for Locations Sampled in 2014 ..... 43
Table 3.2-2 Field-Screening Results for Samples Collected in 2014 ..... 44
Table 3.2-3 Crosswalk of Proposed and Sampled Locations ..... 45
Table 6.2-1 Samples Collected and Analyses Requested at AOC 57-006 ..... 46
Table 6.2-2 Inorganic Chemicals above BVs at AOC 57-006 ..... 47

Table 6.2-3 Organic Chemicals Detected at AOC 57-006 ..... 48
Table 6.2-4 Radionuclides Detected above BVs at AOC 57-006 ..... 48
Table 6.3-1 Samples Collected and Analyses Requested at AOC 57-007 ..... 49
Table 6.3-2 Inorganic Chemicals above BVs at AOC 57-007 ..... 51
Table 6.3-3 Organic Chemicals Detected at AOC 57-007 ..... 52
Table 6.3-4 Radionuclides Detected above BVs at AOC 57-007 ..... 53

**Appendixes**

Appendix A Acronyms and Abbreviations, Metric Conversion Table, and Data Qualifier Definitions
Appendix B Field Methods
Appendix C Investigation-Derived Waste Management
Appendix D Analytical Program
Appendix E Analytical Suites and Results and Analytical Reports (on CD included with this document)
Appendix F Box Plots and Statistical Results
Appendix G Risk Assessments
Appendix H Documentation of Past Investigations and Corrective Actions at New Mexico Oil Conservation Division–Regulated Sites

# 1.0 INTRODUCTION

Los Alamos National Laboratory (LANL or the Laboratory) is a multidisciplinary research facility owned by the U.S. Department of Energy (DOE) and managed by Los Alamos National Security, LLC. The Laboratory is located in north-central New Mexico, approximately 60 mi northeast of Albuquerque and 20 mi northwest of Santa Fe. The Laboratory site covers 36 $mi^2$ of the Pajarito Plateau, which consists of a series of fingerlike mesas that are separated by deep canyons containing perennial and intermittent streams running from west to east. Mesa tops range in elevation from approximately 6200 ft to 7800 ft above mean sea level (amsl).

The Laboratory is participating in a national effort by DOE to clean up sites and facilities formerly involved in weapons research and development. The goal of the Laboratory's efforts is to ensure past operations do not threaten human or environmental health and safety in and around Los Alamos County, New Mexico. To achieve this goal, the Laboratory is currently investigating sites potentially contaminated by past Laboratory operations. These sites are designated as either solid waste management units (SWMUs) or areas of concern (AOCs).

This investigation report addresses AOCs 57-006 and 57-007 within the Technical Area 57 (TA-57) Aggregate Area. These sites are potentially contaminated with hazardous constituents and radionuclides. The New Mexico Environment Department (NMED), pursuant to the New Mexico Hazardous Waste Act, regulates cleanup of hazardous wastes and hazardous constituents. DOE regulates cleanup of radioactive contamination, pursuant to DOE Order 458.1, Administrative Change 3, Radiation Protection of the Public and the Environment, and DOE Order 435.1, Radioactive Waste Management. Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to NMED in accordance with DOE policy.

Corrective actions for hazardous constituents at the Laboratory are subject to the March 2005 Compliance Order on Consent (the Consent Order). This investigation report describes work activities completed in accordance with the Consent Order and the approved TA-57 Aggregate Area investigation work plan (LANL 2012, 214550; NMED 2012, 520936).

## 1.1 General Site Information

The TA-57 Aggregate Area is located at Fenton Hill, which lies on the western side of the Jemez Mountains, approximately 12 mi west of the Laboratory, at an elevation of approximately 8700 ft amsl (Figure 1.1-1). The TA-57 Aggregate Area is located on property owned by the U.S. Forest Service and has been used by DOE pursuant to agreements with the Forest Service. Laboratory operations have been conducted in the aggregate area since 1974. The TA-57 Aggregate Area consists of 10 AOCs, 8 of which have previously been approved for no further action (NFA) or closed under another regulatory program. Three AOCs were approved for NFA by the U.S. Environmental Protection Agency (EPA). The 5 AOCs used to manage geothermal exploration wastes were not subject to regulation under the Resource Conservation and Recovery Act (RCRA). These sites were closed under a discharge plan issued by the New Mexico Oil Conservation Division (NMOCD). Following termination of the discharge plan by NMOCD, no additional corrective actions are required for NMOCD-regulated sites and activities. As indicated in the approval with modifications for the investigation work plan for TA-57 Aggregate Area (LANL 2012, 214550; NMED 2012, 520936), supporting documentation related to past investigations and corrective actions at the closed sites is provided in this report (on CD in Appendix H).

The remaining two AOCs were addressed in the approved TA-57 Aggregate Area investigation work plan (LANL 2012, 214550; NMED 2012, 520936). This investigation report describes the investigation status and results from sampling activities conducted at the two sites. Table 1.1-1 lists the sites included in the investigation report with a brief description and summary of the investigation activities conducted in 2014 for each site.

## 1.2 Purpose of the Investigation

Two AOCs within the TA-57 Aggregate Area were addressed during the 2014 investigation because these sites are potentially contaminated with hazardous chemicals and/or radionuclides, and final assessments of site contamination, associated risks, and recommendations for additional corrective actions are incomplete. The objectives of the 2014 investigation were to (1) define the nature and extent of contamination associated with historical waste management activities at AOCs 57-006 and 57-007, and (2) obtain data to support decisions regarding the need to remediate or remove contamination at these sites.

The process for evaluating the data collected during the 2014 TA-57 Aggregate Area investigation is as follows:

- Initially identify chemicals of potential concern (COPCs) to focus efforts on the constituents of most concern.
- Screen COPCs against soil screening levels (SSLs) and screening action levels (SALs) during determination of extent to focus efforts on characterizing contamination potentially posing a risk/dose and requiring corrective action.
- Perform risk/dose screening level evaluations on all sites to incorporate risk/dose reduction into recommendations for further actions.

All analytical data collected during the 2014 investigation activities are presented and evaluated in this report.

## 1.3 Document Organization

This report is organized into nine sections, including this introduction, with multiple supporting appendixes. Section 2 provides details on the aggregate area site conditions (surface and subsurface). Section 3 provides an overview of the scope of the activities performed during the implementation of the work plan. Section 4 describes the regulatory criteria used to evaluate potential risk to ecological and human receptors. Section 5 describes the data review methods. Section 6 presents an overview of the operational history of the sites, historical releases, summaries of previous investigations, results of the field activities performed, site contamination, and evaluation of the nature and extent of contamination. Section 7 presents the conclusions of the nature and extent evaluations and risk-screening assessments. Section 8 discusses recommendations based on the nature and extent discussions and the risk-screening assessments. Section 9 includes a list of references cited and the map data sources used in all figures.

The appendixes include acronyms, a metric conversion table, and definitions of the data qualifiers used in this report (Appendix A); field methods (Appendix B); investigation-derived waste (IDW) management (Appendix C); analytical program descriptions and summaries of data quality (Appendix D); analytical suites and results and analytical reports (Appendix E on CD); box plots and statistical comparisons (Appendix F); risk-screening assessments (Appendix G); and NFA documentation for other sites from NMOCD (Appendix H).

# 2.0 AGGREGATE AREA SITE CONDITIONS

## 2.1 Surface Conditions

### 2.1.1 Soil

No site-specific soil surveys have been performed at TA-57. Undisturbed soil at TA-57 is probably typical of the soil described by Nyhan et al. (1978, 005702) for the plateau tops and edges in the Los Alamos area (LANL 1994, 034757, p. 3-17). The parent material is the Bandelier Tuff, and the processes-forming soil are expected to be very similar to the processes-forming soils in the Los Alamos area. For most of TA-57, no undisturbed soil remains because of site development activities. Much of the TA-57 site has been filled and regraded. The depth to bedrock noted during previous investigations at TA-57 ranged from 3.5–16 ft.

A thin veneer of physically weathered bedrock colluvium is the only surficial material left in the few undisturbed areas of TA-57. The residual material is thicker on the top of the plateau and thins along the edges to bedrock outcrops on the steep portions of the canyon walls. Some fine-grained to coarser material was observed in the two small alluvial channels draining the site to the southeast and northwest; however, these channels have been considerably altered by activities related to site construction and operations.

### 2.1.2 Surface Water

The major surface water drainage near TA-57 is the Jemez River and its tributaries. The East Fork of the Jemez River drains the Valle Grande. Base flow is from discharge of groundwater to the stream from the near-surface water table in the Valle Grande and from the relatively large amount of precipitation that occurs in the high mountains around the Valles Caldera. San Antonio Creek drains the Valle Toledo to the north of the Valle Grande as well as an area along the west side of the Valles Caldera and is a tributary to the Jemez River at the confluence with the East Fork of the Jemez River. Several thermal springs discharge into the creek. Base flow in San Antonio Creek is from the discharge of groundwater from the near-surface water table in Valle Toledo and from precipitation. At the confluence of the East Fork of the Jemez River and San Antonio Creek, approximately 10 mi south of TA-57, the combined streams become the Jemez River.

The Rio Guadalupe drains the area west of TA-57 and includes the tributaries Rio de las Vacas and Rio Cebolla. The Rio de las Vacas drains an area west of the Valles Caldera. Base flow to the Rio Cebolla is from groundwater discharge from the shallow alluvial aquifers along numerous tributaries and from springs on the canyon walls.

The TA-57 site slopes gently south so the major part of the run-off is into Lake Fork Creek, a tributary to the Rio Cebolla below Fenton Lake. The land immediately northwest of TA-57 drains into an unnamed tributary that joins the Rio Cebolla at Fenton Lake. The land immediately northeast of TA-57 drains toward San Antonio Creek but is diverted by a low divide into Lake Fork Creek (Figure 2.1-1).

### 2.1.3 Land Use

Currently, land use at TA-57 is industrial. The TA-57 site is fenced and locked and is accessible only to authorized workers. A portion of the area immediately adjacent to TA-57 is used by the U.S. Forest Service as a seasonal support area for firefighters. The area around TA-57 is within the Santa Fe National Forest and is used recreationally. Current land uses are not expected to change in the foreseeable future.

## 2.2 Subsurface Conditions

### 2.2.1 Stratigraphic Units

This section summarizes the stratigraphy of the bedrock beneath the TA-57 Aggregate Area. The stratigraphy includes, in descending order, the Bandelier Tuff, the Paliza Canyon Formation, the Abiquiu Tuff, the Abo Formation, the Madera limestone, the Sandia Formation, and Precambrian granite (LANL 1994, 034757, pp. 3-12–3-14).

#### 2.2.1.1 Bandelier Tuff

The Bandelier Tuff is a nonwelded to densely welded rhyolite tuff that ranges from light to dark gray. It is composed of quartz and sanadine crystals, lithic fragments of latite and rhyolite, and fragments of glass shards and rare mafic minerals in a fine-grained ash matrix. This tuff layer thins to the west and southwest away from its source at the Valles Caldera (Rea 1977, 005713; Kaufman and Siciliano 1979, 005941). The Bandelier Tuff is approximately 350 ft thick under the TA-57 Aggregate Area (Purtymun et al. 1974, 005483).

#### 2.2.1.2 Paliza Canyon Formation

The Paliza Canyon Formation underlies the Bandelier Tuff and is composed of andesite and basaltic andesite breccias interbedded with sand and gravels and is approximately 50 ft thick under the site (Purtymun et al. 1974, 005483).

#### 2.2.1.3 Abiquiu Tuff

The Abiquiu Tuff underlies the Paliza Canyon Formation and is a light gray, friable tuffaceous sandstone and is approximately 50 ft thick under the TA-57 site (Purtymun et al. 1974, 005483).

#### 2.2.1.4 Abo Formation

The Permian redbeds of the Abo Formation underlie the Abiquiu Tuff. The lithologies are typically arkosic siltstone, sandstone, and shale with small inclusions of calcareous gray clay. Particles include granules of quartz and feldspar and pieces of igneous rock. The thickness is highly variable because of erosion before Cenozoic volcanism (Rea 1977, 005713; Kaufman and Siciliano 1979, 005941).

#### 2.2.1.5 Magdalena Group

The Magdalena group consists of Madera limestone over the Sandia Formation. The Madera limestone is an arkosic limestone containing both gray and red arkosic shale overlying a dark gray limestone with insets of gray shale and beds of sandstone. The Sandia Formation has an upper clastic member of sandstone, shale, and limestone. The lower part is a discontinuous dark gray siliceous limestone (Rea 1977, 005713; Kaufman and Siciliano 1979, 005941).

#### 2.2.1.6 Precambrian Granite

The Precambrian granite is a coarse basement rock beneath the Sandia Formation and consists or large microcline crystals, quartz-feldspar lenticular gneiss, schists, amphibolites, and pegmatites. Veins include quartz and hornblendite. Minerals include quartz and microcline, oligoclase-andesine, hornblende, biotite, epidote, sphene, apatite, zircon, and magnetite (Rea 1977, 005713; Kaufman and Siciliano 1979, 005941).

### 2.2.2 Hydrogeology

#### 2.2.2.1 Groundwater

Groundwater in the area of TA-57 occurs as (1) water in saturated alluvium, (2) perched aquifers, and (3) the regional aquifer.

**Saturated Alluvium**

Burns Swale, a dry tributary of Lake Fork Canyon at the south side of TA-57, has a 2.0–6.0-ft depth of alluvium in its upper reaches and more than a 40-ft depth of alluvium at the confluence with Lake Fork Canyon (Figure 2.1-1). In May 1979, water was encountered in four holes bored in the alluvium. Later that year, these holes were dry (Kaufman and Siciliano 1979, 005941). After a release of water into Burns Swale in September 1979, the two holes closest to the site again contained water. Releases to Burns Swale were observed to infiltrate the alluvium and then either moved downstream along the alluvium/Cenozoic volcanic bedrock interface or infiltrated the underlying bedrock.

**Perched Aquifers**

The water supply for TA-57 is furnished by a well completed in a perched aquifer at a depth of about 450 ft below ground surface (bgs). The aquifer is in the Abiquiu Tuff and is perched on the clays and siltstones of the Abo Formation. The aquifer is of limited extent, terminating to the east along the canyon cut by San Antonio Creek. Water movement in the aquifer is to the southwest, where a part is discharged through springs and seeps in the lower part of Lake Fork Canyon and along the Rio Cebolla.

Other perched aquifers were identified beneath the site as part of an evaluation of alternate water supplies. Four saturated zones were identified in the Abo Formation at depths of 780–800 ft, 970–995 ft, 1005–1015 ft, and 1100–1120 ft bgs. These zones were described as fine-grained sandstones underlain by shales. Six perched zones were also identified in the Madera limestone.

**Regional Aquifer**

The regional aquifer is at the base of the Madera formation. Many of the hot springs in the region appear at outcrops of this horizon. These are generally hot mineral springs. The regional aquifer is encountered at a depth of 1750 ft bgs below TA-57. All the aquifers above this depth are perched. Within the regional aquifer, a permeable horizon was found in the depth interval 1770–1800 ft bgs. It consisted of 30 ft of arkosic sandstone or granite wash. Geophysical log data indicate the zone is “only fair” as an aquifer (LANL 1994, 034757). Water in the granitic basement is primarily contained in fracture porosity.

#### 2.2.2.2 Vadose Zone

The unsaturated zone from the mesa surface to the top of the regional aquifer is referred to as the vadose zone. The vadose zone underlying TA-57 is in thin surficial soil deposits and in the underlying volcanic tuff. Flow and transport in the vadose zone will be mainly downward to the perched water at the base of the volcanic tuff. The source of moisture for the vadose zone is precipitation, but much of it runs off, evaporates, or is absorbed by plants. The subsurface vertical movement of water is influenced by properties and conditions of the materials that make up the vadose zone.

The Bandelier Tuff is generally dry and does not readily transmit moisture. Most of the pore spaces in the tuff are of capillary size and have a strong tendency to hold water against gravity by surface-tension forces. Vegetation is very effective at removing moisture near the surface. During the summer rainy season, when rainfall is highest, near-surface moisture content is variable because of higher rates of evaporation and transpiration by vegetation, which flourishes at this time.

The various units of the Bandelier Tuff tend to have relatively high porosities. Porosity ranges between 30% and 60% by volume, generally decreasing for more highly welded tuff. Permeability varies for each cooling unit of the Bandelier Tuff. The moisture content of tuff beneath the mesa tops is low, generally less than 5% by volume throughout the profile (Kearl et al. 1986, 015368; Purtymun and Stoker 1990, 007508).

## 3.0 SCOPE OF ACTIVITIES

This section presents an overview of field activities performed during the implementation of the TA-57 Aggregate Area approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). The field investigation results and observations are presented in detail in section 6 and in the appendixes. The scope of activities for the 2014 investigation included site access and premobilization activities; geodetic and field-screening surveys; surface and subsurface sampling; soil removal; site restoration; health and safety monitoring; and waste management activities.

When possible, all field activities were conducted following the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). The applicable field methods are summarized below and are discussed in Appendix B. Any deviations from the approved investigation work plan are noted in section 6 and are described in detail in Appendix B.

### 3.1 Site Access and Premobilization Activities

The area encompassing TA-57 is behind a locked fence and is currently used to operate a fully automated observatory in support of the Thinking Telescopes project overseen by the Laboratory's Intelligence and Space Research Division. A portion of the area immediately adjacent to TA-57 is used by the U.S. Forest Service as a seasonal support area for firefighters. Before field mobilization, the issue of Laboratory worker access (e.g., health and safety documents, notifications) was reviewed as part of the management self-assessment process. All efforts were made to provide a secure and safe work area and to reduce impacts to any site operations, cultural resources, and the environment.

### 3.2 Field Activities

The following subsections describe the field activities conducted during the 2014 investigation, including geodetic surveys, field screening, surface and subsurface sampling, and soil removal. Details regarding the field methods and procedures used to perform these field activities are presented in Appendix B.

#### 3.2.1 Geodetic Survey

Geodetic surveys were conducted during the TA-57 Aggregate Area investigation to locate surface and subsurface sampling locations. Initial geodetic surveys were performed to establish and mark the planned sampling locations in the field in accordance with the most current version of Standard Operating Procedure (SOP) 5028, Coordinating and Evaluating Geodetic Surveys, using a Trimble 5700 differential global positioning system. The surveyed coordinates for all sampling locations at sites included in this report are presented in Table 3.2-1. All geodetic coordinates are expressed as State Plane Coordinate System 1983, New Mexico Central, U.S.

### 3.2.2 Field Screening

Environmental samples were analyzed for organic vapors with a MiniRAE 2000 photoionization detector equipped with an 11.7 electronvolt lamp before they were submitted to the Sample Management Office (SMO). Calibration was performed in accordance with the manufacturer's specifications and the most current version of SOP-06.33, Headspace Vapor Screening with a Photoionization Detector, and recorded on the corresponding sample collection logs (SCLs), chain-of-custody (COC) forms, and the field logbook. The SCLs and COC forms are provided on CD in Appendix E. The organic vapor screening results for the sites are presented Table 3.2-2.

All samples collected were field-screened for radioactivity before they were submitted to the SMO. A Laboratory radiological control technician conducted radiological screening using an Eberline E-600 radiation meter with an SHP-380AB alpha/beta scintillation detector held within 1 in. of the sample. The SCLs and COC forms are provided on CD in Appendix E. The radiological screening results for the sites are presented in Table 3.2-2.

### 3.2.3 Surface and Subsurface Soil Investigation

Samples were collected according to the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). Table 3.2-3 lists the proposed sampling locations for the sites crosswalked with actual location identifiers. Surface samples were collected using the spade-and- scoop method in accordance with SOP-06.09, Spade and Scoop Method for Collection of Soil Samples, or with a hand auger in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. The samples were collected in stainless-steel bowls and transferred to sample collection bottles with a stainless-steel spoon.

All surface and shallow subsurface samples were placed in appropriate sample containers and submitted to the laboratory for the analyses specified by the approved work plan. Samples for volatile organic compound (VOC) analysis were collected immediately to minimize the loss of subsurface VOCs during the sample collection process. Standard quality assurance (QA)/quality control (QC) samples (field duplicates, field trip blanks, and rinsate blanks) were also collected in accordance with SOP-5059, Field Quality Control Samples.

All sample collection activities were coordinated with the SMO. After the samples were collected, they remained in the controlled custody of the field team at all times until they were delivered to the SMO. Sample custody was then relinquished to the SMO for delivery of samples to a preapproved off-site analytical laboratory (SCLs and COC forms are included on CD in Appendix E).

### 3.2.4 Soil Removal

Analytical data collected from AOC 57-007 identified levels of arsenic above the residential SSL in surface samples (0.0–1.0 ft bgs) at locations 57-4011 and 57-4020. Specifically, arsenic was detected at concentrations of 13.8 mg/kg and 18.6 mg/kg at locations 57-4011 and 57-4020, respectively. The Laboratory conducted soil removal of the arsenic-contaminated soil using hand tools. A 2-ft radius was removed around locations 57-4011 and 57-4020 to a depth of 2.0 ft and 2.5 ft bgs, respectively. Confirmation samples were not necessary because samples collected at depth at both locations defined the extent of soil removal.

The remediated areas were backfilled to original grade using clean fill, reseeded using an approved native seed mix, and raked. Straw wattles were placed on the downslope side of each area to prevent run off.

### 3.2.5 Equipment Decontamination

All field equipment that had the potential to contact sample material (e.g., hand augers, sampling scoops, bowls, shovels, picks) was decontaminated between sample collection and between sampling locations to prevent cross-contamination. Decontamination was performed in accordance with the current version of SOP-5061, Field Decontamination of Equipment. Rinsate blanks on sampling equipment were collected to check the effectiveness of decontamination. The dry decontamination methods used are described in Appendix B.

### 3.2.6 Chemical and Radiological Sample Analyses

All investigation samples were shipped by the SMO to off-site contract analytical laboratories for the requested analyses. The analyses requested were as specified by the approved work plan (LANL 2012, 214550; NMED 2012, 520936). The samples were analyzed for the following; target analyte list (TAL) metals, total cyanide, nitrate, perchlorate, VOCs, semivolatile organic compounds (SVOCs), and isotopic uranium. Four samples were analyzed for arsenic only.

### 3.2.7 Health and Safety Measures

All 2014 investigation activities were conducted in accordance with an integrated work document that detailed work steps, potential hazards, hazard controls, and required training to conduct work. These health and safety measures included using Level-D personal protective equipment.

### 3.2.8 IDW Storage and Disposal

All IDW generated during the TA-57 Aggregate Area field investigations was managed in accordance with SOP-10021, Characterization and Management of Environmental Program Waste. This procedure incorporates the requirements of all applicable EPA and NMED regulations, DOE orders, and Laboratory implementation requirements, policies, and/or procedures. IDW was also managed in accordance with the approved waste characterization strategy form (WCSF). Details of IDW management for the TA-57 Aggregate Area investigation are presented in Appendix C.

The waste streams associated with the investigation included arsenic-contaminated soil, contact waste, and solid waste. Each waste stream was containerized and placed in an accumulation area appropriate for the regulatory classification of the waste, in accordance with the approved WSCF.

## 3.3 Deviations

Deviations occurred while conducting field activities as defined in the approved work plan (LANL 2012, 214550; NMED 2012, 520936). The deviations did not adversely affect the completion or results of the investigation. Specific deviations are described in Appendix B, section B-9.0.

# 4.0 REGULATORY CRITERIA

This section describes the criteria used for evaluating potential risk to ecological and human receptors. Regulatory criteria identified by medium in the Consent Order include cleanup standards, risk-based screening levels, and risk-based cleanup goals.

Human health risk-screening evaluations were conducted for the TA-57 Aggregate Area using NMED guidance (NMED 2014, 600115). Ecological risk-screening assessments were performed using Laboratory guidance (LANL 2012, 226715).

## 4.1 Current and Future Land Use

The specific screening levels used in the risk evaluation and corrective action decision process at a site depend on the current and reasonably foreseeable future land use(s). The current and reasonably foreseeable future land use(s) for a site determines the receptors and exposure scenarios used to select screening and cleanup levels. The land use within and surrounding the TA-57 Aggregate Area is currently industrial and is expected to remain industrial for the reasonably foreseeable future. The residential scenario is evaluated for comparison purposes per the Consent Order and is the decision scenario for sites that do not require future controls.

## 4.2 Screening Levels

Human health and ecological risk-screening evaluations were conducted for the COPCs detected in solid media at the sites within the TA-57 Aggregate Area. The human health risk-screening assessments (Appendix G) were performed on inorganic and organic COPCs using NMED SSLs for the industrial and residential scenarios (NMED 2014, 600115). When an NMED SSL was not available for a COPC, SSLs were obtained from EPA regional tables (http://www.epa.gov/earth1r6/6pd/rcra_c/pd-n/screen.htm) (adjusted to a risk level of $10^{-5}$ for carcinogens). Radionuclides were assessed using the Laboratory SALs for the same scenarios (LANL 2014, 600064).

Total chromium now has NMED SSLs (NMED 2014, 600115). Because the toxicity of chromium strongly depends on its oxidation state, NMED and EPA have SSLs for trivalent chromium and hexavalent chromium. For screening purposes, the NMED SSLs for total chromium are used for comparison unless there is a known or suspected source of hexavalent chromium at the site. Total chromium screening levels are appropriate for low-level releases to soil from sources not associated with hexavalent chromium. However, NMED and EPA recommends collecting valence-specific data for chromium when it is likely to be an important contaminant at a site and when hexavalent chromium may exist (NMED 2014, 600115; http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/usersguide.htm). Otherwise, total chromium data are used.

Based on the site operational history and email correspondence with an individual who worked in the on-site chemistry trailer (former structure 57-23), no sources of hexavalent chromium are associated with AOCs 57-006 and 57-007 (Haagenstad 2015, 600266). The chemistry trailer was used until 1989 and was removed from the site in 1994. Two potential oxidizing agents were used at the site that could have potentially converted trivalent chromium to hexavalent chromium: nitric acid (<1% solution) was used to preserve water samples, and dilute potassium permanganate was also used occasionally in very small quantities. However, even if some of the chromium had been oxidized to the hexavalent form in the presence of these oxidants, site conditions for decades following the operational activity at the site strongly favor stability of chromium in the trivalent form. The soil pH is circumneutral, which tends to stabilize chromium as trivalent chromium and form insoluble chromium hydroxide. The redox conditions of the soil from the organic matter concentrated in the vegetation and plant litter enhance and maintain the stability of trivalent chromium and prevent oxidation to hexavalent chromium. Furthermore, iron and manganese are present at background concentrations, and the iron concentrations are greater than the manganese concentrations, which favors reducing conditions for chromium and the formation of trivalent chromium. Based on these lines of evidence, chromium is present in the environment in the stable trivalent form. Total chromium results for these AOCs are screened for potential risk using the NMED total chromium SSLs, and no additional sampling and analysis for hexavalent chromium are warranted. The sampling and analysis approach was presented in in the investigation work plan and approved by NMED (LANL 2012, 214550; NMED 2012, 520936).

### 4.3 Ecological Screening Levels

The ecological risk-screening assessments (Appendix G) were conducted using ecological screening levels (ESLs) obtained from the ECORISK Database, Version 3.2 (LANL 2014, 262559). The ESLs are based on similar species and are derived from experimentally determined no observed adverse effect levels, lowest observed adverse effect levels (LOAELs), or doses determined lethal to 50% of the test population. Information relevant to the calculation of ESLs, including concentration equations, dose equations, bioconcentration factors, transfer factors, and toxicity reference values, are presented in the ECORISK Database, Version 3.2 (LANL 2014, 262559).

### 4.4 Cleanup Standards

As specified in the Consent Order, SSLs for inorganic and organic chemicals (NMED 2014, 600115) are used as soil cleanup levels unless they are determined to be impracticable or values do not exist for the current and reasonably foreseeable future land uses. SALs are used as soil cleanup levels for radionuclides (LANL 2014, 600064). Screening assessments compare COPC concentrations for each site with industrial and residential SSLs and SALs.

The cleanup goals specified in Section VIII of the Consent Order are a target risk of $10^{-5}$ for carcinogens or a hazard index (HI) of 1 for noncarcinogens. For radionuclides, the target dose is 25 mrem/yr as authorized by DOE Order 458.1. The SSLs/SALs used for the risk-screening assessments in Appendix G are based on these cleanup goals.

## 5.0 DATA REVIEW METHODOLOGY

The purpose of the data review is to define the nature and extent of contaminant releases for AOCs 57-006 and 57-007 in the TA-57 Aggregate Area. The nature of a contaminant release refers to the specific contaminants that are present, the affected media, and associated concentrations. The nature of contamination is defined through identification of COPCs, as discussed in section 5.1. The extent of contamination refers to the spatial distribution of COPCs, with an emphasis on the distribution of COPCs potentially posing a risk or requiring corrective action. The process for determining the extent of contamination and for concluding no further sampling for extent is warranted is discussed in section 5.2.

### 5.1 Identification of COPCs

COPCs are chemicals and radionuclides that may be present as a result of releases from sites. Inorganic chemicals and some radionuclides occur naturally, and inorganic chemicals and radionuclides detected because of natural background are not considered COPCs. Similarly, some radionuclides may be present as a result of fallout from historical nuclear weapons testing, and these radionuclides are also not considered COPCs. The Laboratory has collected data on background concentrations of many inorganic chemicals, naturally occurring radionuclides, and fallout radionuclides. These data have been used to develop media-specific background values (BVs) and fallout values (FVs) (LANL 1998, 059730). For inorganic chemicals and radionuclides for which BVs or FVs are available, identification of COPCs involves background comparisons, which are described in sections 5.1.1 and 5.1.2. If no BVs or FVs are available or if samples are collected where FVs are not appropriate (i.e., greater than 1.0-ft depth or in rock), COPCs are identified based on detection status (i.e., if the inorganic chemical or radionuclide is detected, it is identified as a COPC).

Organic chemicals may also be present as a result of anthropogenic activities unrelated to the AOC or, to a lesser extent, from natural sources. Because there are no background data for organic chemicals, background comparisons cannot be performed in the same manner as for inorganic chemicals or radionuclides. Therefore, organic COPCs are identified on the basis of detection status (i.e., if an organic chemical is detected, it is identified as a COPC). When assessing the nature of contamination, the history of site operations may be evaluated to determine whether an organic COPC is present because of a release from a site or is present from a non-site-related source. Organic chemicals that are clearly present from sources other than releases from a site (e.g., polycyclic aromatic hydrocarbons) may be eliminated as COPCs.

### 5.1.1 Inorganic Chemical and Radionuclide Background Comparisons

The COPCs are identified for inorganic chemicals and radionuclides following EP-SOP-10071, Background Comparisons for Inorganic Chemicals, and EP-SOP-10073, Background Comparisons for Radionuclides. Inorganic COPCs are identified by comparing site data with BVs and maximum concentrations in a background data set and using statistical comparisons, as applicable (LANL 1998, 059730). Radionuclides are identified as COPCs based on background comparisons and statistical methods if BVs or FVs are available or based on detection status if BVs or FVs have not been established.

Background data are generally available for inorganic chemicals in soil, sediment, and tuff (LANL 1998, 059730). However, some analytes (e.g., nitrate, perchlorate, and hexavalent chromium) have no BVs. A BV may be either a calculated value from the background data set (upper tolerance limit [UTL] or the 95% upper confidence bound on the 95th quantile) or a detection limit (DL). When a BV is based on a DL, there is no corresponding background data set for that analyte/media combination.

For inorganic chemicals, data are evaluated by sample media to facilitate the comparison with media-specific background data. To identify inorganic COPCs, the first step is to compare the sampling result with BVs. If sampling results are above the BV and sufficient data are available (eight or more sampling results and five or more detections), statistical tests are used to compare the site sampling data with the background data set for the appropriate media. If statistical tests cannot be performed because of insufficient data or a high percentage of nondetections, the sampling results are compared with the BV for the appropriate media. If at least one sampling result is above the BV, the inorganic chemical is identified as a COPC unless lines of evidence can be presented to establish the inorganic chemical is not a COPC. Such lines of evidence include, but are not limited to, comparison to the maximum background concentration, number of detects below or above the BV(s), number of nondetects in the data set, and site history. The same evaluation is performed using DLs when an inorganic chemical is not detected but has a DL above the BV. If no BV is available, detected inorganic chemicals are identified as COPCs.

Radionuclides are identified as COPCs based on comparisons to BVs for naturally occurring radionuclides or to FVs for fallout radionuclides. Thorium-228, thorium-230, thorium-232, uranium-234, uranium-235/236, and uranium-238 are naturally occurring radionuclides. Americium-241, cesium-137, plutonium-238, plutonium-239/240, strontium-90, and tritium are fallout radionuclides.

Naturally occurring radionuclides detected at activities above their respective BVs are identified as COPCs. These radionuclides background have no data sets. If there is no associated BV or FV and the radionuclide is detected, it is retained as a COPC.

The FVs for the fallout radionuclides apply to the top 0.0–1.0 ft of soil and fill and to sediment regardless of depth. If a fallout radionuclide is detected in soil or fill samples collected below 1.0 ft or in tuff samples, the radionuclide is identified as a COPC. For soil and fill samples from 1.0 ft bgs or less, if the activity of a

fallout radionuclide is greater than the FV, comparisons of the top 0.0–1.0-ft sampling data are made with the fallout data set and the radionuclide is eliminated as a COPC if activities are similar to fallout activities. Sediment results are evaluated in the same manner, although all data are included, not only the data from 0.0–1.0 ft bgs.

The FV for tritium in surface soil (LANL 1998, 059730) is in units of pCi/mL. This FV requires using sample percent moisture to convert sample tritium data from pCi/g (as provided by analytical laboratories) to the corresponding values in units of pCi/mL. Because sample percent moisture historically has been determined using a variety of methods, often undocumented, the Laboratory has adopted the conservative approach of identifying tritium in soil as a COPC based on detection status.

### 5.1.2 Statistical Methods Overview

A variety of statistical methods may be applied to each of the data sets. The use of any of these methods depends on how appropriate the method is for the available set.

#### 5.1.2.1 Distributional Comparisons

Comparisons between site-specific data and Laboratory background data are performed using a variety of statistical methods. These methods begin with a simple comparison of site data with a UTL estimated from the background data (UTL or the 95% upper confidence bound on the 95th quantile). The UTLs are used to represent the upper end of the concentration distribution and are referred to as BVs. The UTL comparisons are then followed, when appropriate, by statistical tests that evaluate potential differences between the distributions. These tests are used for testing hypotheses about data from two potentially different distributions (e.g., a test of the hypothesis that site concentrations are elevated above background levels). Nonparametric tests most commonly performed include the Gehan test (modification of the Wilcoxon Rank Sum test) and the quantile test (Gehan 1965, 055611; Gilbert and Simpson 1990, 055612).

The Gehan test is recommended when between 10% and 50% of the data sets are nondetections. It handles data sets with nondetections reported at multiple DLs in a statistically robust manner (Gehan 1965, 055611; Millard and Deverel 1988, 054953). The Gehan test is not recommended if either of the two data sets has more than 50% nondetections. If there are no nondetected concentrations in the data, the Gehan test is equivalent to the Wilcoxon Rank Sum test. The Gehan test is the preferred test because of its applicability to a majority of environmental data sets and its recognition and recommendation in EPA sponsored workshops and publications.

The quantile test is better suited to assessing shifts in a subset of the data. The quantile test determines whether more of the observations in the top chosen quantile of the combined data set come from the site data set than would be expected by chance, given the relative sizes of the site and background data sets. If the relative proportion of the two populations being tested is different in the top chosen quantile of the data than in the remainder of the data, the distributions may be partially shifted because of a subset of site data. This test is capable of detecting a statistical difference when only a small number of concentrations are elevated (Gilbert and Simpson 1992, 054952). The quantile test is the most useful distribution shift test where samples from a release represent a small fraction of the overall data collected. The quantile test is applied at a prespecified quantile or threshold, usually the 80th percentile. The test cannot be performed if more than 80% (or, in general, more than the chosen percentile) of the combined data are nondetected values. It can be used when the frequency of nondetections is approximately the same as the quantile being tested. For example, in a case with 75% nondetections in the combined background and site data set, application of a quantile test comparing $80^{th}$ percentiles is appropriate.

However, the test cannot be performed if nondetections occur in the top chosen quantile. The threshold percentage can be adjusted to accommodate the detection rate of an analyte or to analyze differences further into the distribution tails. The quantile test is more powerful than the Gehan test for detecting differences when only a small percentage of the site concentrations are elevated.

If the differences between two distributions appear to occur far into the tails, the slippage test might be performed. This test evaluates the potential for some of the site data to be greater than the maximum concentration in the background data set if, in fact, the site data and background data came from the same distribution. This test is based on the maximum concentration in the background data set and the number ("n") of site concentrations that exceed the maximum concentration in the background set (Gilbert and Simpson 1990, 055612, pp. 5–8). The result (p-value) of the slippage test is the probability that "n" site samples (or more) exceed the maximum background concentration by chance alone. The test accounts for the number of samples in each data set (the number of samples from the site and the number of samples from background) and determines the probability of "n" (or more) exceedances if the two data sets came from identical distributions. This test is similar to the BV comparison in that it evaluates the largest site measurements but is more useful than the BV comparison because it is based on a statistical hypothesis test, not simply on a statistic calculated from the background distribution.

For all statistical tests, a p-value greater than 0.05 was the criterion for accepting the null hypothesis that site sampling results are not different from background (Appendix F).

#### 5.1.2.2 Graphical Presentation

Box plots are provided for a visual representation of the data and to help illustrate the presence of outliers or other anomalous data that might affect statistical results and interpretations. The plots allow a visual comparison among data distributions. The differences of interest may include an overall shift in concentration (shift of central location) or, when the centers are nearly equal, a difference between the upper tails of the two distributions (elevated concentrations in a small fraction of one distribution). The plots may be used in conjunction with the statistical tests (distributional comparisons) described above. Unless otherwise noted, the nondetected concentrations are included in the plots at their reported DLs.

The box plots presented in Appendix F of this report consist of a box, a line across the box, whiskers (lines extended beyond the box and terminated with a short perpendicular line), and points outside the whiskers. The box area of the plot is the region between the 25$^{th}$ percentile and the 75$^{th}$ percentile of the data, the interquartile range or middle half of the data. The horizontal line within the box represents the median (50$^{th}$ percentile) of the data. The whiskers extend to the most extreme point that is not considered an outlier, with a maximum whisker length of 1.5 times the interquartile range, outside of which data may be evaluated for their potential to be outliers. The concentrations are plotted as points overlying the box plot. When a data set contains both detected concentrations and nondetected concentrations reported as DLs, the detected concentrations are plotted as Xs, and the nondetected concentrations are plotted as Os.

### 5.2 Extent of Contamination

Spatial concentration trends are initially used to determine whether the extent of contamination is defined. Evaluation of spatial concentration data considers the conceptual site model of the release and subsequent migration. Specifically, the conceptual site model should define where the highest concentrations would be expected if a release had occurred and how these concentrations should vary with distance and depth. If the results are different from the conceptual site model, it could indicate that no release has occurred or there are other sources of contamination.

In general, both laterally and vertically decreasing concentrations are used to define extent. If concentrations are increasing or not changing, other factors are considered to determine whether extent is defined or if additional extent sampling is warranted. These factors include

- the magnitude of concentrations and rate of increase compared with SSLs/SALs,
- the magnitude of concentrations of inorganic chemicals or radionuclides compared with the maximum background concentrations for the medium,
- concentrations of organic chemicals compared to estimated quantitation limits (EQLs), and
- results from nearby sampling locations.

The primary focus for defining the extent of contamination is characterizing contamination that potentially poses a potential unacceptable risk and may require additional corrective actions. As such, comparison with SSLs/SALs is used as an additional step following a determination of whether extent is defined by decreasing concentrations with depth and distance and whether concentrations are below EQLs or DLs. The initial SSL/SAL comparison is conducted using the residential SSL/SAL (regardless of whether the current and reasonably foreseeable future land use is residential) because this value is typically the most protective. If the current and reasonably foreseeable future land use is not residential, the relevant SSL/SAL may also be compared if the residential SSL/SAL is exceeded or otherwise similar to COPC concentrations. For the AOCs in the TA-57 Aggregate Area, the current and reasonably foreseeable future land use is industrial (section 4.1).

The SSL/SAL comparison is not necessary, if all COPC concentrations are decreasing with depth and distance. If, however, concentrations increase with depth and distance or do not display any obvious trends, the SSLs/SALs are used to determine whether additional sampling for extent is warranted. If the COPC concentrations are sufficiently below the SSL/SAL (e.g., the residential and/or industrial SSL/SAL is 10 times [an order of magnitude] or more than all concentrations), the COPC does not pose a potential unacceptable risk and no further sampling for extent is warranted. The validity of the assumption that the COPC does not pose a risk is confirmed using the results of the risk-screening assessment. The calculation of risk also assists in determining whether additional sampling is warranted to define the extent of contamination that needs additional corrective actions.

Several inorganic chemicals (calcium, magnesium, potassium, and sodium) may be COPCs but do not have SSLs. These constituents are essential nutrients and their maximum concentrations are compared with NMED's essential nutrient screening levels (NMED 2014, 600115). If the maximum concentration is less than the screening level, no additional sampling for extent is warranted.

## 6.0 TA-57 BACKGROUND AND FIELD-INVESTIGATION RESULTS

Two AOCs located in TA-57 are addressed in this investigation report (Table 1.1-1). Each site is described separately in sections 6.2 and 6.3, including the site description and operational history, relationship to other SWMUs and AOCs, previous investigations, site contamination results based on decision-level data from the current and previous investigations, and summaries of human health and ecological risk screening assessments.

## 6.1 Background of TA-57

### 6.1.1 Operational History

TA-57 was established at the Fenton Hill site in 1974 to support the Laboratory's Hot Dry Rock (HDR) program. HDR was an experimental geothermal energy program designed to test the feasibility of extracting heat from deep geologic units near the Valles Caldera. The first location selected for HDR was in Barley Canyon north of the current TA-57 site. After one test well had been drilled, this location was abandoned because of poor winter access and topographic limitations. Operations were moved to the current TA-57 location, which offered a large flat area with easier access. Operations at TA-57 began in 1974.

The HDR energy recovery concept was based on drilling two deep (i.e., 10,000–15,000 ft) wells into the low-permeability, hot-crystalline rock beneath TA-57. Hydraulic fracturing was then used to create a permeable fractured zone between the two wells. During operations, pressurized water was injected into one well and extracted from the other after it flowed through the fractured zone and became heated. Heat exchangers on the surface were used to extract heat from the water, which was then reinjected.

The first geothermal well drilled at TA-57 was well GT-2, which was started in 1974 and completed in 1975. Upon completion of hydraulic fracturing of well GT-2, drilling began on well EE-1, which was to be the extraction well used with GT-2. After completion of fracturing and additional drilling, testing of the two-well system began in 1978. Work on a larger Phase II system began in 1979 with the drilling of well EE-2, the injection well for the Phase II system. Well EE-2 was completed in 1980, and drilling began on extraction well EE-3, which was completed in 1981. Testing of the Phase II system began in 1985 and continued until 1992, when operations were reduced substantially because of funding limitations.

When the extraction wells were drilled, drilling muds were discharged to mud pits and settling ponds near the drill sites. Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of geothermal energy are solid wastes that are specifically excluded from regulation as hazardous wastes under RCRA [40 Code of Federal Regulations 261.4(b)(5)]. These waste management sites were regulated by NMOCD and were closed in accordance with NMOCD requirements (NMOCD 2003, 101265).

After the HDR project ended, the 5-million-gal. pond originally constructed for the HDR program was converted to a gamma-ray observatory for a project known as Milagro. To construct the observatory, liquid was removed from the pond, the interior of the pond was cleaned, over 700 photomultiplier tubes were placed in the pond, and the pond was refilled with treated water and covered. This water was obtained from an on-site supply well and off-site sources and treated with ion-exchange, granular activated carbon, and ultraviolet light. The Milagro observatory began operating in 1996, and it was decommissioned in June 2008.

TA-57 is currently used to operate a fully automated observatory in support of the Thinking Telescopes project overseen by the Laboratory's Intelligence and Space Research Division. This project combines automated telescope observation, feature extraction from image data, change and anomaly detection, and automated response. An automated measurement program continuously scans the sky to detect optical transients.

### 6.1.2 Summary of Releases

Releases at the TA-57 Aggregate Area sites may have occurred as a result of normal site operations or spills/leaks. Potential contaminant sources include a waste storage drum (AOC 57-006) and a leach field (AOC 57-007).

### 6.1.3 Current Site Usage and Status

The fenced area at TA-57 is industrial. A portion of the area immediately adjacent to TA-57 is used by the U.S. Forest Service as a seasonal support area for firefighters.

## 6.2 AOC 57-006, Former Waste Storage Drum

### 6.2.1 Site Description and Operational History

AOC 57-006 is the former location of a plastic-lined 55-gal. drum that was buried in the ground at TA-57 beneath a trailer (structure 57-23) that served as an analytical chemistry laboratory (Figure 6.2-1). The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer was used to dispose of wastewater associated with chemical analyses. The sink drained to a leach field (AOC 57-007) near the trailer. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to the polyethylene drum. When the drum was full, its contents were transported to the Laboratory for disposal. In 1994, the drum was removed as part of a voluntary corrective action (VCA). The chemistry trailer was removed from the site in March 1994.

The site of the former waste drum is currently vegetated with grasses. The ground surface where the trailer was located is level and then slopes to the southeast toward a drainage swale.

### 6.2.2 Relationship to Other SWMUs and AOCs

AOC 57-006 is located southwest and upgradient of AOC 57-007.

### 6.2.3 Summary of Previous Investigations

A VCA was conducted in 1994 to remove the waste collection drum (LANL 1995, 054336). The contents of the drum had previously been removed in January 1994 (LANL 1995, 054336, p. 1). Sampling of the contents indicated elevated levels of lead and mercury as well as various organic solvents, and the waste was classified as hazardous (LANL 1995, 054336, p. 1). During the VCA, the 55-gal. drum was removed. No evidence of leakage was observed during the removal. After the drum was removed, a sample was collected from the bottom of the excavation at a depth of 0.0–0.5 ft below the bottom of the excavation and submitted for laboratory analysis of TAL metals, total cyanide, total uranium, and VOCs. Data from the 1994 VCA are screening-level data and are summarized below. Section 2.1.3 of the historical investigation report (HIR) (LANL 2012, 214549) presents a more detailed discussion of the screening-level results.

Lead and mercury were each detected above BVs in one sample. Organic chemicals were not detected.

### 6.2.4 Site Contamination

#### 6.2.4.1 Soil, Rock and Sediment Sampling

Based on previous investigation results, further characterization using decision-level data was required to assess the potential contamination at AOC 57-006. As a result, the following activities were completed as part of the 2014 investigation:

- All investigation samples were field-screened for organic vapors and gross-alpha, -beta, and -gamma radiation. Field-screening results were recorded on the SCLs (Appendix E).

- Twelve samples were collected from four locations. Three samples were collected at the previously sampled location of the former waste storage drum (location 57-4022), and three samples each were collected at three step-out locations. At each location, samples were collected from 3.0–4.0 ft (approximately 0.0–1.0 ft below the bottom of the former drum location), 5.0−6.0 ft bgs, and 8.0–9.0 ft bgs. All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.

The 2014 sampling locations at AOC 57-006 are shown in Figure 6.2-1. Table 6.2-1 presents the samples collected and analysis requested for AOC 57-006. The geodetic coordinates of sampling locations are presented in Table 3.2-1.

#### 6.2.4.2 Soil, Rock, and Sediment Field-Screening Results

During headspace screening for organic vapors at AOC 57-006, no organic vapors were detected. No radiological screening results exceeded twice the daily background levels. Field-screening results are presented in Table 3.2-2. There were no changes to sampling or other activities because of field-screening results.

#### 6.2.4.3 Soil, Rock, and Sediment Analytical Results

Decision-level data at AOC 57-006 consist of 12 samples (7 fill and 5 tuff) collected from 4 locations.

**Inorganic Chemicals**

Twelve samples (seven fill and five tuff) were analyzed for TAL metals, total cyanide, nitrate, and perchlorate. Table 6.2-2 presents the inorganic chemicals above BVs and detected inorganic chemicals with no BVs. Figure 6.2-2 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Antimony was not detected above the soil and Qbt 2,3,4 BVs (0.83 mg/kg and 0.5 mg/kg) but had DLs (0.946 mg/kg to 1.12 mg/kg) above BVs in all 12 samples. The DLs were also above the maximum soil or Qbt 2,3,4 background concentrations (1 mg/kg and 0.4 mg/kg) in 10 samples. Antimony is retained as a COPC.

Barium was detected above the Qbt 2,3,4 BV (46 mg/kg) in four samples with a maximum concentration of 136 mg/kg. Barium is retained as a COPC.

Cadmium was not detected above the soil and Qbt 2,3,4 BVs (0.4 mg/kg and 1.63 mg/kg) but had DLs (0.477 mg/kg to 0.56 mg/kg) above the soil BV in 7 samples. The DLs were only 0.077 mg/kg to 0.16 mg/kg above the soil BV and were approximately 2 mg/kg to 2.1 mg/kg below the maximum soil background concentration (2.6 mg/kg). Cadmium was not detected in the 7 soil samples and was not detected above BVs in the 12 samples (detected in 1 tuff sample below the Qbt 2,3,4 BV). The single detected concentration of cadmium (0.14 mg/kg) was well below both BVs and indicates that cadmium, when present, is background. Cadmium is not a COPC.

Chromium was detected above the soil and Qbt 2,3,4 BVs (19.3 mg/kg and 7.14 mg/kg) in one fill sample and three tuff samples with a maximum concentration of 113 mg/kg. Chromium is retained as a COPC.

Copper was detected above the Qbt 2,3,4 BV (4.66 mg/kg) in two samples with a maximum concentration of 26 mg/kg. Copper is retained as a COPC.

Lead was detected above the Qbt 2,3,4 BV (11.2 mg/kg) in four samples with a maximum concentration of 14.5 mg/kg. The concentrations were only 0.6 mg/kg to 3.3 mg/kg above the Qbt 2,3,4 BV and were approximately 1 mg/kg to 3.7 mg/kg below the maximum Qbt 2,3,4 background concentration (15.5 mg/kg). Lead was detected below the soil and Qbt 2,3,4 BVs in the other eight samples and at similar concentrations in soil and tuff samples with concentrations ranging from 9.05 mg/kg to 14.5 mg/kg (a difference of 5.45 mg/kg). Lead is not a COPC.

Manganese was detected above the Qbt 2,3,4 BV (482 mg/kg) in 1 sample at a concentration of 536 mg/kg. The concentration was 54 mg/kg above the Qbt 2,3,4 BV and approximately 216 mg/kg below the maximum Qbt 2,3,4 background concentration (752 mg/kg). Manganese was detected below the soil and Qbt 2,3,4 BVs in the other 11 samples and at similar concentrations in soil and tuff samples with concentrations ranging from 326 mg/kg to 552 mg/kg (the maximum concentration was detected in a fill sample below the soil BV). Manganese is not a COPC.

Nitrate was detected in 12 samples with a maximum concentration of 8.03 mg/kg. Nitrate is naturally occurring, and the concentrations reflect naturally occurring levels of nitrate. Nitrate is not a COPC.

Selenium was detected above the Qbt 2,3,4 BV (0.3 mg/kg) in two samples with a maximum concentration of 0.358 mg/kg and had DLs (0.944 mg/kg to 1.06 mg/kg) above the BV in three samples. Selenium is retained as a COPC.

Zinc was detected above the soil and Qbt 2,3,4 BVs (48.8 mg/kg and 63.5 mg/kg) in five fill samples and two tuff samples with a maximum concentration of 75.1 mg/kg. Zinc is retained as a COPC.

**Organic Chemicals**

Twelve samples (seven fill and five tuff) were analyzed for SVOCs and VOCs. Table 6.2-3 summarizes the analytical results for detected organic chemicals. Figure 6.2-3 shows the spatial distribution of detected organic chemicals.

The organic chemicals detected at AOC 57-006 include bis(2-ethylhexyl)phthalate, methylene chloride, and trichloroethene. All detected organic chemicals are retained as COPCs.

**Radionuclides**

Twelve samples (seven fill and five tuff) were analyzed for isotopic uranium. Table 6.2-4 summarizes radionuclides detected above BVs. Figure 6.2-4 shows the spatial distribution of detected radionuclides.

Uranium-235/236 was detected above the Qbt 2,3,4 BV (0.09 mg/kg) in 1 sample at an activity of 0.0956 pCi/g. The activity was only 0.0056 pCi/g above the BV, and uranium-235/236 was not detected or was detected below the soil or Qbt 2,3,4 BVs in the other 11 samples (detected in 4 samples below the BVs). The Qbt 2,3,4 BV for uranium-235/236 is calculated using the total uranium measured in rock and the isotopic abundance and activity of uranium-234, uranium-235/236, and uranium-238. As presented in Table 5.3-4 of the Laboratory's background report (LANL 1998, 059730), the maximum activity of total uranium in Qbt 2,3,4 is about 23% greater (7.123 pCi/g versus 5.79 pCi/g) than the BV based on 26 background samples. A calculated maximum uranium-235/236 activity for Qbt 2,3,4 background is 0.11 pCi/g. This activity is 0.014 pCi/g above the maximum site activity and indicates the uranium-235/236 activities are naturally occurring. The other uranium isotopes (uranium-234 and uranium-238) are not different from background, also indicating naturally occurring activities of uranium-235/236. Uranium-235/236 is not a COPC.

#### 6.2.2.4 Nature and Extent of Contamination

The nature and extent of inorganic, organic, and radionuclide COPCs at AOC 57-006 are discussed below.

**Inorganic Chemicals**

Inorganic COPCs at AOC 57-006 are antimony, barium, chromium, copper, selenium, and zinc.

Antimony was not detected above the soil and Qbt 2,3,4 BVs but had DLs (0.946 mg/kg to 1.12 mg/kg) above BVs in all 12 samples. Because antimony was not detected in any sample and the residential SSL is approximately 28 times the maximum DL, further sampling for extent of antimony is not warranted.

Barium was detected above the Qbt 2,3,4 BV in four samples with a maximum concentration of 136 mg/kg. Concentrations decreased with depth at location 57-4023. The concentrations at locations 57-4022, 57-4024, and 57-4025 increased with depth, and concentrations increased laterally from location 57-4022. The residential and industrial SSLs were approximately 115 times and 1875 times the maximum concentration. Further sampling for extent of barium is not warranted.

Chromium was detected above the soil and Qbt 2,3,4 BVs in one fill sample and three tuff samples with a maximum concentration of 113 mg/kg. Concentrations decreased with depth at location 57-4024. The concentrations at locations 57-4022, 57-4023, and 57-4025 increased with depth and increased laterally from location 57-4022. As discussed in section 4.2, no source of hexavalent chromium was present at this site, and site conditions would not have produced hexavalent chromium. Therefore, the results were compared with trivalent chromium SSLs for extent purposes. The trivalent chromium residential and industrial SSLs were approximately 1035 times and 15,044 times the maximum concentration, respectively. Further sampling for extent of chromium is not warranted.

Copper was detected above the Qbt 2,3,4 BV in two samples with a maximum concentration of 26 mg/kg. Concentrations at location 57-4022 did not change substantially with depth (2.2 mg/kg) and increased with depth at location 57-4025. Concentrations increased laterally to the north from location 57-4022 to location 57-4025. The residential and industrial SSLs were approximately 120 times and 1996 times the maximum concentration, respectively. Further sampling for extent of copper is not warranted.

Selenium was detected above the Qbt 2,3,4 BV in two samples at concentrations of 0.347 mg/kg and 0.358 mg/kg and had DLs (0.944 mg/kg to 1.06 mg/kg) above the BV in three samples. The detected concentrations at locations 57-4022 and 57-4025 were in the deepest samples but only 0.047 mg/kg and 0.058 mg/kg above the BV. Selenium was not detected at locations 57-4023 and 57-4024. The residential SSL was approximately 1092 times the detected concentrations and approximately 368 times the maximum DL. Further sampling for extent of selenium is not warranted.

Zinc was detected above the soil and Qbt 2,3,4 BVs in five fill samples and two tuff samples with a maximum concentration of 75.1 mg/kg. Concentrations decreased with depth at locations 57-4024 and 57-4022. The concentrations at locations 57-4023 and 57-4025 increased slightly with depth (12.9 mg/kg and 24.7 mg/kg) and increased slightly laterally (12.3 mg/kg or less at depth) from location 57-4022. However, the concentrations were reported at similar ranges at each location across the site (44.5 mg/kg to 75.1 mg/kg) and were below the maximum soil background concentration (75.5 mg/kg) and below or slightly above (9.5 mg/kg or less) the maximum Qbt 2,3,4 background concentration (65.6 mg/kg). The residential and industrial SSLs were approximately 313 times and 5180 times the maximum concentration, respectively. Further sampling for extent of zinc is not warranted.

#### Organic Chemicals

Organic COPCs at 57-006 include bis(2-ethylhexyl)phthalate, methylene chloride, and trichloroethene.

Bis(2-ethylhexyl)phthalate was detected in one sample at a concentration of 0.269 mg/kg. The concentration was below the EQL and decreased laterally from location 57-4022. The residential SSL was approximately 1412 times the concentration. Further sampling for extent of bis(2-ethylhexyl)phthalate is not warranted.

Methylene chloride was detected in two samples with a maximum concentration of 0.0028 mg/kg. Concentrations decreased with depth and were below the EQLs. Concentrations decreased or did not change substantially laterally (0.00032 mg/kg). The residential SSL was approximately 146,071 times the maximum concentration. The vertical extent of methylene chloride is defined, and further sampling for lateral extent is not warranted.

Trichloroethene was detected in two samples with a maximum concentration of 0.000726 mg/kg. The concentrations did not change substantially with depth and were below the EQLs. Concentrations increased laterally from location 57-4022. The residential SSL was approximately 9325 times the maximum concentration. The vertical extent of trichloroethene is defined, and further sampling for lateral extent is not warranted.

#### Radionuclides

No radionuclide COPCs were identified at AOC 57-006.

### 6.2.5 Summary of Human Health Risk Screening

#### Industrial Scenario

Samples were not collected from the 0.0–1.0-ft depth interval; therefore, the industrial scenario was not evaluated for AOC 57-006.

#### Residential Scenario

The total excess cancer risk for the residential scenario is $6 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$. The HI for the residential scenario is 0.05, which is less than the NMED target HI of 1.

Based on the risk-screening assessment results, no potential unacceptable risks or doses exist for the industrial and residential scenarios at AOC 57-006.

### 6.2.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations, and LOAEL analyses, no potential ecological risks to the earthworm, plant, American robin, American kestrel, deer mouse, montane shrew, desert cottontail, and red fox exist at AOC 57-006.

## 6.3 AOC 57-007, Leach Field

### 6.3.1 Site Description and Operational History

AOC 57-007 is a leach field at TA-57 that served a former trailer (structure 57-23) that was used as an analytical chemistry laboratory (Figure 6.2-1). The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer drained to the leach field and was used to dispose of wastewater associated with chemical analyses. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to a polyethylene-lined 55-gal. drum (AOC 57-006). The chemistry trailer was removed from the site in March 1994.

The RCRA facility investigation (RFI) work plan for Operable Unit 1154 (LANL 1994, 034757) described the leach field's location as approximately 20 ft southeast of the trailer at 8.0–10.0 ft bgs. During the 1994 Phase I RFI at this site, the leach field was discovered to be northeast of the trailer and at a depth of 1.0–2.0 ft bgs. The site of the leach field is currently vegetated with grasses, shrubs, and small trees. The ground surface slopes to the southeast toward a drainage swale. An elevated electrical conduit rack runs across the site roughly parallel to the road.

### 6.3.2 Relationship to Other SWMUs and AOCs

AOC 57-007 is located northeast and downgradient of AOC 57-006.

### 6.3.3 Summary of Previous Investigations

During the 1994 Phase I RFI conducted at AOC 57-007, the drainline from the trailer to the leach field was found to be in place, uncovered, and used to locate the leach field (LANL 1996, 053801). One sample was collected where the drainline discharged to the leach field from a depth 0.0–1.0 ft below the bottom of the drainline. The sample was submitted for laboratory analysis of TAL metals, total cyanide, total uranium, and SVOCs. Data from the 1994 RFI are screening-level data and are summarized below. Section 2.2.3 of the HIR presents a more detailed discussion of the screening-level results (LANL 2012, 214549).

Mercury, uranium, and zinc were each detected above the soil BVs in the one sample. Organic chemicals were not detected.

### 6.3.4 Site Contamination

#### 6.3.4.1 Soil, Rock, and Sediment Sampling

Based on previous investigation results, further characterization using decision-level data was required to assess the potential contamination at AOC 57-007. As a result, the following activities were completed as part of the 2014 investigation:

- All investigation samples were field-screened for organic vapors and gross-alpha, -beta, and -gamma radiation. Field screening results were recorded in the SCLs (Appendix E).

- Nine samples were collected where the drainline exited the former trailer (location 57-4011), beneath the midpoint of the drainline (location 57-4013), and near the previously sampled location where the drainline entered the leach field (location 57-4012) (see discussion of deviations in Appendix B). At each location, samples were collected from three depth intervals: the interval encompassing the former drainline; the interval 0.0–1.0 ft below the drainline/1 ft above tuff; and approximately 2.0–3.0 ft into tuff. These intervals deviate slightly from those proposed in investigation work plan because two of the intervals specified in the work plan were the same (see discussion of deviations in Appendix B). At location 57-4011, samples were collected from 0.0–1.0 ft, 1.0–2.0 ft, and 3.0–4.0 ft bgs. At location 57-4012, samples were collected from 0.0–1.0 ft, 1.25–2.25 ft, and 4.25–5.25 ft bgs. At location 57-4013, samples were collected from 0.0–1.0 ft, 1.0–2.0 ft, and 4.0–5.0 ft bgs. All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.
- Six samples were collected from two locations within the leach field. At location 57-4014 samples were collected from 1.0–2.0 ft, 2.0–3.0 ft, and 4.0–5.0 ft bgs. At location 57-4015 samples were collected from 1.5–2.5 ft, 2.5–3.5 ft, and 4.5–5.5 ft bgs. All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.
- Nine samples were collected from three step-out locations around the leach field. At location 57-4016, samples were collected from 2.5–3.5 ft, 3.0–4.0 ft, and 6.0–7.0 ft bgs. At location 57-4017, samples were collected from 1.0–2.0 ft, 2.5–3.5 ft, and 4.0–5.0 ft bgs. At location 57-4018, samples were collected from 2.5–3.5 ft, 4.4–5.4 ft, and 7.4–8.4 ft bgs. Samples were also collected from 0.0–1.0 ft bgs at each location (see deviations in Appendix B). All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.
- Nine samples were collected from three locations in the drainage downgradient of the leach field to define lateral extent of contamination. At location 57-4019, samples were collected from 0.0–1.0 ft, 1.5–2.5 ft, and 4.5–5.5 ft bgs. At location 57-4020, samples were collected from 0.0–1.0 ft, 2.5–3.5 ft, and 5.5–6.5 ft bgs. At location 57-4021, samples were collected from 0.0–1.0 ft, 4.5–5.5 ft, and 6.5–7.5 ft bgs. All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.
- Soil removal occurred at locations 57-4011 and 57-4020 to remove elevated arsenic concentrations in the 0.0−1.0-ft depth interval. Excavations were to 2.0 ft bgs at location 57-4011 and to 2.5 ft bgs at location 57-4020 (three samples were eliminated from the data set because of this activity). No additional samples were collected because sampling data from the bottom of the excavations were available.
- Four samples were collected from 2 locations (57-4026 and 57-4027) southwest of location 57-4011. At location 57-4026, samples were collected from 3.5–4.5 ft and 6.5–7.5 ft bgs. At location 57-4027, samples were collected from 2.0–3.0 ft and 5.0–6.0 ft bgs. Samples were analyzed at an off-site fixed laboratory for arsenic only.

The 2014 sampling locations at AOC 57-007 are shown in Figure 6.2-1. Table 6.3-1 presents the samples collected and analysis requested for AOC 57-007. The geodetic coordinates of sampling locations are presented in Table 3.2-1.

#### 6.3.4.2 Soil, Rock, and Sediment Field-Screening Results

During headspace screening for organic vapors at AOC 57-007, no organic vapors were detected. No radiological screening results exceeded twice the daily background levels. Field-screening results are presented in Table 3.2-2. There were no changes to sampling or other activities because of field-screening results.

#### 6.3.4.3 Soil, Rock, and Sediment Analytical Results

Decision-level data at AOC 57-007 consist of 37 samples (21 soil/fill and 16 tuff) collected from 13 locations.

**Inorganic Chemicals**

Thirty-three samples (19 soil/fill and 14 tuff) were analyzed for TAL metals, total cyanide, nitrate, and perchlorate. Four samples (2 soil and 2 tuff) were analyzed for arsenic only. Table 6.3-2 presents the inorganic chemicals above BVs and detected inorganic chemicals with no BVs. Figure 6.3-1 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Aluminum was detected above the soil and Qbt 2,3,4 BVs (29,200 mg/kg and 7340 mg/kg) in one soil and one tuff sample with a maximum concentration of 29,600 mg/kg. The Gehan and quantile tests indicated site concentrations of aluminum in soil are not statistically different from background (Figure F-1 and Table F-1). The quantile and slippage tests indicated site concentrations of aluminum in tuff are not statistically different from background (Figure F-1 and Table F-2). Aluminum is not a COPC.

Antimony was not detected above the soil and Qbt 2,3,4 BVs (0.83 mg/kg and 0.5 mg/kg) but had DLs (0.875 mg/kg to 1.15 mg/kg) above BVs in 14 soil samples and 12 tuff samples (78% of samples). The DLs were also above the maximum soil and Qbt 2,3,4 background concentrations (1 mg/kg and 0.4 mg/kg, respectively). Antimony is retained as a COPC.

Arsenic was detected above the Qbt 2,3,4 BV (2.79 mg/kg) in one sample at a concentration of 5.12 mg/kg. The Gehan and quantile tests indicated site concentrations of arsenic in tuff are statistically different from background (Table F-2 and Figure F-2). Arsenic is retained as a COPC.

Barium was detected above the soil and Qbt 2,3,4 BVs (295 mg/kg and 46 mg/kg) in one soil sample and eight tuff samples with a maximum concentration of 384 mg/kg. The Gehan and quantile tests indicated the site concentrations of barium in soil are not statistically different from background (Figure F-3 and Table F-1). The Gehan and quantile tests indicated site concentrations of barium in tuff are statistically different from background (Figure F-3 and Table F-2). Barium is retained as a COPC.

Beryllium was detected above the soil BV (1.83 mg/kg) in one soil sample at a concentration of 2.29 mg/kg. The Gehan and quantile tests indicated the site concentrations of beryllium in soil are not statistically different from background (Figure F-4 and Table F-1). Beryllium is not a COPC.

Cadmium was detected above the soil BV (0.4 mg/kg) in 1 sample at a concentration of 0.574 mg/kg and had DLs (0.479 mg/kg to 0.575 mg/mg) above the soil BV in 17 samples (the DLs for all samples, whether soil or tuff, were similar, ranging from 0.438 mg/kg to 0.575 mg/kg). The detected concentration above BV was only 0.174 mg/kg and the DLs were only 0.079 mg/kg to 0.175 mg/kg above the soil BV. The detected concentration and DLs were approximately 2 mg/kg to 2.1 mg/kg below the maximum soil background concentration (2.6 mg/kg). Cadmium was not detected in 27 samples, was detected below the soil BV in 1 sample, and was detected below the Qbt 2,3,4 BV (1.63 mg/kg) in 4 samples

(concentrations were also below the soil BV). The detected concentrations of cadmium are well below both BVs and indicate that cadmium, when present, is background. Cadmium is not a COPC.

Chromium was detected above the Qbt 2,3,4 BV (7.14 mg/kg) in eight samples with a maximum concentration of 68.3 mg/kg. The Gehan and quantile tests indicated the site concentrations of chromium in tuff are statistically different from background (Table F-2 and Figure F-5). Chromium is retained as a COPC.

Copper was detected above the soil and Qbt 2,3,4 BVs (14.7 mg/kg and 4.66 mg/kg) in one soil sample and two tuff samples with a maximum concentration of 65.1 mg/kg. The Gehan and slippage tests indicated site concentrations of copper in soil are not statistically different from background (Figure F-6 and Table F-1).The Gehan and quantile tests indicated the site concentrations of copper in tuff are statistically different from background (Figures F-6 and Table F-2). Copper is retained as a COPC.

Cyanide was detected above the soil BV (0.5 mg/kg) in one soil sample at a concentration of 0.73 mg/kg. Cyanide is retained as a COPC.

Lead was detected above the soil and Qbt 2,3,4 BVs (22.3 mg/kg and 11.2 mg/kg) in one soil sample and seven tuff samples with a maximum concentration of 33.6 mg/kg. The Gehan and quantile tests indicated site concentrations of lead in soil are not statistically different from background (Figure F-7 and Table F-1). The Gehan and quantile tests indicated the site concentrations of lead in tuff are statistically different from background (Figure F-7 and Table F-2). Lead is retained as a COPC.

Mercury was detected above the soil and Qbt 2,3,4 BV (0.1 mg/kg) in two soil samples and two tuff samples with a maximum concentration of 20.6 mg/kg. Mercury is retained as a COPC.

Nitrate was detected in four soil samples and two tuff samples with a maximum concentration of 1.16 mg/kg. Nitrate is naturally occurring and the concentrations reflect naturally occurring levels of nitrate. Nitrate is not a COPC.

Perchlorate was detected in six soil samples and two tuff samples with a maximum concentration of 0.00159 mg/kg. Perchlorate is retained as a COPC.

Selenium was not detected above the Qbt 2,3,4 BV (0.3 mg/kg) but had DLs (0.917 mg/kg to 1.08 mg/kg) above the BV in 14 samples. Selenium is retained as a COPC.

Silver was detected above the soil BV (1 mg/kg) in two soil samples with a maximum concentration of 15.2 mg/kg. Silver is retained as a COPC.

Zinc was detected above the soil and Qbt 2,3,4 BVs (48.8 mg/kg and 63.5 mg/kg) in five soil samples and six tuff samples with a maximum concentration of 113 mg/kg. The Gehan and quantile tests indicated site concentrations of zinc in soil are statistically different from background (Figure F-8 and Table F-1). The Gehan and quantile tests indicated site concentrations of zinc in tuff are statistically different from background (Figure F-8 and Table F-2). Zinc is retained as a COPC.

**Organic Chemicals**

Thirty-three samples (19 soil/fill and 14 tuff) were analyzed for SVOCs and VOCs. Table 6.3-3 summarizes the analytical results for detected organic chemicals. Figure 6.3-2 shows the spatial distribution of detected organic chemicals.

The organic chemicals detected at AOC 57-007 include benzoic acid; bis(2-ethylhexyl)phthalate; butylbenzylphthalate; 1,4-dichlorobenzene; fluoranthene; methylene chloride; phenanthrene; and trichloroethene. All detected organic chemicals are retained as COPCs.

**Radionuclides**

Thirty-three samples (19 soil/fill and 14 tuff) were analyzed for isotopic uranium. Table 6.3-4 summarizes radionuclides detected or detected above BVs/FVs. Figure 6.3-3 shows the spatial distribution of detected radionuclides.

Uranium-235/236 was detected above the Qbt 2,3,4 BV (0.09 pCi/g) in 4 samples with a maximum activity of 0.115 pCi/g. The differences in activities between the site activities and the BV are 0.0056 pCi/g to 0.025 pCi/g, and the frequency of detected activities above BVs is only 4 of 33 samples. The Qbt 2,3,4 BV for uranium-235/236 is calculated using the total uranium measured in rock and the isotopic abundance and activity of uranium-234, uranium-235/236, and uranium-238. As presented in Table 5.3-4 of the Laboratory's background report (LANL 1998, 059730), the maximum activity of total uranium in Qbt 2,3,4 is about 23% greater than the BV (7.123 pCi/g versus 5.79 pCi/g) based on 26 background samples. A calculated maximum uranium-235/236 activity for Qbt 2,3,4 background is 0.11 pCi/g. This activity is similar to the maximum site activity and indicates the uranium-235/236 activities are naturally occurring. The other uranium isotopes (uranium-234 and uranium-238) are not different from background, also indicating naturally occurring activities of uranium-235/236. Uranium-235/236 is not a COPC.

#### 6.3.4.4 Nature and Extent of Contamination

The nature and extent of inorganic, organic, and radionuclide COPCs at AOC 57-007 are discussed below.

**Inorganic Chemicals**

Inorganic COPCs at AOC 57-007 are antimony, arsenic, barium, chromium, copper, cyanide, lead, mercury, perchlorate, selenium, silver, and zinc.

Antimony was not detected above the soil and Qbt 2,3,4 BVs but had DLs (0.875 mg/kg to 1.15 mg/kg) above BVs in 14 soil samples and 12 tuff samples. The residential SSL was approximately 27 times the maximum DL. Further sampling for extent of antimony is not warranted.

Arsenic was detected above the Qbt 2,3,4 BV in one sample at a concentration of 5.12 mg/kg. The concentration at location 57-4026 increased slightly with depth (approximately 3.3 mg/kg), but the concentration at depth (5.12 mg/kg) is similar to the maximum Qbt 2,3,4 background concentration (5 mg/kg). The industrial SSL was approximately 4.2 times the detected concentration. Further sampling for extent of arsenic is not warranted.

Barium was detected above the soil and Qbt 2,3,4 in one soil sample and eight tuff samples with a maximum concentration of 384 mg/kg. Concentrations decreased with depth at all locations and decreased downgradient. The lateral and vertical extent of barium are defined.

Chromium was detected above the Qbt 2,3,4 BV in eight samples with a maximum concentration of 68.3 mg/kg. Chromium concentrations decreased downgradient. Chromium concentrations decreased with depth at locations 57-4014 and 57-4015. Concentrations increased with depth at locations 57-4012, 57-4013, 57-4016, 57-4017, and 57-4018. As discussed in section 4.2, no source of hexavalent chromium is present at this site, and site conditions would not have produced hexavalent chromium. Therefore, the

results were compared with trivalent chromium SSLs for extent purposes. The trivalent chromium residential SSL was approximately 1713 times the maximum concentration. The lateral extent of chromium is defined, and further sampling for vertical extent is not warranted.

Copper was detected above the soil and Qbt 2,3,4 BVs in one soil sample and two tuff samples with a maximum concentration of 65.1 mg/kg. Concentrations decreased with depth at locations 57-4014, and 57-4015 and decreased downgradient. The lateral and vertical extent of copper are defined.

Cyanide was detected above the soil BV in one sample at a concentration of 0.73 mg/kg. Concentrations decreased with depth and decreased downgradient. The lateral and vertical extent of cyanide are defined.

Lead was detected above the soil and Qbt 2,3,4 BVs in one soil sample and seven tuff samples with a maximum concentration of 33.6 mg/kg. Lead concentrations decreased with depth at locations 57-4011 and 57-4020 (Appendix E, Excavated Samples Table) as well as at location 57-4015 and did not change substantially with depth (0.1 mg/kg to 3.6 mg/kg) at locations 57-4014, 57-4017, 57-4019, and 57-4021. The concentrations at depth at these four locations were less than or equivalent to the maximum Qbt 2,3,4 background concentration (15.5 mg/kg) and the residential and industrial SSLs were approximately 26 times and 52 times the maximum concentration at these locations. Concentrations decreased downgradient. The lateral extent of lead is defined, and further sampling for vertical extent is not warranted.

Mercury was detected above the soil and Qbt 2,3,4 BVs in two soil samples and two tuff samples with a maximum concentration of 20.6 mg/kg. Concentrations decreased with depth at locations 57-4014 and 57-4015 and decreased downgradient. The lateral and vertical extent of mercury are defined.

Perchlorate was detected in six soil samples and two tuff samples with a maximum concentration of 0.00159 mg/kg. Concentrations were below the estimated DLs and decreased with depth at locations 57-4011 (Appendix E, Excavated Samples Table), 57-4012, 57-4013, 57-4015, 57-4018, and 57-4020 and did not change substantially with depth (0.000954 mg/kg) at location 57-4016. Concentrations decreased downgradient. The lateral and vertical extent of perchlorate are defined.

Selenium was not detected above the Qbt 2,3,4 BV but had DLs (0.917 mg/kg to 1.08 mg/kg) above the BV in 14 samples. Because selenium was not detected in any samples and the residential SSL was approximately 362 times the maximum DL, further sampling for extent of selenium is not warranted.

Silver was detected above the soil BV in two samples with a maximum concentration of 15.2 mg/kg. Concentrations decreased with depth and decreased downgradient. The lateral and vertical extent of silver are defined.

Zinc was detected above the soil and Qbt 2,3,4 BVs in five soil samples and six tuff samples with a maximum concentration of 113 mg/kg. Concentrations decreased with depth at locations 57-4012, 57-4015, 57-4018, and 57-4021 and decreased downgradient. Concentrations increased slightly with depth (approximately 14 mg/kg to 24 mg/kg) at locations 57-4013, 57-4014, and 57-4017 with the deepest concentrations at locations 57-4013 and 57-4017 below or equivalent to the maximum Qbt 2,3,4 background concentration (65.6 mg/kg). The residential SSL was approximately 320 times the maximum concentration at these three locations. The lateral extent of zinc is defined, and further sampling for vertical extent is not warranted.

**Organic Chemicals**

Organic COPCs at AOC 57-007 include benzoic acid; bis(2-ethylhexyl)phthalate; butylbenzylphthalate; 1,4-dichlorobenzene; fluoranthene; methylene chloride; phenanthrene; and trichloroethene.

Benzoic acid was detected in three samples with a maximum concentration of 2.83 mg/kg. Concentrations decreased with depth and decreased downgradient. The lateral and vertical extent of benzoic acid are defined.

Bis(2-ethylhexyl)phthalate and butylbenzylphthalate were detected in one sample at concentrations of 0.13 mg/kg and 0.339 mg/kg, respectively. Concentrations were below the EQLs, decreased with depth, and decreased downgradient. The lateral and vertical extent of bis(2-ethylhexyl)phthalate and butylbenzylphthalate are defined.

Dichlorobenzene[1,4-] and methylene chloride were detected in three and two samples, respectively, with maximum concentrations of 0.00043 mg/kg and 0.00299 mg/kg. Concentrations were below the EQLs, decreased with depth, and decreased downgradient. The lateral and vertical extent of 1,4-dichlorobenzene and methylene chloride are defined.

Fluoranthene and phenanthrene were detected in one or two samples with maximum concentrations of 0.0145 mg/kg and 0.0134 mg/kg, respectively. Concentrations were below the EQLs, decreased with depth at all locations, and decreased downgradient. The lateral and vertical extent of fluoranthene and phenanthrene are defined.

Trichloroethene was detected in two samples with a maximum concentration of 0.00294 mg/kg. Concentrations decreased with depth or did not change substantially downgradient (0.00186 mg/kg). The residential SSL was approximately 2303 times the maximum concentration. The vertical extent of trichloroethene is defined, and further sampling for lateral extent is not warranted.

**Radionuclides**

No radionuclide COPCs were identified at AOC 57-007.

### 6.3.5 Summary of Human Health Risk Screening

**Industrial Scenario**

Carcinogenic COPCs were not identified in the 0.0–1.0-ft depth interval. The HI for the industrial scenario is 0.001, which is less than the NMED target HI of 1.

**Residential Scenario**

The total excess cancer risk for the residential scenario is $7 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$. The HI for the residential scenario is 0.3, which is less than the NMED target HI of 1.

Based on the risk-screening assessment results, no potential unacceptable risks or doses exist for the industrial and residential scenarios at AOC 57-007.

### 6.3.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations, LOAEL analyses, and chemicals of potential ecological concern (COPECs) without ESLs, no potential ecological risks to the earthworm, plant, American robin, American kestrel, deer mouse, montane shrew, desert cottontail, and red fox exist at AOC 57-007.

## 7.0 CONCLUSIONS

### 7.1 Nature and Extent of Contamination

Based on the evaluation of the data, the nature and extent of contamination have been defined and/or no further sampling for extent is warranted for the sites investigated.

#### 7.1.1 TA-57 Aggregate Area

The nature and extent of contamination have been defined, and/or no further sampling for extent is warranted for the following sites in TA-57:

- AOC 57-006, Former Waste Storage Drum
- AOC 57-007, Leach Field

### 7.2 Summary of Risk-Screening Assessments

AOCs 57-006 and 57-007 were evaluated for potential risk by human health and ecological risk-screening assessments.

#### 7.2.1 Human Health Risk-Screening Assessments

The human health risk-screening assessments are presented in Appendix G, section G-4.0.

The industrial scenario was not evaluated AOC 57-006 because samples were not collected from the 0.0–1.0-ft depth interval. The human health risk-screening assessments found no unacceptable risks under the industrial scenario at AOC 57-007 and found no unacceptable risks under the residential scenario at both AOCs. The total excess cancer risks were less than the NMED target risk level of $1 \times 10^{-5}$ and the HIs were less than the NMED target HI of 1.

#### 7.2.2 Ecological Risk-Screening Assessment

The ecological risk-screening assessments are presented in Appendix G, section G-5.0.

Ecological risks were evaluated for both sites based on comparisons to minimum ESLs, HI analyses, potential effects to populations, and LOAEL analyses. These lines of evidence and the analysis of COPECs with no ESLs support the conclusion that no potential ecological risk exists at these sites.

## 8.0 RECOMMENDATIONS

The determination of site status is based on the results of the risk-screening assessments and the nature and extent evaluation. Depending upon the decision scenario used, the sites are recommended as corrective actions complete either with or without controls or for additional action. The residential scenario is the only scenario under which corrective action complete without controls is applicable; that is, no additional corrective actions or conditions are necessary. The other decision scenarios (industrial, construction worker, and recreational) result in corrective action complete with controls; that is, some type of institutional controls must be in place to ensure land use remains consistent with site cleanup levels. The current and reasonably foreseeable future land use for the TA-57 Aggregate Area is industrial.

### 8.1 Additional Field Characterization Activities

Additional sampling to define the nature and extent of contamination is not warranted for AOCs 57-006 and 57-007.

### 8.2 Recommendations for Corrective Actions Complete

AOCs 57-006 and 57-007 do not pose a potential unacceptable risk or dose under the industrial and residential scenarios and have no potential ecological risks to any receptor, and the nature and extent of contamination are defined and/or no further sampling for extent is warranted. At these sites, the Laboratory recommends no further investigation or remediation activities, and both sites are appropriate for corrective actions complete without controls.

## 9.0 REFERENCES AND MAP DATA SOURCES

### 9.1 References

*The following list includes all documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the ESH Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

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## 9.2 Map Data Sources

Data sources used in original figures created for this report are described below and identified by legend title.

| Legend Item | Data Source |
|---|---|
| LANL Technical Areas | Technical Area Boundaries; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Office; September 2007; as published 04 December 2008. |
| Paved roads | Paved Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| Dirt roads | Dirt Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| Drainages | WQH Drainage Arcs; Los Alamos National Laboratory, ENV Water Quality and Hydrology Group; 1:24,000 Scale Data; 03 June 2003. |
| LANL AOC boundaries | Areas of Concern; Los Alamos National Laboratory, Waste and Environmental Services Division, Environmental Data and Analysis Group, EP2009-0137; 1:2,500 Scale Data; 25 January 2010. |
| LANL structures | Structures; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL fence lines | Security and Industrial Fences and Gates; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL communications lines | Communication Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 08 August 2002; as published 28 May 2009. |
| LANL electric lines | Primary Electric Grid; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL gas lines | Primary Gas Distribution Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL sewer lines | Sewer Line System; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL water lines | Water Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| Contours | Hypsography, 2, 10, 20, and 100 Foot Contour Interval; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; 1991. |

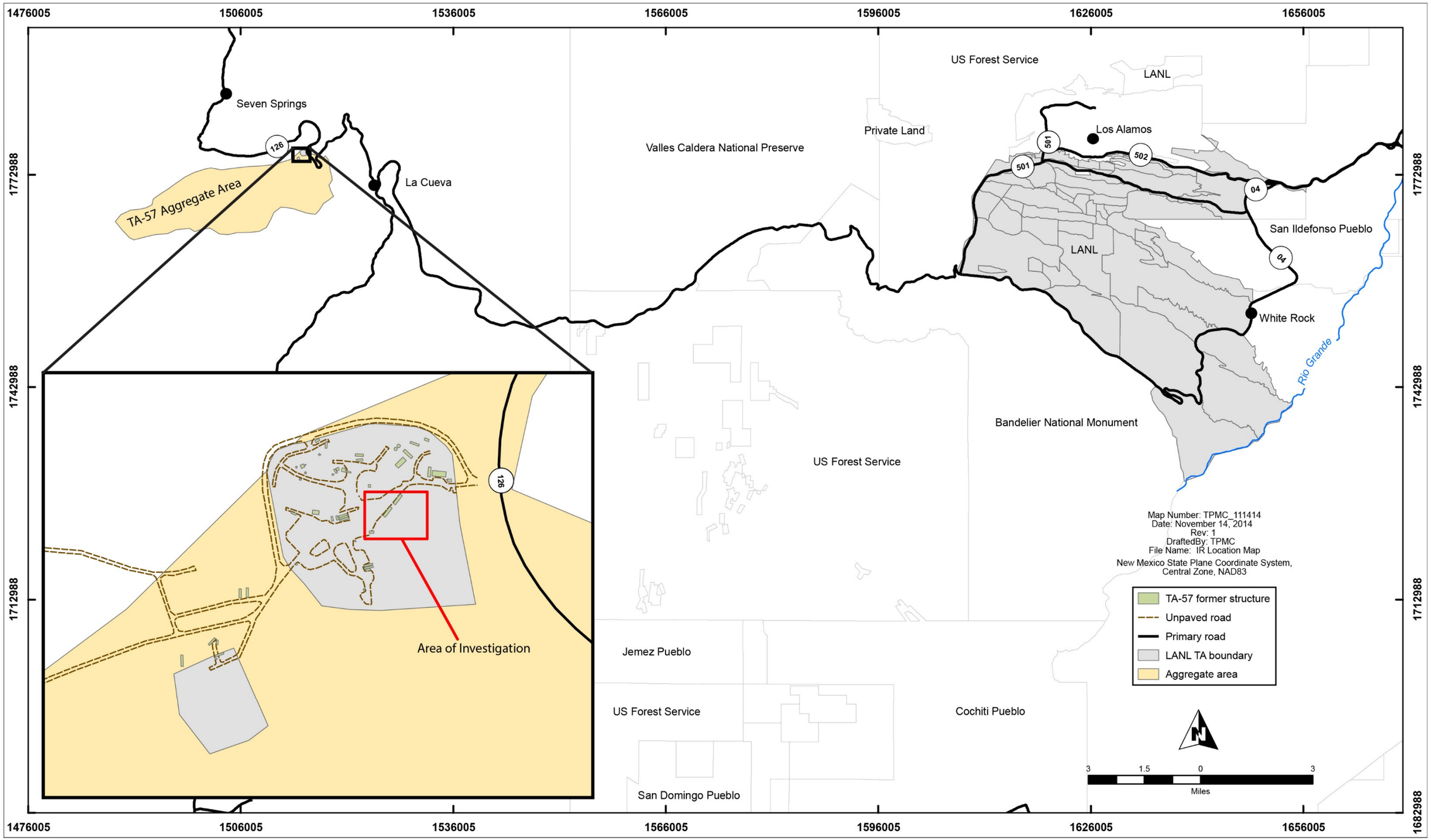


**Figure 1.1-1 Location of TA-57 Aggregate Area with respect to the Laboratory and surrounding area**

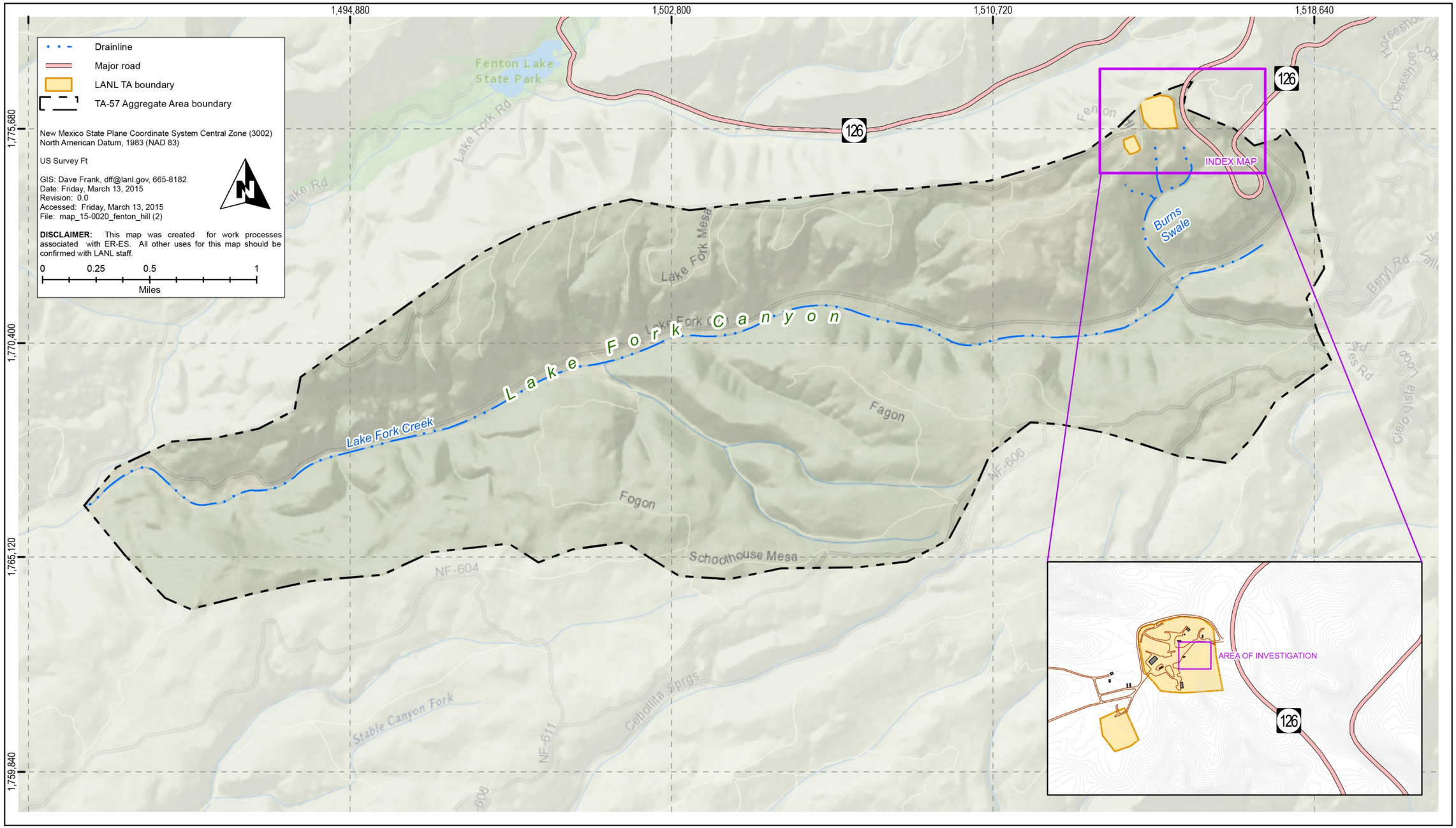


**Figure 2.1-1 Geologic and surface water features in the vicinity of the TA-57 Aggregate Area**

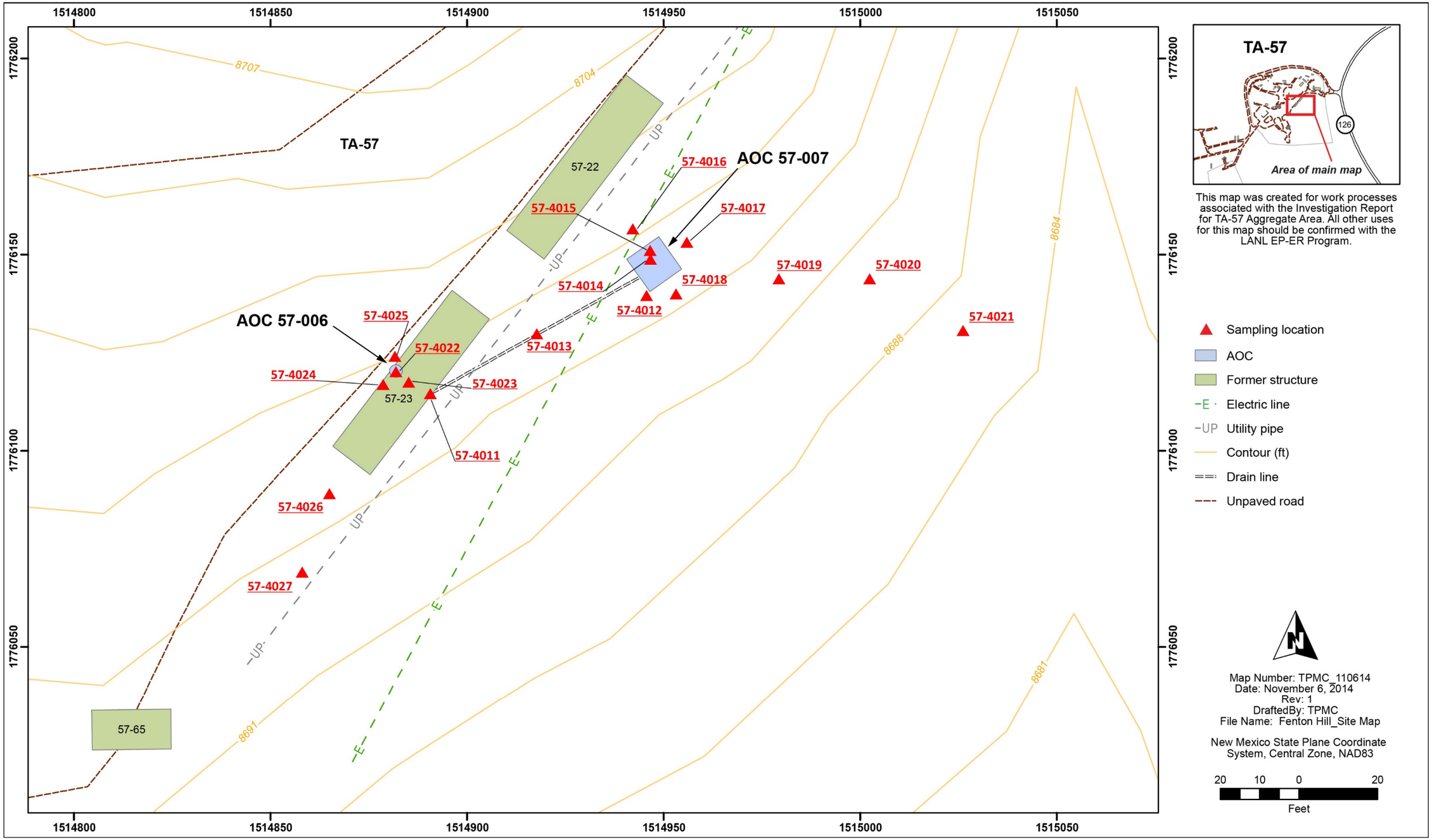


**Figure 6.2-1 Site map of AOCs 57-006 and 57-007 with sample locations**

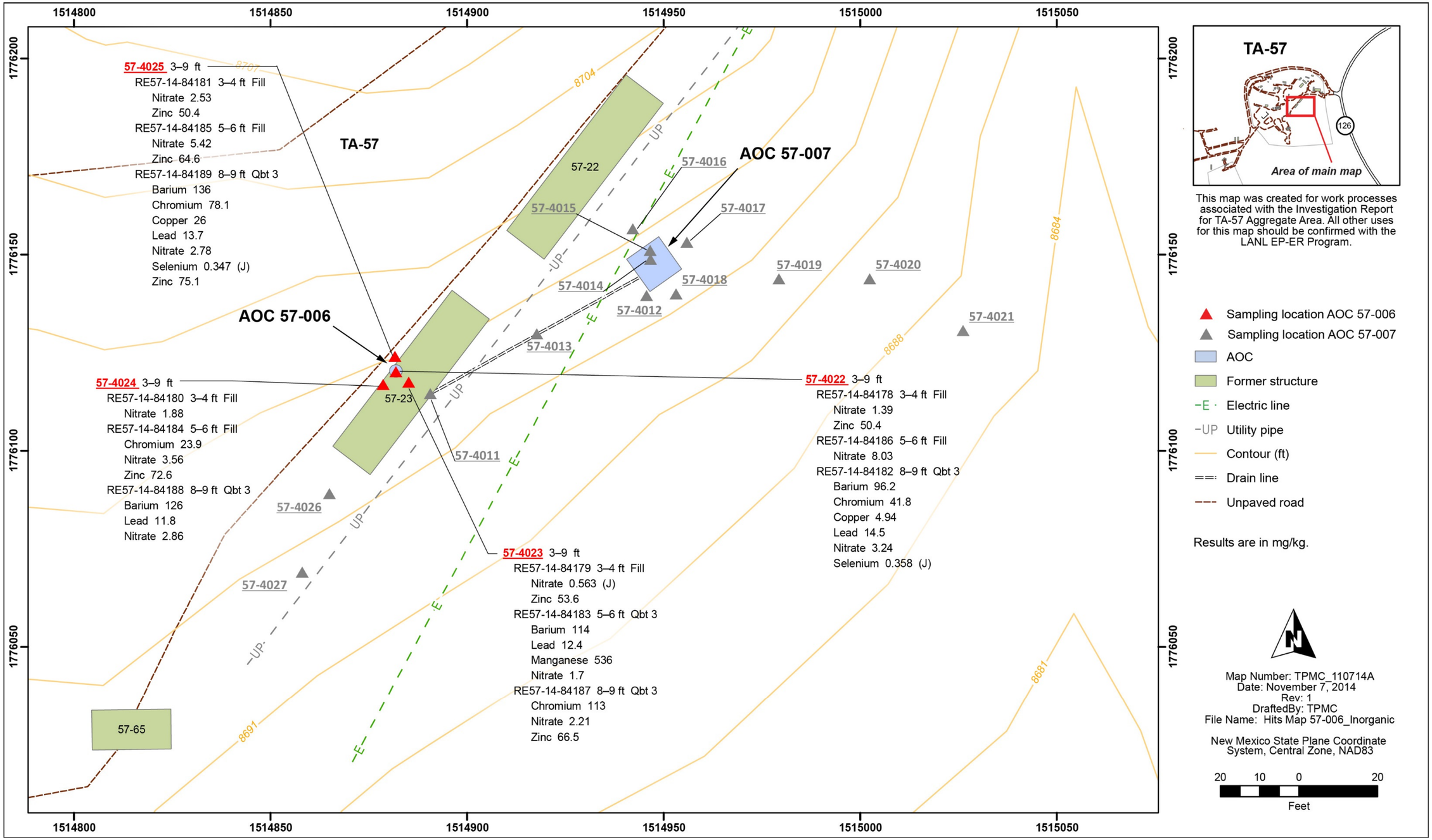


**Figure 6.2-2 Inorganic chemicals detected or detected above BVs at AOC 57-006**

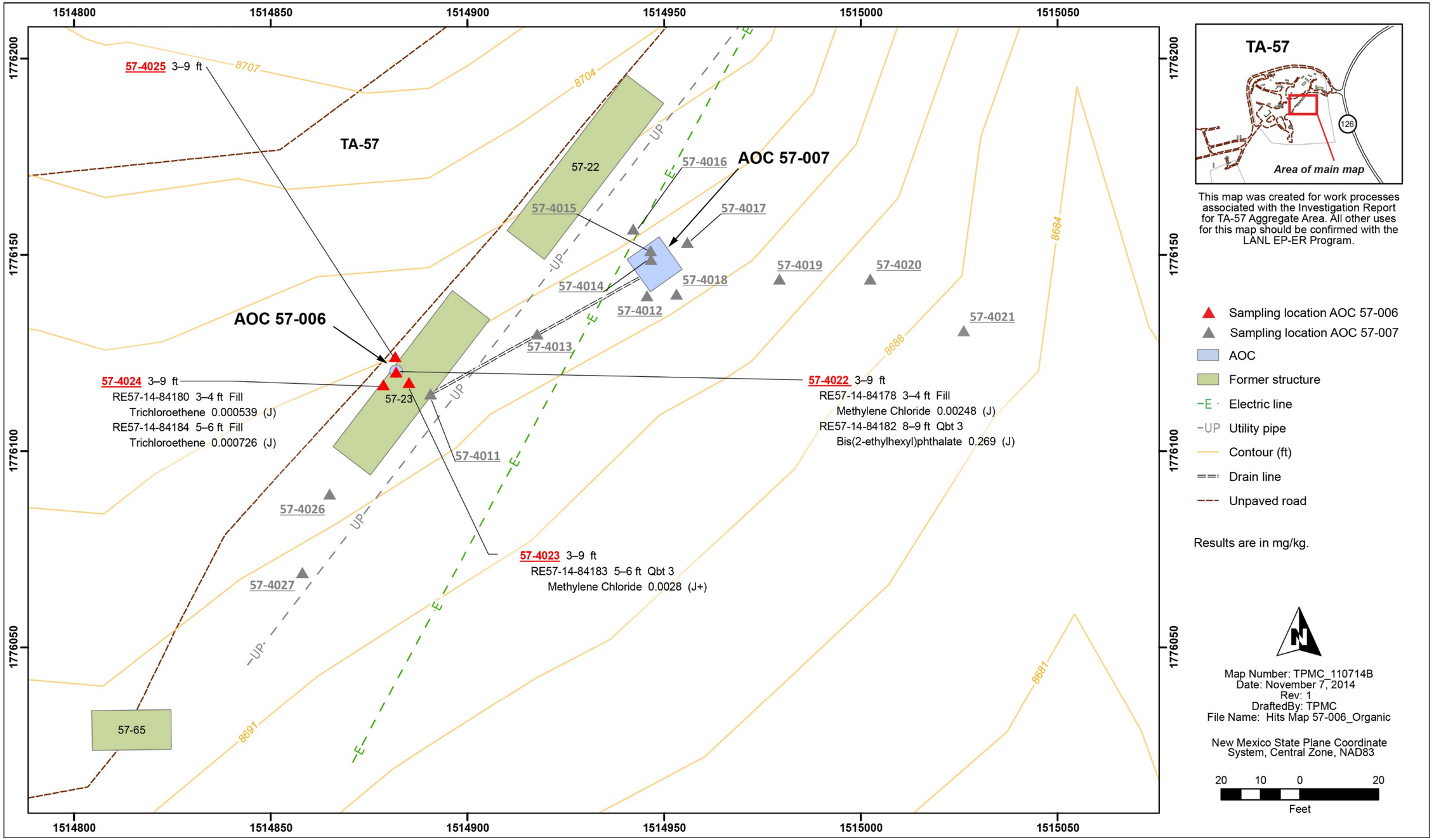


**Figure 6.2-3 Organic chemicals detected at AOC 57-006**

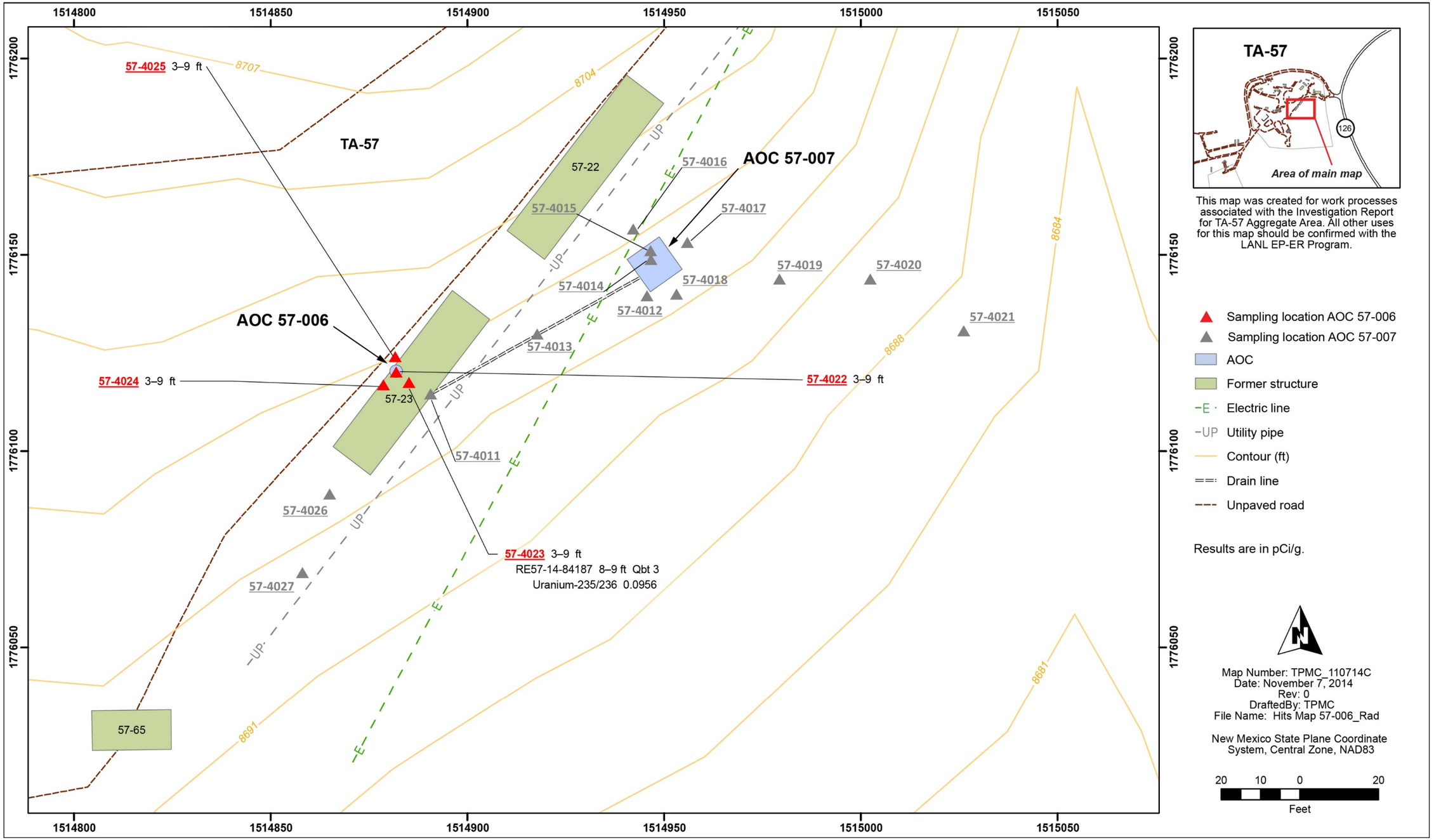


**Figure 6.2-4 Radionuclides detected above BVs at AOC 57-006**

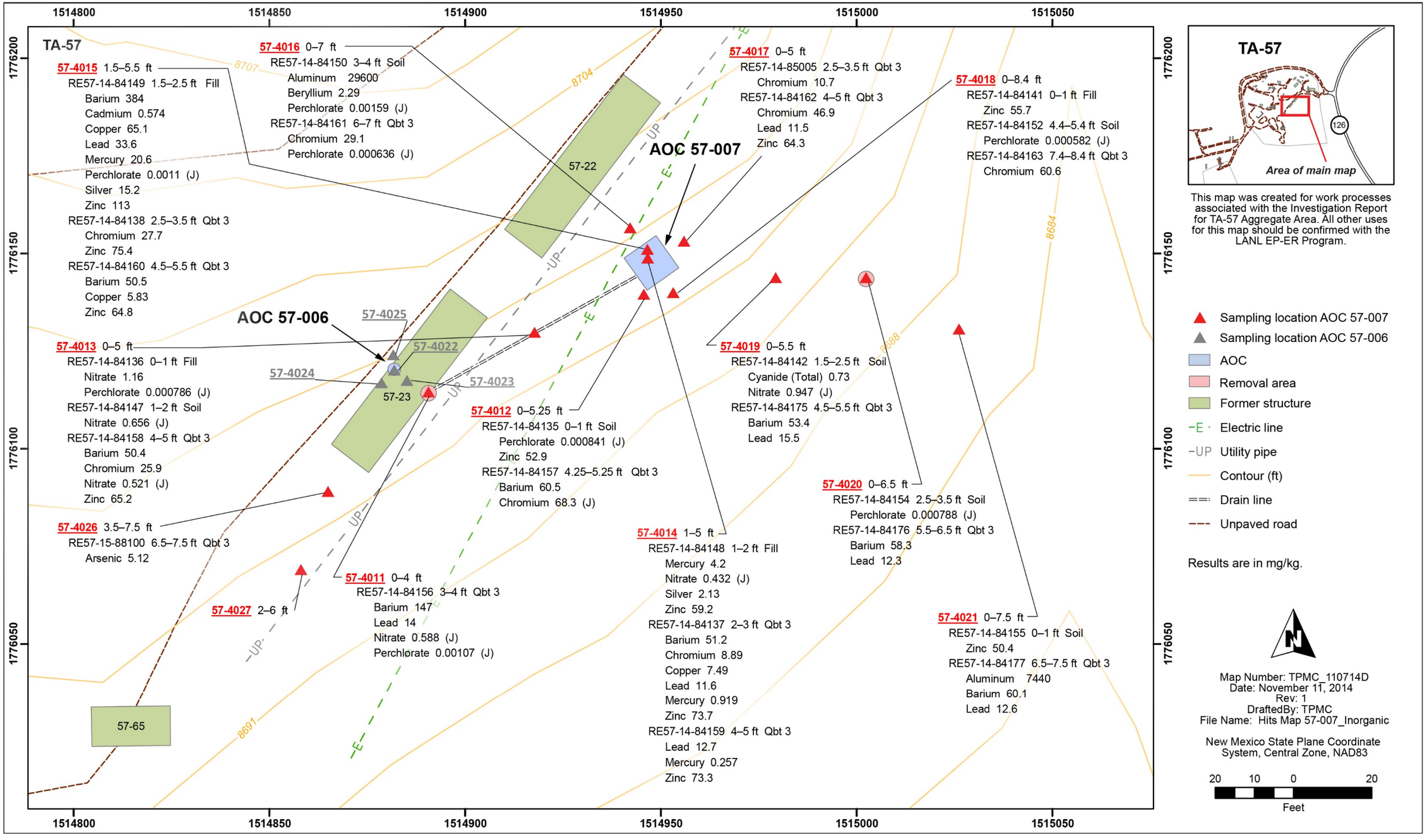


**Figure 6.3-1 Inorganic chemicals detected or detected above BVs at AOC 57-007**

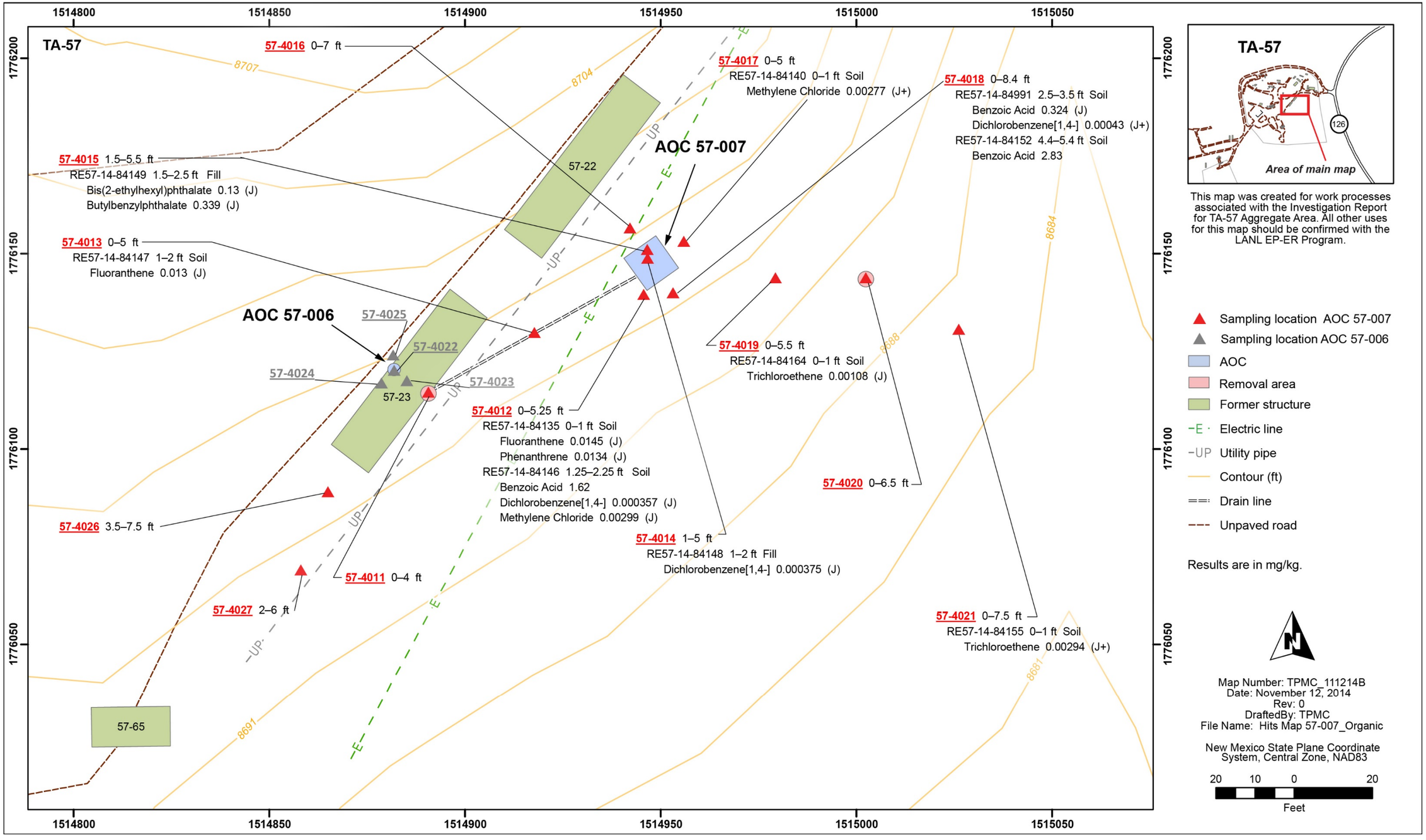


**Figure 6.3-2 Organic chemicals detected at AOC 57-007**

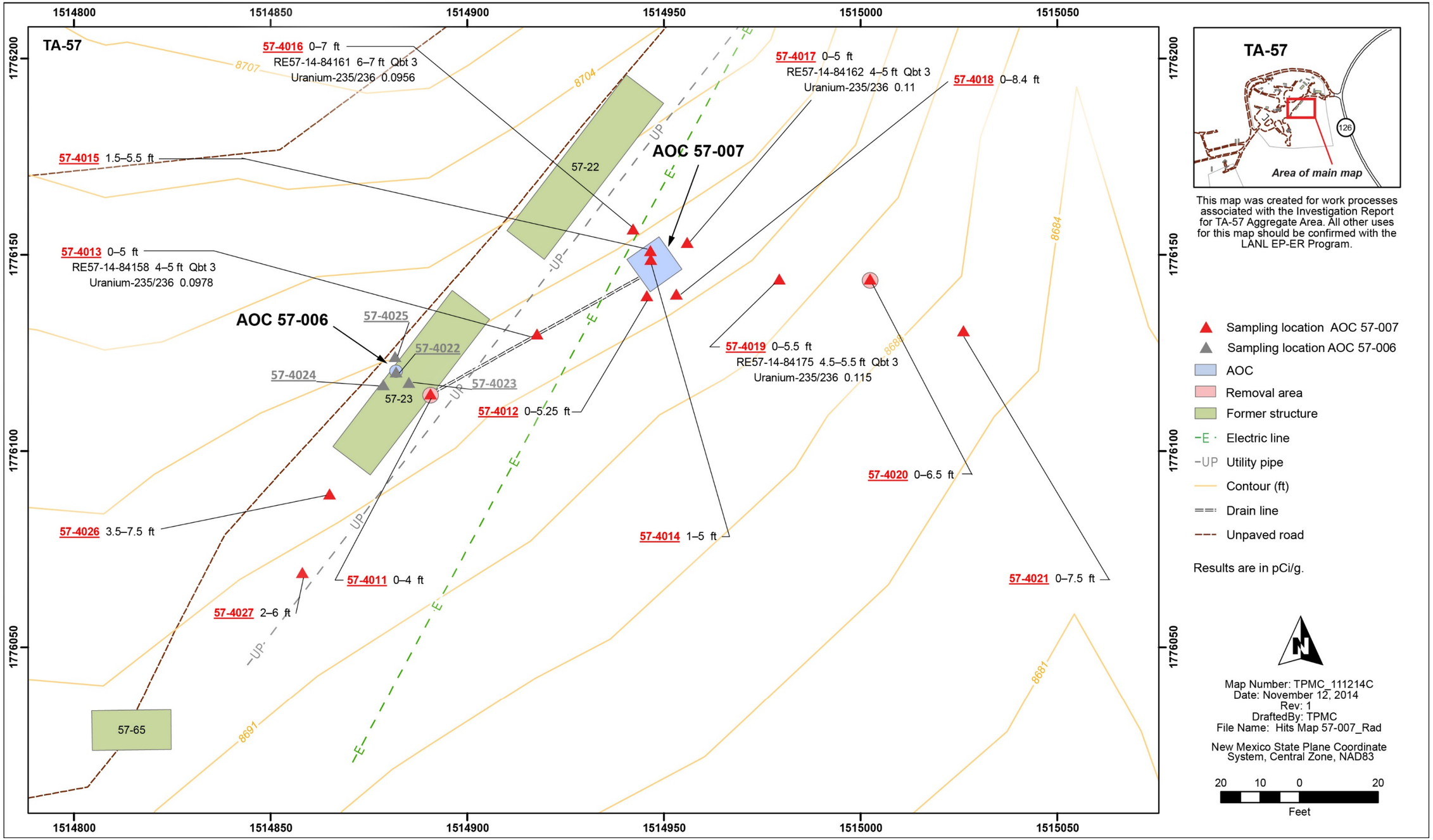


**Figure 6.3-3 Radionuclides detected above BVs at AOC 57-007**

**Table 1.1-1**
**Sites Included in the TA-57 Aggregate Area Investigation**

| Site | Brief Description | 2014 Investigation | Current Status |
|---|---|---|---|
| AOC 57-006 | Former waste storage drum | Sampled | Investigation report (section 6.2) |
| AOC 57-007 | Leach field | Sampled and remediated | Investigation report (section 6.3) |

**Table 3.2-1**
**Surveyed Coordinates for Locations Sampled in 2014**

| Site | Location ID | Easting (ft) | Northing (ft) |
|---|---|---|---|
| AOC 57-006 | 57-4022 | 1514881.914 | 1776120.145 |
| AOC 57-006 | 57-4023 | 1514885.169 | 1776117.454 |
| AOC 57-006 | 57-4024 | 1514878.659 | 1776116.846 |
| AOC 57-006 | 57-4025 | 1514881.654 | 1776124.095 |
| AOC 57-007 | 57-4011 | 1514890.694 | 1776114.563 |
| AOC 57-007 | 57-4012 | 1514942.934 | 1776143.626 |
| AOC 57-007 | 57-4013 | 1514917.726 | 1776129.772 |
| AOC 57-007 | 57-4014 | 1514946.632 | 1776148.834 |
| AOC 57-007 | 57-4015 | 1514949.132 | 1776145.918 |
| AOC 57-007 | 57-4016 | 1514942.153 | 1776156.543 |
| AOC 57-007 | 57-4017 | 1514955.903 | 1776153.157 |
| AOC 57-007 | 57-4018 | 1514953.142 | 1776139.980 |
| AOC 57-007 | 57-4019 | 1514979.288 | 1776143.782 |
| AOC 57-007 | 57-4020 | 1515002.413 | 1776143.834 |
| AOC 57-007 | 57-4021 | 1515026.163 | 1776130.605 |
| AOC 57-007 | 57-4026 | 1514853.653 | 1776083.717 |
| AOC 57-007 | 57-4027 | 1514846.753 | 1776063.727 |

**Table 3.2-2**
**Field-Screening Results for Samples Collected in 2014**

| Site | Location ID | Depth (ft) | Sample ID | PID (ppm) | Alpha[a] (dpm[b]) | Beta/Gamma[a] (dpm) |
|---|---|---|---|---|---|---|
| AOC 57-006 | 57-4022 | 3.0–4.0 | RE57-14-84178 | 0.0 | 19 | 1466 |
| AOC 57-006 | 57-4022 | 5.0–6.0 | RE57-14-84186 | 0.0 | 29 | 1468 |
| AOC 57-006 | 57-4022 | 8.0–9.0 | RE57-14-84182 | 0.1 | 44 | 1603 |
| AOC 57-006 | 57-4023 | 3.0–4.0 | RE57-14-84179 | 0.0 | 4 | 1603 |
| AOC 57-006 | 57-4023 | 5.0–6.0 | RE57-14-84183 | 0.0 | 19 | 1736 |
| AOC 57-006 | 57-4023 | 8.0–9.0 | RE57-14-84187 | 0.0 | 19 | 1600 |
| AOC 57-006 | 57-4024 | 3.0–4.0 | RE57-14-84180 | 0.0 | 29 | 1509 |
| AOC 57-006 | 57-4024 | 5.0–6.0 | RE57-14-84184 | 0.0 | 14 | 1588 |
| AOC 57-006 | 57-4024 | 8.0–9.0 | RE57-14-84188 | 0.0 | 19 | 1651 |
| AOC 57-006 | 57-4025 | 3.0–4.0 | RE57-14-84181 | 0.0 | 4 | 1591 |
| AOC 57-006 | 57-4025 | 5.0–6.0 | RE57-14-84185 | 0.0 | 39 | 1500 |
| AOC 57-006 | 57-4025 | 8.0–9.0 | RE57-14-84189 | 0.0 | 24 | 1524 |
| AOC 57-007 | 57-4011 | 0.0–1.0 | RE57-14-84134 | 0.0 | 15 | 1566 |
| AOC 57-007 | 57-4011 | 1.0–2.0 | RE57-14-84145 | 0.0 | 44 | 1657 |
| AOC 57-007 | 57-4011 | 3.0–4.0 | RE57-14-84156 | 0.0 | 9 | 1415 |
| AOC 57-007 | 57-4012 | 0.0–1.0 | RE57-14-84135 | 0.0 | 9 | 1554 |
| AOC 57-007 | 57-4012 | 1.25–2.25 | RE57-14-84146 | 0.0 | 9 | 1569 |
| AOC 57-007 | 57-4012 | 4.25–5.25 | RE57-14-84157 | 0.0 | 44 | 1506 |
| AOC 57-007 | 57-4013 | 0.0–1.0 | RE57-14-84136 | 0.0 | 19 | 1563 |
| AOC 57-007 | 57-4013 | 1.0–2.0 | RE57-14-84147 | 0.0 | 24 | 1524 |
| AOC 57-007 | 57-4013 | 4.0–5.0 | RE57-14-84158 | 0.0 | 24 | 1506 |
| AOC 57-007 | 57-4014 | 2.0–3.0 | RE57-14-84137 | 0.0 | 24 | 1572 |
| AOC 57-007 | 57-4014 | 1.0–2.0 | RE57-14-84148 | 0.0 | 34 | 1481 |
| AOC 57-007 | 57-4014 | 4.0–5.0 | RE57-14-84158 | 0.0 | 19 | 1648 |
| AOC 57-007 | 57-4015 | 1.5–2.5 | RE57-14-84149 | 0.0 | 9 | 1469 |
| AOC 57-007 | 57-4015 | 2.5–3.5 | RE57-14-84120 | 0.0 | 34 | 1606 |
| AOC 57-007 | 57-4015 | 4.5–5.5 | RE57-14-84160 | 0.0 | 19 | 1433 |
| AOC 57-007 | 57-4016 | 0.0–1.0 | RE57-14-84139 | 0.0 | 29 | 1606 |
| AOC 57-007 | 57-4016 | 2.5–3.5 | RE57-14-84990 | 0.0 | 0 | 39 |
| AOC 57-007 | 57-4016 | 3.0–4.0 | RE57-14-84150 | 0.0 | 34 | 1600 |
| AOC 57-007 | 57-4016 | 6.0–7.0 | RE57-14-84161 | 0.0 | 39 | 1509 |
| AOC 57-007 | 57-4017 | 0.0–1.0 | RE57-14-84140 | 0.0 | 14 | 1563 |
| AOC 57-007 | 57-4017 | 1.0–2.0 | RE57-14-84151 | 0.0 | 13 | 1530 |
| AOC 57-007 | 57-4017 | 2.5–3.5 | RE57-14-85005 | 0.0 | 0 | 3 |
| AOC 57-007 | 57-4017 | 4.0–5.0 | RE57-14-84162 | 0.0 | 14 | 1706 |
| AOC 57-007 | 57-4018 | 0.0–1.0 | RE57-14-84141 | 0.0 | 9 | 1563 |
| AOC 57-007 | 57-4018 | 2.5–3.5 | RE57-14-84991 | 0.0 | 0 | 6 |

**Table 3.2-2 (continued)**

| Site | Location ID | Depth (ft) | Sample ID | PID (ppm) | Alpha[a] (dpm[b]) | Beta/Gamma[a] (dpm) |
|---|---|---|---|---|---|---|
| AOC 57-007 | 57-4018 | 4.4–5.4 | RE57-14-84152 | 0.0 | 34 | 1630 |
| AOC 57-007 | 57-4018 | 7.4–8.4 | RE57-14-84163 | 0.0 | 24 | 1642 |
| AOC 57-007 | 57-4019 | 0.0–1.0 | RE57-14-84164 | 0.0 | 9 | 1581 |
| AOC 57-007 | 57-4019 | 1.5–2.5 | RE57-14-84142 | 0.0 | 34 | 1597 |
| AOC 57-007 | 57-4019 | 4.5–5.5 | RE57-14-84175 | 0.0 | 29 | 1548 |
| AOC 57-007 | 57-4020 | 0.0–1.0 | RE57-14-84165 | 0.0 | 19 | 1500 |
| AOC 57-007 | 57-4020 | 2.5–3.5 | RE57-14-84154 | 0.0 | 35 | 1542 |
| AOC 57-007 | 57-4020 | 5.5–6.5 | RE57-14-84176 | 0.0 | 14 | 1615 |
| AOC 57-007 | 57-4021 | 0.0–1.0 | RE57-14-84155 | 0.0 | 34 | 1751 |
| AOC 57-007 | 57-4021 | 4.5–5.5 | RE57-14-84144 | 0.0 | 9 | 1500 |
| AOC 57-007 | 57-4021 | 6.5–7.5 | RE57-14-84177 | 0.0 | 14 | 1785 |
| AOC 57-007 | 57-4026 | 3.5–4.5 | RE57-14-88102 | 0.0 | 37 | 1956 |
| AOC 57-007 | 57-4026 | 5.5–6.5 | RE57-14-88100 | 0.0 | 9 | 2510 |
| AOC 57-007 | 57-4027 | 2.0–3.0 | RE57-14-88101 | 0.0 | 221 | 1846 |
| AOC 57-007 | 57-4027 | 4.0–5.0 | RE57-14-88103 | 0.1 | 210 | 1929 |

[a] Result reported represents site background level.

[b] dpm = Disintegrations per minute.

**Table 3.2-3**
**Crosswalk of Proposed and Sampled Locations**

| Site | Proposed Location | Location ID |
|---|---|---|
| AOC 57-006 | 6-1 | 57-4022 |
| AOC 57-006 | 6-2 | 57-4023 |
| AOC 57-006 | 6-3 | 57-4024 |
| AOC 57-006 | 6-4 | 57-4025 |
| AOC 57-007 | 7-1 | 57-4011 |
| AOC 57-007 | 7-2 | 57-4012 |
| AOC 57-007 | 7-3 | 57-4013 |
| AOC 57-007 | 7-4 | 57-4014 |
| AOC 57-007 | 7-5 | 57-4015 |
| AOC 57-007 | 7-6 | 57-4016 |
| AOC 57-007 | 7-7 | 57-4017 |
| AOC 57-007 | 7-8 | 57-4018 |
| AOC 57-007 | 7-9 | 57-4019 |
| AOC 57-007 | 7-10 | 57-4020 |
| AOC 57-007 | 7-11 | 57-4021 |
| AOC 57-007 | 57-1 | 57-4026 |
| AOC 57-007 | 57-2 | 57-4027 |

**Table 6.2-1**
**Samples Collected and Analyses Requested at AOC 57-006**

| Sample ID | Location ID | Depth (ft) | Media | TAL Metals | Cyanide (Total) | Perchlorate | Nitrate | VOCs | SVOCs | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84178 | 57-4022 | 3.0–4.0 | Fill | 2014-3701* | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84186 | 57-4022 | 5.0–6.0 | Fill | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84182 | 57-4022 | 8.0–9.0 | Qbt3 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84179 | 57-4023 | 3.0–4.0 | Fill | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84183 | 57-4023 | 5.0–6.0 | Qbt3 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84187 | 57-4023 | 8.0–9.0 | Qbt3 | 2014-3719 | 2014-3719 | 2014-3719 | 2014-3719 | 2014-3719 | 2014-3719 | 2014-3719 |
| RE57-14-84180 | 57-4024 | 3.0–4.0 | Fill | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84184 | 57-4024 | 5.0–6.0 | Fill | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84188 | 57-4024 | 8.0–9.0 | Qbt3 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84181 | 57-4025 | 3.0–4.0 | Fill | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84185 | 57-4025 | 5.0–6.0 | Fill | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |
| RE57-14-84189 | 57-4025 | 8.0–9.0 | Qbt3 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 | 2014-3701 |

*Request number.

**Table 6.2-2**
**Inorganic Chemicals above BVs at AOC 57-006**

| Sample ID | Location ID | Depth (ft) | Media | Antimony | Barium | Cadmium | Chromium | Copper | Lead | Manganese | Nitrate | Selenium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Qbt 2,3,4 BV[a]** | | | | **0.5** | **46** | **1.63** | **7.14** | **4.66** | **11.2** | **482** | **na[b]** | **0.3** | **63.5** |
| **Soil BV[a]** | | | | **0.83** | **295** | **0.4** | **19.3** | **14.7** | **22.3** | **671** | **na** | **1.52** | **48.8** |
| **Industrial SSL[c]** | | | | **519** | **255000** | **1110** | **505[d]** | **51900** | **800** | **160000** | **2080000** | **6490** | **389000** |
| **Residential SSL[c]** | | | | **31.3** | **15600** | **70.5** | **96.6[d]** | **3130** | **400** | **10500** | **125000** | **391** | **23500** |
| RE57-14-84178 | 57-4022 | 3.0–4.0 | Fill | 1.06 (U) | —[e] | 0.528 (U) | — | — | — | — | 1.39 | — | 50.4 |
| RE57-14-84186 | 57-4022 | 5.0–6.0 | Fill | 1.12 (U) | — | 0.56 (U) | — | — | — | — | 8.03 | — | — |
| RE57-14-84182 | 57-4022 | 8.0–9.0 | Qbt3 | 1.06 (U) | 96.2 | — | 41.8 | 4.94 | 14.5 | — | 3.24 | 0.358 (J) | — |
| RE57-14-84179 | 57-4023 | 3.0–4.0 | Fill | 1.09 (U) | — | 0.546 (U) | — | — | — | — | 0.563 (J) | — | 53.6 |
| RE57-14-84183 | 57-4023 | 5.0–6.0 | Qbt3 | 1.05 (U) | 114 | — | — | — | 12.4 | 536 | 1.7 | 0.966 (U) | — |
| RE57-14-84187 | 57-4023 | 8.0–9.0 | Qbt3 | 1.02 (U) | — | — | 113 | — | — | — | 2.21 | 1.06 (U) | 66.5 |
| RE57-14-84180 | 57-4024 | 3.0–4.0 | Fill | 1.09 (U) | — | 0.545 (U) | — | — | — | — | 1.88 | — | — |
| RE57-14-84184 | 57-4024 | 5.0–6.0 | Fill | 0.953 (U) | — | 0.477 (U) | 23.9 | — | — | — | 3.56 | — | 72.6 |
| RE57-14-84188 | 57-4024 | 8.0–9.0 | Qbt3 | 1.05 (U) | 126 | — | — | — | 11.8 | — | 2.86 | 0.944 (U) | — |
| RE57-14-84181 | 57-4025 | 3.0–4.0 | Fill | 1.1 (U) | — | 0.551 (U) | — | — | — | — | 2.53 | — | 50.4 |
| RE57-14-84185 | 57-4025 | 5.0–6.0 | Fill | 0.961 (U) | — | 0.48 (U) | — | — | — | — | 5.42 | — | 64.6 |
| RE57-14-84189 | 57-4025 | 8.0–9.0 | Qbt3 | 0.946 (U) | 136 | — | 78.1 | 26 | 13.7 | — | 2.78 | 0.347 (J) | 75.1 |

Notes: All concentrations are in mg/kg. Data qualifiers are defined in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2014, 600115).

[d] SSL for total chromium.

[e] — = Not detected or not detected above BV.

**Table 6.2-3**
**Organic Chemicals Detected at AOC 57-006**

| Sample ID | Location ID | Depth (ft) | Media | Bis(2-ethylhexyl)phthalate | Methylene Chloride | Trichloroethene |
|---|---|---|---|---|---|---|
| **Industrial SSL[a]** | | | | **1830** | **5130** | **36.5** |
| **Residential SSL[a]** | | | | **380** | **409** | **6.77** |
| RE57-14-84178 | 57-4022 | 3.0–4.0 | Fill | —[b] | 0.00248 (J) | — |
| RE57-14-84182 | 57-4022 | 8.0–9.0 | Qbt3 | 0.269 (J) | — | — |
| RE57-14-84183 | 57-4023 | 5.0–6.0 | Qbt3 | — | 0.0028 (J+) | — |
| RE57-14-84180 | 57-4024 | 3.0–4.0 | Fill | — | — | 0.000539 (J) |
| RE57-14-84184 | 57-4024 | 5.0–6.0 | Fill | — | — | 0.000726 (J) |

Notes: All concentrations are in mg/kg. Data qualifiers are defined in Appendix A.

[a] SSLs from NMED (2014, 600115).

[b] — = Not detected.

**Table 6.2-4**
**Radionuclides Detected above BVs at AOC 57-006**

| Sample ID | Location ID | Depth (ft) | Media | Uranium-235/236 |
|---|---|---|---|---|
| **Qbt2, 3, 4 BV[a]** | | | | **0.09** |
| **Industrial SAL[b]** | | | | **150** |
| **Residential SAL[b]** | | | | **39** |
| RE57-14-84187 | 57-4023 | 8.0–9.0 | Qbt3 | 0.0956 |

Notes: All activities are in pCi/g.

[a] BVs from LANL (1998, 059730).

[b] SALs from LANL (2014, 600064).

**Table 6.3-1**
**Samples Collected and Analyses Requested at AOC 57-007**

| Sample ID | Location ID | Depth (ft) | Media | TAL Metals | Cyanide (Total) | Perchlorate | Nitrate | VOCs | SVOCs | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84134 | 57-4011 | 0.0–1.0 | Fill | 2014-3718[a] | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84145 | 57-4011 | 1.0–2.0 | Soil | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84156 | 57-4011 | 3.0–4.0 | Qbt3 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84135 | 57-4012 | 0.0–1.0 | Soil | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84146 | 57-4012 | 1.25–2.25 | Soil | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84157 | 57-4012 | 4.25–5.25 | Qbt3 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84136 | 57-4013 | 0.0–1.0 | Fill | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84147 | 57-4013 | 1.0–2.0 | Soil | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84158 | 57-4013 | 4.0–5.0 | Qbt3 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84148 | 57-4014 | 1.0–2.0 | Fill | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84137 | 57-4014 | 2.0–3.0 | Qbt3 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 | 2014-3718 |
| RE57-14-84159 | 57-4014 | 4.0–5.0 | Qbt3 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84149 | 57-4015 | 1.5–2.5 | Fill | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84138 | 57-4015 | 2.5–3.5 | Qbt3 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84160 | 57-4015 | 4.5–5.5 | Qbt3 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84139 | 57-4016 | 0.0–1.0 | Soil | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84990 | 57-4016 | 2.5–3.5 | Soil | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 |
| RE57-14-84150 | 57-4016 | 3.0–4.0 | Soil | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84161 | 57-4016 | 6.0–7.0 | Qbt3 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84140 | 57-4017 | 0.0–1.0 | Soil | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84151 | 57-4017 | 1.0–2.0 | Soil | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-85005 | 57-4017 | 2.5–3.5 | Qbt3 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 |
| RE57-14-84162 | 57-4017 | 4.0–5.0 | Qbt3 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84141 | 57-4018 | 0.0–1.0 | Fill | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84991 | 57-4018 | 2.5–3.5 | Soil | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 | 2014-3910 |

**Table 6.3-1 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | TAL Metals | Cyanide (Total) | Perchlorate | Nitrate | VOCs | SVOCs | Isotopic Uranium |
|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84152 | 57-4018 | 4.4–5.4 | Soil | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 | 2014-3751 |
| RE57-14-84163 | 57-4018 | 7.4–8.4 | Qbt3 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84164 | 57-4019 | 0.0–1.0 | Soil | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84142 | 57-4019 | 1.5–2.5 | Soil | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84175 | 57-4019 | 4.5–5.5 | Qbt3 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84165 | 57-4020 | 0.0–1.0 | Soil | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84154 | 57-4020 | 2.5–3.5 | Soil | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84176 | 57-4020 | 5.5–6.5 | Qbt3 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84155 | 57-4021 | 0.0–1.0 | Soil | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84144 | 57-4021 | 4.5–5.5 | Soil | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-84177 | 57-4021 | 6.5–7.5 | Qbt3 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 | 2014-3795 |
| RE57-14-88102 | 57-4026 | 3.5–4.5 | Soil | 2015-82[b] | —[c] | — | — | — | — | — |
| RE57-14-88100 | 57-4026 | 6.5–7.5 | Qbt3 | 2015-82[b] | — | — | — | — | — | — |
| RE57-14-88101 | 57-4027 | 2–3 | Soil | 2015-88[b] | — | — | — | — | — | — |
| RE57-14-88103 | 57-4027 | 5–6 | Qbt3 | 2018-88[b] | — | — | — | — | — | — |

Note: Shaded samples were excavated to remove elevated arsenic concentrations (Appendix E).

[a] Request number.

[b] Samples analyzed for arsenic only.

[c] — = Analyses not requested.

**Table 6.3-2**
**Inorganic Chemicals above BVs at AOC 57-007**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium | Copper | Cyanide (Total) | Lead | Mercury | Nitrate | Perchlorate | Selenium | Silver | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Qbt2, 3, 4 BV[a]** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **7.14** | **4.66** | **0.5** | **11.2** | **0.1** | **na[b]** | **na** | **0.3** | **1** | **63.5** |
| **Soil BV[a]** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **19.3** | **14.7** | **0.5** | **22.3** | **0.1** | **na** | **na** | **1.52** | **1** | **48.8** |
| **Industrial SSL[c]** | | | | **1290000** | **519** | **21.5** | **255000** | **2580** | **1110** | **505[d]** | **51900** | **63.3** | **800** | **389** | **2080000** | **908** | **6490** | **6490** | **389000** |
| **Residential SSL[c]** | | | | **78000** | **31.3** | **4.25** | **15600** | **156** | **70.5** | **96.6[d]** | **3130** | **11.2** | **400** | **23.5** | **125000** | **54.8** | **391** | **391** | **23500** |
| RE57-14-84156 | 57-4011 | 3–4 | Qbt3 | —[e] | 1 (U) | — | 147 | — | — | — | — | — | 14 | — | 0.588 (J) | 0.00107 (J) | 1.05 (U) | — | — |
| RE57-14-84135 | 57-4012 | 0–1 | Soil | — | 1.06 (U) | — | — | — | 0.528 (U) | — | — | — | — | — | — | 0.000841 (J) | — | — | 52.9 |
| RE57-14-84146 | 57-4012 | 1.25–2.25 | Soil | — | 0.986 (U) | — | — | — | 0.493 (U) | — | — | — | — | — | — | — | — | — | — |
| RE57-14-84157 | 57-4012 | 4.25–5.25 | Qbt3 | — | 1.06 (U) | — | 60.5 | — | — | 68.3 (J) | — | — | — | — | — | — | 1.04 (U) | — | — |
| RE57-14-84136 | 57-4013 | 0–1 | Fill | — | 1.01 (U) | — | — | — | 0.505 (U) | — | — | — | — | — | 1.16 | 0.000786 (J) | — | — | — |
| RE57-14-84147 | 57-4013 | 1–2 | Soil | — | 1.02 (U) | — | — | — | 0.509 (U) | — | — | — | — | — | 0.656 (J) | — | — | — | — |
| RE57-14-84158 | 57-4013 | 4–5 | Qbt3 | — | 0.99 (U) | — | 50.4 | — | — | 25.9 | — | — | — | — | 0.521 (J) | — | 0.984 (U) | — | 65.2 |
| RE57-14-84148 | 57-4014 | 1–2 | Fill | — | 1.04 (U) | — | — | — | 0.518 (U) | — | — | — | — | 4.2 | 0.432 (J) | — | — | 2.13 | 59.2 |
| RE57-14-84137 | 57-4014 | 2–3 | Qbt3 | — | 0.992 (U) | — | 51.2 | — | — | 8.89 | 7.49 | — | 11.6 | 0.919 | — | — | 0.97 (U) | — | 73.7 |
| RE57-14-84159 | 57-4014 | 4–5 | Qbt3 | — | 1.03 (U) | — | — | — | — | — | — | — | 12.7 | 0.257 | — | — | 1.05 (U) | — | 73.3 |
| RE57-14-84149 | 57-4015 | 1.5–2.5 | Fill | — | 1.05 (U) | — | 384 | — | 0.574 | — | 65.1 | — | 33.6 | 20.6 | — | 0.0011 (J) | — | 15.2 | 113 |
| RE57-14-84138 | 57-4015 | 2.5–3.5 | Qbt3 | — | — | — | — | — | — | 27.7 | — | — | — | — | — | — | 0.984 (U) | — | 75.4 |
| RE57-14-84160 | 57-4015 | 4.5–5.5 | Qbt3 | — | 0.991 (U) | — | 50.5 | — | — | — | 5.83 | — | — | — | — | — | 0.981 (U) | — | 64.8 |
| RE57-14-84139 | 57-4016 | 0–1 | Soil | — | 1 (U) | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| RE57-14-84990 | 57-4016 | 2.5–3.5 | Soil | — | 1.03 (U) | — | — | — | 0.516 (U) | — | — | — | — | — | — | — | — | — | — |
| RE57-14-84150 | 57-4016 | 3–4 | Soil | 29600 | 1.15 (U) | — | — | 2.29 | 0.575 (U) | — | — | — | — | — | — | 0.00159 (J) | — | — | — |
| RE57-14-84161 | 57-4016 | 6–7 | Qbt3 | — | 0.94 (U) | — | — | — | — | 29.1 | — | — | — | — | — | 0.000636 (J) | 1.03 (U) | — | — |
| RE57-14-84140 | 57-4017 | 0–1 | Soil | — | — | — | — | — | 0.524 (U) | — | — | — | — | — | — | — | — | — | — |
| RE57-14-84151 | 57-4017 | 1–2 | Soil | — | — | — | — | — | 0.479 (U) | — | — | — | — | — | — | — | — | — | — |
| RE57-14-85005 | 57-4017 | 2.5–3.5 | Qbt3 | — | 0.875 (U) | — | — | — | — | 10.7 | — | — | — | — | — | — | 0.917 (U) | — | — |
| RE57-14-84162 | 57-4017 | 4–5 | Qbt3 | — | 0.986 (U) | — | — | — | — | 46.9 | — | — | 11.5 | — | — | — | 0.984 (U) | — | 64.3 |
| RE57-14-84141 | 57-4018 | 0–1 | Fill | — | 1.04 (U) | — | — | — | 0.521 (U) | — | — | — | — | — | — | — | — | — | 55.7 |
| RE57-14-84991 | 57-4018 | 2.5–3.5 | Soil | — | 0.961 (U) | — | — | — | 0.481 (U) | — | — | — | — | — | — | — | — | — | — |
| RE57-14-84152 | 57-4018 | 4.4–5.4 | Soil | — | 1.01 (U) | — | — | — | 0.507 (U) | — | — | — | — | — | — | 0.000582 (J) | — | — | — |
| RE57-14-84163 | 57-4018 | 7.4–8.4 | Qbt3 | — | 0.978 (U) | — | — | — | — | 60.6 | — | — | — | — | — | — | 1.01 (U) | — | — |
| RE57-14-84164 | 57-4019 | 0–1 | Soil | — | 1.05 (U) | — | — | — | 0.524 (U) | — | — | — | — | — | — | — | — | — | — |
| RE57-14-84142 | 57-4019 | 1.5–2.5 | Soil | — | — | — | — | — | 0.505 (U) | — | — | 0.73 | — | — | 0.947 (J) | — | — | — | — |
| RE57-14-84175 | 57-4019 | 4.5–5.5 | Qbt3 | — | 1.11 (U) | — | 53.4 | — | — | — | — | — | 15.5 | — | — | — | 1.06 (U) | — | — |
| RE57-14-84154 | 57-4020 | 2.5–3.5 | Soil | — | — | — | — | — | 0.56 (U) | — | — | — | — | — | — | 0.000788 (J) | — | — | — |
| RE57-14-84176 | 57-4020 | 5.5–6.5 | Qbt3 | — | — | — | 58.3 | — | — | — | — | — | 12.3 | — | — | — | 1.08 (U) | — | — |
| RE57-14-84155 | 57-4021 | 0–1 | Soil | — | — | — | — | — | 0.538 (U) | — | — | — | — | — | — | — | — | — | 50.4 |
| RE57-14-84144 | 57-4021 | 4.5–5.5 | Soil | — | 0.997 (U) | — | — | — | 0.499 (U) | — | — | — | — | — | — | — | — | — | — |

**Table 6.3-2 (continued)**

| Sample ID | Location ID | Depth (ft) | Media | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Chromium | Copper | Cyanide (Total) | Lead | Mercury | Nitrate | Perchlorate | Selenium | Silver | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Qbt2, 3, 4 BV[a]** | | | | **7340** | **0.5** | **2.79** | **46** | **1.21** | **1.63** | **7.14** | **4.66** | **0.5** | **11.2** | **0.1** | **na[b]** | **na** | **0.3** | **1** | **63.5** |
| **Soil BV[a]** | | | | **29200** | **0.83** | **8.17** | **295** | **1.83** | **0.4** | **19.3** | **14.7** | **0.5** | **22.3** | **0.1** | **na** | **na** | **1.52** | **1** | **48.8** |
| **Industrial SSL[c]** | | | | **1290000** | **519** | **21.5** | **255000** | **2580** | **1110** | **505[d]** | **51900** | **63.3** | **800** | **389** | **2080000** | **908** | **6490** | **6490** | **389000** |
| **Residential SSL[c]** | | | | **78000** | **31.3** | **4.25** | **15600** | **156** | **70.5** | **96.6[d]** | **3130** | **11.2** | **400** | **23.5** | **125000** | **54.8** | **391** | **391** | **23500** |
| RE57-14-84177 | 57-4021 | 6.5–7.5 | Qbt3 | 7440 | 1.05 (U) | — | 60.1 | — | — | — | — | — | 12.6 | — | — | — | 1.01 (U) | — | — |
| RE57-15-88100 | 57-4026 | 6.5–7.5 | Qbt3 | NA[f] | NA | 5.12 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

Notes: All concentrations are in mg/kg. Data qualifiers are defined in Appendix A.

[a] BVs from LANL (1998, 059730).

[b] na = Not available.

[c] SSLs from NMED (2014, 600115).

[d] SSL for total chromium.

[e] — = Not detected or not detected above BV.

[f] NA = Not analyzed.

**Table 6.3-3**
**Organic Chemicals Detected at AOC 57-007**

| Sample ID | Location ID | Depth (ft) | Media | Benzoic Acid | Bis(2-ethylhexyl)phthalate | Butylbenzylphthalate | Dichlorobenzene[1,4-] | Fluoranthene | Methylene Chloride | Phenanthrene | Trichloroethene |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Industrial SSL[a]** | | | | **3300000[b]** | **1830** | **12000[b]** | **159** | **33700** | **5130** | **25300** | **36.5** |
| **Residential SSL[a]** | | | | **250000[b]** | **380** | **2800[b]** | **32.8** | **2320** | **409** | **1740** | **6.77** |
| RE57-14-84135 | 57-4012 | 0.0–1.0 | Soil | —[c] | — | — | — | 0.0145 (J) | — | 0.0134 (J) | — |
| RE57-14-84146 | 57-4012 | 1.25–2.25 | Soil | 1.62 | — | — | 0.000357 (J) | — | 0.00299 (J) | — | — |
| RE57-14-84147 | 57-4013 | 1.0–2.0 | Soil | — | — | — | — | 0.013 (J) | — | — | — |
| RE57-14-84148 | 57-4014 | 1.0–2.0 | Fill | — | — | — | 0.000375 (J) | — | — | — | — |
| RE57-14-84149 | 57-4015 | 1.5–2.5 | Fill | — | 0.13 (J) | 0.339 (J) | — | — | — | — | — |
| RE57-14-84140 | 57-4017 | 0.0–1.0 | Soil | — | — | — | — | — | 0.00277 (J+) | — | — |
| RE57-14-84991 | 57-4018 | 2.5–3.5 | Soil | 0.324 (J) | — | — | 0.00043 (J+) | — | — | — | — |
| RE57-14-84152 | 57-4018 | 4.4–5.4 | Soil | 2.83 | — | — | — | — | — | — | — |
| RE57-14-84164 | 57-4019 | 0.0–1.0 | Soil | — | — | — | — | — | — | — | 0.00108 (J) |
| RE57-14-84155 | 57-4021 | 0.0–1.0 | Soil | — | — | — | — | — | — | — | 0.00294 (J+) |

Notes: All concentrations are in mg/kg. Data qualifiers are defined in Appendix A.

[a] SSLs from NMED (2014, 600115) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

[c] — = Not detected.

**Table 6.3-4**
**Radionuclides Detected above BVs at AOC 57-007**

| Sample ID | Location ID | Depth (ft) | Media | Uranium-235/236 |
|---|---|---|---|---|
| **Qbt2, 3, 4 BV[a]** | | | | **0.09** |
| **Industrial SAL[b]** | | | | **150** |
| **Residential SAL[b]** | | | | **39** |
| RE57-14-84158 | 57-4013 | 4.0–5.0 | Qbt3 | 0.0978 |
| RE57-14-84161 | 57-4016 | 6.0–7.0 | Qbt3 | 0.0956 |
| RE57-14-84162 | 57-4017 | 4.0–5.0 | Qbt3 | 0.11 |
| RE57-14-84175 | 57-4019 | 4.5–5.5 | Qbt3 | 0.115 |

Notes: All activities are in pCi/g.

[a] BVs from LANL (1998, 059730).

[b] SALs from LANL (2014, 600064).

# Appendix A

*Acronyms and Abbreviations,*
*Metric Conversion Table, and Data Qualifier Definitions*

## A-1.0 ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| %R | percent recovery |
| AK | acceptable knowledge |
| amls | above mean sea level |
| AOC | area of concern |
| bgs | below ground surface |
| BMP | best management practice |
| BV | background value |
| CCV | continuing calibration verification |
| COC | chain of custody |
| Consent Order | Compliance Order on Consent |
| COPC | chemical of potential concern |
| COPEC | chemical of potential ecological concern |
| CSM | conceptual site model |
| DAF | dilution attenuation factor |
| DGPS | differential global positioning system |
| DL | detection limit |
| DOE | Department of Energy (U.S.) |
| dpm | disintegrations per minute |
| Eh | oxidation-reduction potential |
| EPA | Environmental Protection Agency (U.S.) |
| EPC | exposure point concentration |
| EQL | estimated quantitation limit |
| ESH | Environment, Safety, and Health (Directorate) |
| ESL | ecological screening level |
| FV | fallout value |
| HDR | Hot Dry Rock (former Laboratory program) |
| HI | hazard index |
| HIR | historical investigation report |
| HQ | hazard quotient |
| HR | home range |
| ICS | interference check sample |
| ICV | initial calibration verification |
| I.D. | inside diameter |
| ID | identification |

| | |
|---|---|
| IDW | investigation-derived waste |
| IS | internal standard |
| JMS | Jemez Mountain salamander |
| $K_d$ | soil-water partition coefficient |
| $K_{oc}$ | organic carbon-water partition coefficient |
| $K_{ow}$ | octanol-water partition coefficient |
| LAL | lower acceptance limit |
| LANL | Los Alamos National Laboratory |
| LCS | laboratory control sample |
| LOAEL | lowest observed adverse effect level |
| MDC | minimum detectable concentration |
| MDL | method detection limit |
| MS | matrix spike |
| MSW | municipal solid waste |
| NFA | no further action |
| NMED | New Mexico Environment Department |
| NMOCD | New Mexico Oil Conservation Division |
| NOAEL | no observed adverse effect level |
| PAH | polycyclic aromatic hydrocarbon |
| PAUF | population area use factor |
| PCS | petroleum-contaminated soil |
| PID | photoionization detector |
| QA | quality assurance |
| QC | quality control |
| RCRA | Resource Conservation and Recovery Act |
| RCT | radiological control technician |
| RfD | reference dose |
| RFI | RCRA facility investigation |
| RPD | relative percent difference |
| SAL | screening action level |
| SCL | sample collection log |
| SF | slope factor |
| SMO | Sample Management Office |
| SOP | standard operating procedure |
| SOW | statement of work |
| SSL | soil screening level |

| | |
|---|---|
| SVOC | semivolatile organic compound |
| SWMU | solid waste management unit |
| T&E | threatened and endangered |
| TA | technical area |
| TAL | target analyte list |
| TRV | toxicity reference value |
| UAL | upper acceptance limit |
| UCL | upper confidence limit |
| USFS | U.S. Forest Service |
| UTL | upper tolerance limit |
| VCA | voluntary corrective action |
| VOC | volatile organic compound |
| WCSF | waste characterization strategy form |

## A-2.0 METRIC CONVERSION TABLE

| Multiply SI (Metric) Unit | by | To Obtain U.S. Customary Unit |
|---|---|---|
| kilometers (km) | 0.622 | miles (mi) |
| kilometers (km) | 3281 | feet (ft) |
| meters (m) | 3.281 | feet (ft) |
| meters (m) | 39.37 | inches (in.) |
| centimeters (cm) | 0.03281 | feet (ft) |
| centimeters (cm) | 0.394 | inches (in.) |
| millimeters (mm) | 0.0394 | inches (in.) |
| micrometers or microns (µm) | 0.0000394 | inches (in.) |
| square kilometers ($km^2$) | 0.3861 | square miles ($mi^2$) |
| hectares (ha) | 2.5 | acres |
| square meters ($m^2$) | 10.764 | square feet ($ft^2$) |
| cubic meters ($m^3$) | 35.31 | cubic feet ($ft^3$) |
| kilograms (kg) | 2.2046 | pounds (lb) |
| grams (g) | 0.0353 | ounces (oz) |
| grams per cubic centimeter ($g/cm^3$) | 62.422 | pounds per cubic foot ($lb/ft^3$) |
| milligrams per kilogram (mg/kg) | 1 | parts per million (ppm) |
| micrograms per gram (µg/g) | 1 | parts per million (ppm) |
| liters (L) | 0.26 | gallons (gal.) |
| milligrams per liter (mg/L) | 1 | parts per million (ppm) |
| degrees Celsius (°C) | 9/5 + 32 | degrees Fahrenheit (°F) |

## A-3.0 DATA QUALIFIER DEFINITIONS

| Data Qualifier | Definition |
|---|---|
| U | The analyte was analyzed for but not detected. |
| J | The analyte was positively identified, and the associated numerical value is estimated to be more uncertain than would normally be expected for that analysis. |
| J+ | The analyte was positively identified, and the result is likely to be biased high. |
| J- | The analyte was positively identified, and the result is likely to be biased low. |
| UJ | The analyte was not positively identified in the sample, and the associated value is an estimate of the sample-specific detection or quantitation limit. |
| R | The data are rejected as a result of major problems with quality assurance/quality control parameters. |

# Appendix B

*Field Methods*

## B-1.0 INTRODUCTION

This appendix summarizes the field methods implemented during the 2014 investigation at Technical Area 57 (TA-57) Aggregate Area, located at Fenton Hill, which lies on the western side of the Jemez Mountains, approximately 12 mi west of Los Alamos National Laboratory (LANL or the Laboratory). Table B-1.0-1 provides a summary of field investigation methods and the following sections provide more detailed descriptions of these methods. All activities were conducted in accordance with approved subcontractor procedures technically equivalent to Laboratory standard operating procedures (SOPs) listed in Table B-1.0-2 and available at http://www.lanl.gov/community-environment/environmental-stewardship/plans-procedures.php.

## B-2.0 EXPLORATORY DRILLING CHARACTERIZATION

No exploratory drilling characterization was conducted during the 2014 investigation.

## B-3.0 FIELD-SCREENING METHODS

This section summarizes the field-screening methods used during the investigation activities. Field screening for organic vapors and radioactivity was performed on every sample submitted to the Sample Management Office (SMO).

### B-3.1 Field Screening for Organic Vapors

Field screening for organic vapors was conducted for all samples using an IonScience PhoCheck+ photoionization detector (PID) equipped with an 11.7-electronvolt lamp. Screening was performed in accordance with the manufacturer's specifications and SOP-06.33, Headspace Vapor Screening with a Photoionization Detector. Screening measurements were recorded on the sample collection logs (SCLs) and chain-of-custody (COC) forms, provided on CD in Appendix E. The screening results are presented in Table 3.2-2 of the investigation report.

### B-3.2 Field Screening for Radioactivity

All samples collected were field screened for radioactivity, targeting alpha and beta/gamma emitters. A Laboratory radiological control technician (RCT) conducted radiological screening using an Eberline E-600 radiation meter with an SHP-380AB alpha/beta scintillation detector held within 1 in. of the sample. The Eberline E-600 with attachment SHP-380AB consists of a dual phosphor plate covered by two Mylar windows housed in a light-excluding metal body. The phosphor plate is a plastic scintillator used to detect beta and gamma emissions and is thinly coated with zinc sulfide to detect alpha emissions. The operational range varies from trace emissions to 1 million disintegrations per minute. Screening measurements were recorded on the SCLs and COC forms and are provided on CD in Appendix E. The screening results are presented in Table 3.2-2 of the investigation report.

## B-4.0 FIELD INSTRUMENT CALIBRATION

Instrument calibration and/or function check was completed daily. Several environmental factors affected the instruments' integrity, including air temperature, atmospheric pressure, wind speed, and humidity. Calibration of the PID was conducted by the site environmental safety and health representative.

Calibration of the Eberline E-600 was conducted by the RCT. All calibrations were performed according to the manufacturer's specifications and requirements

### B-4.1 IonScience PhoCheck+PID Instrument Calibration

The IonScience PhoCheck+ PID was calibrated both to ambient air and a standard reference gas (100 ppm isobutylene). The ambient-air calibration determined the zero point of the instrument sensor calibration curve in ambient air. Calibration with the standard reference gas determined a second point of the sensor calibration curve. Each calibration was within 3% of 100 ppm isobutylene, qualifying the instrument for use.

The following calibration information was recorded daily on operational calibration logs:

- instrument identification number
- final span settings
- date and time
- concentration and type of calibration gas used (isobutylene at 100 ppm)
- name of the personnel performing the calibration

All daily calibration procedures for the IonScience PhoCheck+ met the manufacturer's specifications for standard reference gas calibration.

### B-4.2 Eberline E-600 Instrument Calibration

The Eberline E-600 was calibrated daily by the RCT before local background levels for radioactivity were measured. The instrument was calibrated using plutonium-239 and chloride-36 sources for alpha and beta emissions, respectively. The following five checks were performed as part of the calibration procedures:

- calibration date
- physical damage
- battery
- response to a source of radioactivity
- background

All calibrations performed for the Eberline E-600 met the manufacturer's specifications and the applicable radiation detection instrument manual.

## B-5.0 SURFACE AND SUBSURFACE SAMPLING

This section summarizes the methods used for collecting surface and subsurface samples, including soil, fill, and tuff, according to the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936).

### B-5.1 Surface Sampling Methods

Surface samples were collected using either the hand-auger or spade-and-scoop methods in accordance with approved subcontractor procedures technically equivalent to SOP-06.10, Hand Auger and Thin-Wall Tube Sampler, or SOP-06.09, Spade and Scoop Method for the Collection of Soil Samples. A hand auger or spade and scoop were used to collect material in approximately 6-in. increments. Samples for volatile organic compound (VOC) analysis were collected immediately to minimize the loss of subsurface VOCs during the sample collection process. Containers for VOC samples were filled as completely as possible, leaving no or minimal headspace, and sealed with a Teflon-lined cap. Table B-1.0-1 provides additional details on the collection of samples for VOC analysis. The description provided is specific to the sampling method rather than to the media. The remaining sample material was placed in a stainless-steel bowl with a stainless-steel scoop, after which it was transferred to sterile sample collection jars. Samples were preserved using coolers with blue ice to maintain the required temperature in accordance with an approved subcontractor procedure technically equivalent to SOP-5056, Sample Containers and Preservation.

Samples were appropriately labeled, sealed with custody seals, and documented before they were transported to the SMO. Samples were managed in accordance with an approved subcontractor procedure technically equivalent to SOP-5057, Handling, Packaging, and Transporting Field Samples, and WES-EDA-QP-219, Sample Control and Field Documentation.

Sample collection tools were decontaminated (see section B-5.7) immediately before and after each sample was collected in accordance with a subcontractor procedure technically equivalent to SOP-5061, Field Decontamination of Equipment.

### B-5.2 Subsurface Tuff Sampling Methods

Subsurface samples were collected in accordance with an approved subcontractor procedure technically equivalent to SOP-06.10, Hand Auger and Thin-Wall Tube Sampler.

Subsurface samples were collected using the hand auger method. Samples for VOC analysis were collected immediately to minimize the loss of subsurface VOCs during the sample collection process. Containers for VOC samples were filled as completely as possible, leaving no or minimal headspace, and sealed with a Teflon-lined cap. Table B-1.0-1 provides additional details on collection of samples for VOC analysis. The description provided is specific to the sampling method rather than to the media. The remaining sample material was placed in a stainless-steel bowl with a stainless-steel scoop, after which it was transferred to sterile sample collection jars or bags. Samples were preserved using coolers to maintain the required temperature and chemical preservative, such as nitric acid, in accordance with an approved subcontractor procedure technically equivalent to SOP-5056, Sample Containers and Preservation.

Samples were appropriately labeled, sealed with custody seals, and documented before they were transported to the SMO. Samples were managed in accordance with an approved subcontractor procedure technically equivalent to SOP-5057, Handling, Packaging, and Transporting Field Samples, and WES-EDA-QP-219, Sample Control and Field Documentation.

Sample collection tools were decontaminated (see section B-5.7) immediately before each sample was collected in accordance with a subcontractor procedure technically equivalent to SOP-5061, Field Decontamination of Equipment.

### B-5.3 Quality Control Samples

Quality control (QC) samples were collected in accordance with an approved subcontractor procedure technically equivalent to SOP-5059, Field Quality Control Samples. QC samples included field duplicates, field rinsate blanks, and field trip blanks. Field duplicate samples were collected from the same material as an investigation sample and submitted for the same analyses. Field duplicate samples were collected at a frequency of at least 1 duplicate sample for every 10 samples.

Field rinsate blanks were collected to evaluate field decontamination procedures. Rinsate blanks were collected by rinsing sampling equipment (i.e., hand auger buckets, sampling bowls and spoons), after decontamination, with deionized water. The rinsate water was collected in a sample container and submitted to the SMO. Field rinsate blank samples were analyzed for inorganic chemicals (metals) and were collected from sampling equipment at a frequency of at least 1 rinsate sample for every 10 solid samples.

Field trip blanks were provided by SMO at a frequency of 1 per day at the time samples were collected for VOC analysis. Trip blanks consisted of containers of certified clean sand and kept with the other sample containers during the sampling process and during transportation to the SMO and the off-site analytical laboratory.

### B-5.4 Sample Documentation and Handling

Field personnel completed an SCL and COC form for each sample. Sample containers were sealed with signed custody seals and placed in coolers at approximately 4°C. Samples were handled in accordance with approved subcontractor procedures technically equivalent to SOP-5057, Handling, Packaging, and Transporting Field Samples, and SOP-5056, Sample Containers and Preservation. Swipe samples were collected from the exterior of sample containers and analyzed by the RCT before the sample containers were removed from the site. Samples were transported to the SMO for processing and shipment to off-site contract analytical laboratories. The SMO personnel reviewed and approved the SCLs and COC forms and accepted custody of the samples.

### B-5.5 Decontamination of Sampling Equipment

The hand augers and all other sampling equipment that came (or could have come) in contact with sample material were decontaminated immediately before and after each sample was collected. Decontamination included wiping the equipment with Fantastik and paper towels. Decontamination activities were performed in accordance with an approved subcontractor procedure technically equivalent to SOP-5061, Field Decontamination of Equipment.

### B-5.6 Site Demobilization and Restoration

All field equipment was demobilized from the site on October 16, 2014. All excavated areas (see section B-6.0, Soil Removal) were reseeded with an approved native grass mix and best management practices (BMPs) were installed to prevent runoff.

## B-6.0 SOIL REMOVAL

Arsenic-contaminated soil with concentrations above the residential arsenic soil screening level was removed using hand tools, including shovels and picks. A 2-ft radius was removed around locations 57-4011 and 57-4020 to depths of 2.0 ft below ground surface (bgs) and 2.5 ft bgs, respectively.

Confirmation samples were not necessary because samples collected at depth at both locations defined the depth of the soil removal. The excavated material was placed in three 55-gal. drums and characterized for waste disposal by direct sampling of the containerized soil. The excavations were backfilled with clean fill material, reseeded using an approved native seed mix, and BMPs were installed to prevent runoff. The excavated soil was managed as investigation-derived waste (IDW), as described in Appendix C.

## B-7.0 GEODETIC SURVEYING

Geodetic surveys of all sample locations were performed using a Trimble RTK 5700 differential global positioning system (DGPS) referenced from published and monumented external Laboratory survey control points in the vicinity. All sampling locations were surveyed in accordance with an approved subcontractor procedure technically equivalent to SOP-5028, Coordinating and Evaluating Geodetic Surveys. Horizontal accuracy of the monumented control points is within 0.1 ft. The DGPS instrument referenced from Laboratory control points is accurate within 0.2 ft. The surveyed coordinates are presented in Table 3.2-1 of the investigation report.

## B-8.0 INVESTIGATION-DERIVED WASTE STORAGE AND DISPOSAL

All IDW generated during the field investigation was managed in accordance with SOP-10021, Characterization and Management of Environmental Program Waste. This procedure incorporates the requirements of all applicable U.S. Environmental Protection Agency (EPA) and New Mexico Environment Department (NMED) regulations, U.S. Department of Energy orders, and Laboratory implementation requirements. IDW was also managed in accordance with the approved waste characterization strategy form and the IDW management appendix of the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). Details of IDW management for the TA-57 Aggregate Area investigation are presented in Appendix C.

## B-9.0 DEVIATIONS FROM THE WORK PLAN

Several proposed sampling locations identified in the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936) were moved as a result of site conditions encountered during implementation of the field activities at Area of Concern (AOC) 57-007. These locations were moved because they were positioned atop, or next to, underground utilities. When locations were moved, the new locations were sited as close as possible to the planned locations. Additional deviations to the approved work plan scope are discussed below:

- The investigation work plan stated hollow-stem augers would be used to collect subsurface samples where hand-augering was impractical because of the depth of the material being sampled. All samples were collected using hand-auger and spade-and-scoop methods.
- The investigation work plan proposed collecting samples from three intervals below the drainline at AOC 57-007: 0.0–1.0 ft below the drainline; 1 ft above tuff; and 2.0–3.0 ft into tuff. Because the bottom of the drainline was determined to be 1 ft bgs and the top of tuff 2 ft bgs, the first two intervals were both 1.0–2.0 ft bgs. Rather than sample only two depths (1.0–2.0 ft bgs and 4.0–5.0 ft bgs), the interval 0.0–1.0 ft bgs was also sampled to encompass the depth where the former drainline was located.
- Location 57-4012 was moved 5 ft downslope/downgradient of marked utility lines.

- Location 57-4015 was moved 6 ft northwest of marked utility and remained within the leach field.
- The investigation work plan proposed collecting samples at 0.0−1.0 below the leach field. However, the leach field was not present at locations 57-4016, 57-4017, and 57-4018 and samples were collected from 0.0−1.0 ft bgs. To be consistent with the sampling depth intervals where the leach field was present, additional samples were collected from 2.5−3.5 ft bgs at locations 57-4016, 57-4017, and 57-4018. This depth interval was selected because it was equivalent to 0.0−1.0 ft below the visible leach field at sampling location 57-4015.
- The investigation work plan proposed collecting samples at locations 7-10 and 7-11; however, to avoid disturbance to undeveloped core habitat for the Jemez Mountain salamander, these two locations were moved to new locations 57-4019 and 57-4021, respectively. These locations are shown in the map presented in Attachment G-4 of this report.
- At location 57-4021, a sample was inadvertently collected from 1.0−2.0 ft into tuff instead of 2.0−3.0 ft into tuff.
- Arsenic-contaminated soil was removed at locations 57-4011 and 57-4020 within AOC 57-007. A 2-ft radius was removed around locations 57-4011 and 57-4020 to a depth of 2.0 ft and 2.5 ft bgs, respectively.
- Additional samples were collected at AOC 57-007. Four samples were collected from locations 57-4026 and 57-4027 situated southwest and downgradient of location 57-4011. At each location, samples were collected from 1.0 ft above tuff, and 2.0−3.0 ft into tuff to define the lateral extent of arsenic.

## B-10.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the ESH Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

LANL (Los Alamos National Laboratory), April 2012. "Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill)," Los Alamos National Laboratory document LA-UR-12-20545, Los Alamos, New Mexico. (LANL 2012, 214550)

NMED (New Mexico Environment Department), July 11, 2012. "Approval with Modifications, Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill)," New Mexico Environment Department letter to P. Maggiore (DOE-LASO) and M.J. Graham (LANL) from J.E. Kieling (NMED-HWB), Santa Fe, New Mexico. (NMED 2012, 520936)

**Table B-1.0-1**
**Brief Description of Field Investigation Methods**

| Method | Summary |
|---|---|
| Spade and Scoop Collection of Soil Samples | This method is typically used to collect shallow (i.e., approximately 0.0–1.0 ft.) soil samples. The spade-and-scoop method involves digging a hole to the desired depth, as prescribed in the work plan, and collecting a discrete grab sample. The sample is typically placed in a clean stainless-steel bowl for transfer into various sample containers. |
| Hand Auger Sampling | This method is typically used for sampling soil at depths of less than 10.0–15.0 ft but may in some cases be used to collect samples of weathered or nonwelded tuff. The method involves hand-turning a stainless-steel bucket auger (typically 3–4 in. inside diameter), creating a vertical hole that can be advanced to the desired sampling depth. When the desired depth was reached during the investigation, the auger was decontaminated before the hole was advanced through the sampling depth. The sample material was transferred from the auger bucket to a stainless-steel sampling bowl before the various required sample containers were filled. |
| Headspace Vapor Screening | Individual soil, rock, or sediment samples were field-screened for organic vapors by placing a portion of the sample in a plastic sample bag or in a glass container with a foil-sealed cover. The container was sealed and gently shaken and allowed to equilibrate for 5 min. The sample was then screened by inserting a PID probe into the container and measuring and recording any detected vapors. |
| Handling, Packaging, and Shipping of Samples | Field team members sealed and labeled samples before packing them to ensure the sample containers and the containers used for transport were free of external contamination.<br>Field team members packaged all samples to minimize the possibility of breakage during transport.<br>After all environmental samples were collected, packaged, and preserved, a field team member transported them to the SMO. The SMO arranged to ship the samples to analytical laboratories. |
| Sample Control and Field Documentation | The collection, screening, and transport of samples were documented on standard forms generated by the SMO. These included SCLs, COC forms, and sample container labels. SCLs were completed at the time of sample collection, and the logs were signed by the sampler and a reviewer who verified the logs for completeness and accuracy. Corresponding labels were initialed and applied to each sample container, and custody seals were placed around each sample container. COC forms were completed and signed to verify that the samples were not left unattended. |
| Field Quality Control Samples | Field QC samples were collected as follows:<br>*Field Duplicates*: At a frequency 10%; collected at the same time as a regular sample and submitted for the same analyses.<br>*Rinsate Blank*: At a frequency of 10%; collected by rinsing sampling equipment with deionized water that was collected in a sample container and submitted for laboratory analysis.<br>*Trip Blanks*: Required for all field events that include the collection of samples for VOC analysis. Trip blanks containers of certified clean sand were opened and kept with the other sample containers during the sampling process. |
| Field Decontamination of Remediation and Sampling Equipment | Dry decontamination was used to minimize the generation of liquid waste. Dry decontamination included the use of a wire brush or other tool to remove soil or other material adhering to the sampling equipment, followed by use of a commercial cleaning agent (nonacid, waxless cleaners) and paper wipes. |

**Table B-1.0-1 (continued)**

| Method | Summary |
|---|---|
| Containers and Preservation of Samples | Specific requirements/processes for sample containers, preservation techniques, and holding times are based on EPA guidance for environmental sampling, preservation, and quality assurance. Specific requirements for each sample were printed on the SCL provided by the SMO (size and type of container [e.g., glass, amber glass, and polyethylene]). All samples were preserved by placing them with ice in insulated containers to maintain a temperature of 4°C. |
| Coordinating and Evaluating Geodetic Surveys | Geodetic surveys focused on obtaining survey data of acceptable quality to use during project investigations. Geodetic surveys were conducted with a Trimble 5700 DGPS. The survey data conformed to Laboratory Information Architecture project standards IA-CB02, GIS Horizontal Spatial Reference System, and IA-D802, Geospatial Positioning Accuracy Standard for A/E/C/ and Facility Management. All coordinates were expressed as State Plain Coordinate System 83, NM Central, U.S. feet. All elevation data were reported relative to the National Geodetic Vertical Datum of 1983. |
| Management of Environmental Restoration Project Waste, Waste Characterization | IDW is managed, characterized, and stored in accordance with an approved waste characterization strategy form that documents site history, field activities, and characterization approach for each waste stream managed. Waste characterization complied with on- or off-site waste acceptance criteria. All stored IDW was marked with appropriate signage and labels and contained within an area of contamination. A waste storage area was established before waste was generated. Waste storage areas were located in controlled areas of the Laboratory to prevent unauthorized personnel from inadvertently adding or managing wastes. Each container of waste generated was individually labeled with waste classification, item identification number, and radioactivity (if applicable), immediately following containerization. All waste was segregated by classification and compatibility to prevent cross-contamination. Management of IDW is described in Appendix C. |

**Table B-1.0-2**
**SOPs Used for Investigation Activities Conducted at TA-57 Aggregate Area**

| |
|---|
| P101-17, R1, Excavation/Fill/Soil Disturbance Permit Process |
| P101-18, R2, Procedure for Pause/Stop Work |
| P315, R3, Conduct of Operations Manual |
| P409, R4, Waste Management |
| SOP-5181, R1, Notebook and Logbook Documentation for Environmental Directorate Technical and Field Activities |
| SOP-06.09, Spade and Scoop Method for the Collection of Soil Samples |
| SOP-06.10, Hand Auger and Thin-Wall Tube Sampler |
| SOP-06.33, Headspace Vapor Screening with a Photo Ionization Detector |
| SOP-5028, Coordinating and Evaluating Geodetic Surveys |
| SOP-5056, Sample Containers and Preservation |
| SOP-5057, Handling, Packaging, and Transporting Field Samples |
| WES-EDA-QP-219, Sample Control and Field Documentation |
| SOP-5059, Field Quality Control Samples |
| SOP-5061, Field Decontamination of Equipment |
| EP-DIR-SOP-10021, R0, Characterization and Management of Environmental Program Waste |

Note: Procedures used were approved subcontractor procedures technically equivalent to the procedures listed in the table.

# Appendix C

*Investigation-Derived Waste Management*

## C-1.0 INTRODUCTION

This appendix contains the waste management records for the investigation-derived waste (IDW) generated during the implementation of the investigation work plan for Technical Area 57 (TA-57) Aggregate Area, located at Fenton Hill, which lies on the western side of the Jemez Mountains, approximately 12 mi west of Los Alamos National Laboratory (LANL or the Laboratory).

All IDW generated during the field investigation was managed in accordance with Standard Operating Procedure (SOP) 10021, Characterization and Management of Environmental Program Waste. This procedure incorporates the requirements of applicable U.S. Environmental Protection Agency and New Mexico Environment Department regulations, U.S. Department of Energy orders, and Laboratory policies and procedures.

Consistent with Laboratory procedures, a waste characterization strategy form (WCSF) was prepared to address characterization approaches, on-site management, and final disposition options for wastes. Analytical data and information on wastes generated during previous investigations and/or acceptable knowledge (AK) were used to complete the WCSF. The WCSF is included in this appendix as Attachment C-1 (on CD).

The selection of waste containers was based on appropriate U.S. Department of Transportation requirements, waste types, and estimated volumes of IDW to be generated. Immediately following containerization, each waste container was individually labeled with a unique identification number and with information regarding waste classification, contents, and radioactivity, if applicable.

Wastes were staged in clearly marked, appropriately constructed waste accumulation areas. Waste accumulation area postings, regulated storage duration, and inspection requirements were based on the type of IDW and its classification. Container and storage requirements were detailed in the WCSF and approved before waste was generated.

Investigation activities were conducted in a manner that minimized the generation of waste. Waste minimization was accomplished by implementing the most recent version of the “Los Alamos National Laboratory Hazardous Waste Minimization Report.”

## C-2.0 WASTE STREAMS

The IDW streams generated and managed during the investigation at the TA-57 Aggregate Area are described below and are summarized in Table C-2.0-1. The waste stream numbers correspond with those identified in the WCSF.

- WCSF Waste Stream #1: Contact waste consisted of solid waste generated during soil removal and sampling activities that came in contact with contaminated environmental media and equipment. This waste included, but was not limited to, personal protective equipment (e.g., gloves); plastic sheeting (e.g., tarps, liners); plastic and glass sample bottles; disposable sampling supplies (e.g., filters, tubing, plastic bags); and dry decontamination wastes, such as paper items. These wastes were containerized at the point of generation and were characterized based on AK of the waste materials, the methods of generation, and analytical data for the media with which they came into contact. Approximately 0.25 $yd^3$ of contact waste was generated and disposed of as industrial waste at Waste Management of New Mexico in Rio Rancho, NM.

- WCSF Waste Stream #2: Petroleum-contaminated soil (PCS) was not generated during the TA-57 Aggregate Area investigation.
- WCSF Waste Stream #3: Municipal solid waste (MSW) consisted of noncontact trash, including paper, cardboard, wood, plastic, food, and beverage containers. Approximately 0.5 $yd^3$ of waste was generated and was determined to be nonhazardous, nonradioactive MSW. It was stored in plastic-lined trash cans and disposed of at the Los Alamos County landfill.
- WCSF Waste Stream #4: Soil consisted of soil contaminated with arsenic above risk-based residential soil screening levels. Approximately 1.5 $yd^3$ of soil was generated during this investigation and stored in 55-gal. drums. A hand auger was used in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler, to collect a composite sample from the three drums. The soil was disposed of as industrial waste at Waste Management of New Mexico in Rio Rancho, NM.

**Table C-2.0-1**
**Summary of IDW Generation and Management**

| Waste Stream | Waste Type | Volume | Characterization Method | On-Site Management | Disposition |
|---|---|---|---|---|---|
| Contact Waste | Industrial | 0.25 $yd^3$ | AK and analytical results of site characterization | 55-gal. drum | Waste Management of New Mexico |
| PCS | New Mexico Special Waste | n/a* | AK | n/a | n/a |
| Municipal Solid | MSW | 0.5 $yd^3$ | AK | Plastic bags | Los Alamos County landfill |
| Arsenic-contaminated soil | Industrial | 1.5 $yd^3$ | Direct sampling and use of analytical results | 55-gal. drum | Waste Management of New Mexico |

*n/a = Not applicable.

# Attachment C-1

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*Waste Characterization Strategy Form*
*(on CD included with this document)*

# Waste Characterization Strategy Form

| | |
|---|---|
| **Project Title:** | TA 57-007 Fenton Hill |
| **Activity Type:** | Risk Based Soil Removal |
| **Project Manager:** | Todd Haagenstad |
| **Waste Generator:** | Victor Garde |
| **Waste Management Coordinator:** | Ron DeSotel |
| **Completed by:** | Ron DeSotel |
| **Date:** | September 11, 2014 |

## Description of Activity:

The waste-generating activities addressed in this Waste Characterization Strategy Form (WCSF) consist of removal of soil contaminated with arsenic above residential screening levels and nature and extent sampling. Soil removal activities will consist of manual removal of soil.

The following waste streams are expected to be generated during reconfiguration:

- Contact Waste
- Petroleum Contaminated Soils (PCS) (potential)
- Municipal Solid Waste (MSW)
- Soil

All waste will be managed in accordance with P-409, *Waste Management*; EP-SOP-10021 R.1, *Characterization and Management of Environmental Program Waste*; P-930-1, *LANL Waste Acceptance Criteria*; P-930-2, *Waste Certification Program*, and approved work plans.

A trained and qualified Field Waste Management Technician (FWMT), Waste Sampling Personnel (SP), and Hazardous Materials Packaging and Transportation (HMPT) personnel will be assigned to perform the duties outlined in EP-SOP-10021 R.1, and Exhibit F of the LANL Contract.

This WCSF will be implemented before any waste generating activity is undertaken. An amendment to this WCSF will be prepared and submitted for review and approval if any of the waste streams change in description or characterization approach, or unanticipated waste streams are generated. The generation of no path forward wastes must be approved by the Department of Energy (DOE) prior to generation of the waste.

## Relevant Site History and Description:

AOC 57-007 is a leach field located at Fenton Hill, the site of former geothermal energy experiments. The leach field served a trailer used as an analytical chemistry laboratory and was located approximately 20 ft southeast of the trailer. The open-bottom leach field was about 8 ft to 10 ft deep, constructed with cinder blocks and filled with gravel. Chemists working in the trailer used a special drain that was connected to a plastic-lined, 55-gal. drum to dispose of chemicals that could not be disposed of through the wastewater system (AOC 57-006). Wastewater from other activities in the trailer drained to the leach field. Potential contaminants at AOC 57-007 are inorganic and organic chemicals. An AK Review Form, 57-006 & 57-007 has been prepared an approved for this area.

**Scope of Work:**

SUBCONTRACTOR shall perform work as prescribed in the Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill), LA-UR-12-20545, April 2012, EP2012-0093 subsequently referred to as the Work Plan that is included in Exhibit D, Appendix D-1, and as prescribed in additional scope via modifications to Exhibit D scope of work and technical specifications. Additional scope includes:

- Collect additional extent samples to define lateral extent for arsenic associated with sample location 57-4011.
- Removal of arsenic-contaminated surface soil at two locations that exceeds the 3.9 milligram per kilogram (mg/kg) residential soil screening level (SSL)

## CHARACTERIZATION STRATEGY

The characterization strategy for investigation derived waste (IDW) generated during soil removal will be based on direct sampling of the containerized waste, and may also include source term/process identification performed to identify whether listed hazardous waste may be present (i.e., due diligence review).

The selection of waste containers will be based on U.S. Department of Transportation requirements, waste types, and estimated volumes of waste to be generated. Immediately following containerization, each waste container will be individually labeled with a unique container identification number and with information regarding waste classification, contents, and date generated. A waste determination must be made within 45 days of the generation of the waste. A Waste Acceptance Criteria (WAC) waste exception form (WEF) can be used if the generator does not meet the 45 day deadline.

A copy of either the ENV-CP approved due diligence/AK Review or the NMED contained-in approval letter must accompany all waste profiles prepared for the subject waste(s).

**Waste # 1 - Contact Waste:** This waste stream is comprised of solid waste generated during soil removal and sampling activities that has come into contact with contaminated environmental media and equipment. This includes, but is not limited to: personal protective equipment (PPE) (e.g., gloves); plastic sheeting (e.g., tarps, liners); plastic and glass sample bottles; disposable sampling supplies (e.g., filters, tubing, plastic bags); and dry decontamination wastes, such as paper items. It is estimated that less than 1 $yd^3$ of contact waste may be generated.

***Anticipated Regulatory Status:*** Industrial (non-hazardous/non-radiological).

***Characterization Approach:*** Contact Waste will be characterized using the AK of the environmental media (i.e., soil) with which it came into contact.

***Storage and Disposal Method:*** Contact waste will be containerized at the point of generation and initially managed as non-hazardous/non-radiological waste pending review of analytical data to determine final waste characterization. . If the contact waste is determined to be non-hazardous/nonradioactive and approval is granted by ENV-RCRA, it may be recycled and reused via the Material Recycling Facility (MRF). Otherwise, the contact waste will be disposed of at an appropriate waste disposal facility based upon the final regulatory classification of the waste.

**Waste # 2 – Petroleum Contaminated Soils (PCS):** This waste stream is comprised of soils contaminated due to the accidental release of commercial products such as hydraulic fluid, motor oil, unleaded gasoline, or diesel fuel (e.g., from the rupture of hydraulic or fuel hoses, or spills during maintenance, etc.). It may also include adsorbent padding, paper towels, spill pillows or other adsorbent material used to contain the released material and added to the containerized PCS waste for storage and disposal. It is estimated that less than 1 $yd^3$ of this waste stream will be generated.

***Anticipated Regulatory Status:*** New Mexico Special Waste (NMSW)

***Characterization Approach:*** PCS may be characterized based upon the AK of the product spilled and the media with which it came into contact and/or using the analytical results obtained from direct sampling. AK may only be used if the product spilled is known (an MSDS specifying composition is available) and the spill is on clean fill (non-hazardous/non-radioactive). Direct sampling may be performed in place (same day as spill/containerization) or from the containerized waste within 10 days of generation. Samples will be collected in one of the following two ways:

1. For spills containerized in large containers (i.e., 55-gallon drums) and/or deep spills being sampling in place the samples will be collected in accordance with LANL SOP-06-10, *Hand Auger and Thin-Wall Tube Sampler.*

2. For spills containerized in small containers and/or shallow spills being sampled in place the samples will be collected in accordance with SOP-06.09, Spade and Scoop Method for Collection of Soil Samples.

The analysis of the samples will be dependent on where the spill occurred as follows:

- If the spill occurred on clean soil, other constituents may be analyzed as necessary to meet the WAC of the disposal facility.

- If the spill occurs on soils with known hazardous contaminants or soils with no available/reliable AK documentation the samples will be analyzed, at minimum, for VOCs, SVOCs, TPH, DRO/GRO, PCBs, total cyanides, nitrates/nitrites, perchlorates and total metals based on the below characterization table. TCLP analysis may also be performed for TAL metals if the analytical results for the total metals divided by 20 indicate contaminants that exceed regulatory thresholds. If radiological contamination is a possibility the samples must also be analyzed for radionuclides (by alpha and gamma spectroscopy); isotopic uranium, isotopic plutonium, americium-241, tritium, and strontium-90.

All samples will be submitted with a 21-day turnaround time for analysis so that a waste determination can be made within 30 days of generation. The "initial" date or date of generation for NMSW is the date the container is completely full or the date in which no additional NMSW will be added to the container. The "final" date (or the date starting the 90 day NMSW clock) is the date that the validated analytical data is received by the WMC and/or a waste determination has been made using AK.

Sampling personnel must record sampling information in accordance with EP-ERSS-SOP-5058 and EP-ERSS-SOP-5181. The field notebook or sample collection sheet must be used to document sample collection activities (e.g., equipment and sampling methods used, number and location of samples, etc.). Sampling personnel must also record field conditions, problems encountered, local sources of contamination (e.g., operating generators or vehicles), the personnel involved, equipment and supplies used, waste generated, and field observations.

***Storage and Disposal Method:*** PCS will be containerized at the point of generation on the same day that the spill occurred. If AK for the site indicates that the soil will not be contaminated with radioactive or hazardous materials, the PCS will be managed as NMSW pending review of AK and/or analytical results to determine final waste characterization. If AK for the site indicates that the soil could be contaminated with radioactive or hazardous materials the PCS will be stored in a clearly marked and constructed waste accumulation area appropriate to the anticipated waste type. Waste accumulation area postings, regulated storage duration, and inspection requirements will be based upon the waste classification.

**Waste # 3 – Municipal Solid Waste (MSW):** This waste stream is comprised of non-contact trash, including, but not limited to, paper, cardboard, wood, plastic, food, and beverage containers. It is estimated that less than 1 $yd^3$ of MSW will be generated.

***Anticipated Regulatory Status:*** MSW

***Characterization Approach:*** MSW will be characterized based on AK of the waste materials (including MSDSs) and methods of generation.

***Storage and Disposal Method:*** MSW will be segregated from all other waste streams. It is anticipated that the wastes will be stored in plastic trash bags or other appropriate containers and transferred/disposed of at the County of Los Alamos Solid Waste Transfer Station or other authorized off-site solid waste facility.

**Waste # 4 – Soil:** This waste stream is comprised of soil contaminated with arsenic above Risk Based Screening Levels (Residential). It is estimated that less than 10 $yd^3$ of soil will be generated.

***Anticipated Regulatory Status:*** Industrial (non-hazardous/non-radiological)

***Characterization Approach:*** SUBCONTRACTOR shall excavate and remove soil/tuff from two separate areas at and around locations 57-4011 and 57-4020. At location 57-4011, soil shall be removed to a depth of 2 ft bgs and a radius of 2 ft surrounding location 57-4011. At location 57-4020, soil shall be removed to a depth of 2.5 ft bgs with a radius of 2ft surrounding location 57-4020. Soil will be removed using manual methods. The soil will be characterized by direct sampling of the containerized soil. Soil will be sampled within 10 days of generation and submitted for analysis with a 21 day turnaround time. Soil from a single SWMU may be combined into a single container before sampling. If container sizes are small, a representative sample may be collected from more than one container (e.g., one sample for every 20 $yd^3$ generated from a single SWMU). A hand auger or thin-wall tube sampler will be used in accordance with LANL SOP-06.1 0, *Hand Auger and Thin-Wall Tube Sampler,* to collect waste material from each container, auguring from the surface to the bottom of the waste in a sufficient number of locations to obtain a representative sample. Soil will be analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), radionuclides, nitrates/nitrites, perchlorates, total cyanides, PCB's and toxicity characteristic (TCLP) metals based on the below characterization table. If process knowledge, odors, or staining indicate the cuttings may be contaminated with petroleum products, the materials will be analyzed for total petroleum hydrocarbons (TPH [DRO/GRO]). Other constituents may be analyzed as necessary to meet the WAC for a receiving facility.

***Storage and Disposal Method:*** Soil will be containerized at the point of generation in DOT approved containers appropriate for the quantity of waste generated and managed as industrial (non-hazardous/non-radiological) pending analytical results to determine final waste characterization. Note: Due to the nature of this project, soil may have to be stored at a centrally located staging area, on LANL property, as opposed to the point of generation. SUBCONTRACTOR shall be responsible for providing waste containers, packaging, on-site management (including transfer of waste containers to a LANL approved staging/storage area), off-site profile(s), transportation and disposal of all waste generated.

## TABLE 1- CHARACTERIZATION TABLE

NOTE: Multiple sampling may be required to ensure WAC requirements are met.

| Waste Description | Waste # 1 Contact Waste | Waste #2 Petroleum Contaminated Soils (PCS) | Waste #3 Municipal Solid Waste (MSW) | Waste #4 Soil |
|---|---|---|---|---|
| Estimated Volume | | | | |
| Packaging | | | | |
| **Regulatory classification:** | | | | |
| Radioactive Waste | | X | | |
| Reusable Material | | | | |
| Municipal Solid Waste (MSW) | | | X | |
| Waste destined for LANL's SWWS or RLWTF [1] | | | | |
| Hazardous Waste | | X | | |
| Mixed (hazardous and radioactive) Waste | | X | | |
| Toxic Substances Control Act (TSCA) | | X | | |
| New Mexico Special Waste | | X | | |
| Industrial Waste | X | X | | X |
| **Characterization Method** | | | | |
| Acceptable knowledge (AK): Existing Data/Documentation | X | X | X | |
| AK: Site Characterization | | X | | |
| Direct Sampling of Waste | | X (As needed) | | X |
| **Analytical Testing** | | | | |
| Volatile Organic Compounds (EPA 8260-B) | | X (As needed) | | X |
| Semivolatile Organic Compounds (EPA 8270-C) | | X (As needed) | | X |
| Organic Pesticides (EPA 8081-A) | | | | |
| Organic Herbicides (EPA 8151-A) | | | | |
| PCBs (EPA 8082) | | X (As needed) | | X |
| Total Metals (EPA 6010-B/7471-A) | | | | |
| Total Cyanide (EPA 9012-A) [2] | | X (As needed) | | X |
| Nitrates/Nitrites (EPA 300.09) | | X (As needed) | | X |
| Dioxins/Furans (EPA 1613B) | | | | |
| Oil/Grease (EPA 1665) | | | | |
| Fluoride, Chlorine, Sulfate (EPA 300) | | | | |
| TTO (EPA 8260-B and EPA 8270-C) [3] | | | | |
| Total Suspended & Dissolved Solids (TSS) and Total Dissolved Solids (TDS) (EPA 160.1 and 160.2) | | | | |
| Chemical Oxygen Demand (COD) (EPA 410.4) | | | | |
| pH (EPA 904c) | | | | |
| Microtox or Biological Oxygen Demand (BOD) [4] | | | | |
| Perchlorates (EPA 6850) | | X (As needed) | | X |
| High Explosives Constituents (EPA 8330/8321-A) | | | | |
| Asbestos | | | | |
| BTEX (EPA-8021b) | | | | |
| Total petroleum hydrocarbon (TPH)-GRO (EPA 8015-M) TPH-DRO (EPA 8015-M) | | X | | |
| Toxicity characteristic leaching procedure (TCLP) Metals (EPA 1311/6010-B) | | X (As needed) | | X |
| TCLP Organics (EPA 1311/8260-B & 1311/8270-C) | | | | |
| TCLP Pest. & Herb. (EPA 1311/8081-A/1311/8151-A) | | | | |
| Radium 226 & 228 (EPA 9320) | | X | | X |
| Gross Alpha (alpha counting) (EPA 900) | | | | |
| Gross Beta (beta counting) (EPA 900) | | | | |
| Tritium (liquid scintillation) (EPA 906.0) | | X (As needed) | | X |
| Gamma spectroscopy (EPA 901.1) | | X (As needed) | | X |
| Isotopic plutonium (Chem. Separation/alpha spec.) (HASL-300) | | X (As needed) | | X |
| Isotopic uranium (Chem. Separation/alpha spec.) (HASL-300) | | X (As needed) | | X |
| Total uranium (EPA 6020) | | X (As needed) | | X |
| Strontium-90 (EPA 905) | | X (As needed) | | X |
| Americium-241 (Chem. Separation/alpha spec.) (HASL-300) | | X (As needed) | | X |
| Isotopic Thorium | | X (As needed) | | X |
| Waste Profile Form # | TBD | TBD | TBD | |

1 In addition to other analytes needed to characterize the waste (e.g., VOC, SVOC, total metals), analyze for TSS, TDS, Oil and Grease, gross alpha gross beta, tritium, and pH for liquids destined for the LANL SWWS. For wastes destined for the RLWTF additional constituents include TTO, TSS, COD, pH, total nitrates/nitrites, and gross alpha, gross beta (not including tritium), and gross gamma or the sum of individual alpha-, beta-, and gamma-emitting nuclides.
2 Filtered metals and filtered Cyanide are required for land application, with the exception of mercury (hg).
3 TTO is the total of volatile organic and semi-volatile organic compound contaminants. Request methods EPA 8260-B (VOCs) and EPA 8270-C (SVOCs).
4 If Microtox analysis is not available, request BOD.

**Notes:**

If data are insufficient to make a definitive regulatory classification at the time of WCSF completion, more than one box on the characterization table may be checked, along with an explanation in the text section. The final regulatory classification will be reflected on the waste profile form. The table identifies the suite of analyses required based on site knowledge, information needed by the anticipated receiving facility, or for land application, if applicable.

Section 1.2 of the TCLP method 1311 states "If a total analysis of the waste demonstrates that individual analytes are not present in the waste, or that they are present but at such low concentrations that the appropriate regulatory levels could not possibly be exceeded, the TCLP need not be run." The methodology for using total waste analyses determination for the 40 TC constituents in soil is as follows:

**Liquids** – Wastes containing less than 0.5% filterable solids do not require extraction and therefore by filtering the waste and measuring the total constituent level of the filtrate and comparing those levels to regulatory levels is appropriate.

**Solids** – Constituent concentrations from the extraction fluid of wastes that are 100% physical solids are divided by 20 (reflecting the 20 to 1 ratio of TCLP extraction) and then compared to the regulatory levels. If the theoretical levels do not equal or exceed the regulatory levels, the TCLP need not be run. If the levels do equal or exceed the regulatory levels, the generator may either declare the waste hazardous or run TCLP analyses.

**Additional Analytical Information:**

Standard analytical turnaround time is anticipated to be 30 calendar days. In the event a waste is suspected to be hazardous, the total waste volume exceeds 55 gallons (e.g., purge water, decontamination fluids, and contact waste), and a <90-day Accumulation Area is required, then an expedited analytical turnaround time will be needed to meet the 90-day time limit. Environmental Stewardship sample support will be notified if an expedited analysis is necessary. Utah-certified analytical laboratory data is recommended to meet the MLLW WAC for waste streams that are suspected to be hazardous and low-level radioactive.

**References:**


- 40 CFR 261.24, 40 *Code of Federal Regulations* Part 261, Identification and Listing of Hazardous Waste, Subpart C, Section 24, Toxicity Characteristic.
- EP-DIR-SOP-10021 R.1, *Characterization and Management of Environmental Programs Waste*
- EP-ERSS-SOP-5056, *Sample Containers and Preservation*
- EP-ERSS-SOP-5058, *Handling, Packaging, and Transporting Field Samples*
- EP-ERSS-SOP-5181, *Notebook and Logbook Documentation for Environmental Directorate Technical and Field Activities*
- P-409, *Waste Management*
- P930-1, *LANL Waste Acceptance Criteria*
- SOP-06.09, *Spade and Scoop Method for the Collection of Soil Samples*
- SOP-06-10, *Hand Auger and Thin-Wall Tube Sampler*
- WES-EDA-QP-219, *Sample Control and Field Documentation*

**Waste Characterization Strategy Form**

| *Signatures* | Date |
|---|---|
| **Project Manager:** Todd Haagenstad<br>Todd Haagenstad | 9/11/14 |
| **Waste Generator:** Victor Garde | 9/15/14 |
| **Waste Management Coordinator:** Ron DeSotel<br>RDeS | 9-11-14 |
| **ENV-CP Representative:** John Valdez<br>John M Valdez TA-57 Fenton Hill WCSF | 9/18/14 |
| **Waste Acceptance Representative:** Andy Elicio | 09/17/2014 |
| **Waste Certification Program Representative** (only if radioactive wastes will be generated) N/A | N/A |
| | **Los Alamos National Laboratory EP** |

# AK REVIEW FORM or DUE DILIGENCE REPORT

**Remediation; Soil Sampling; and Borehole Sampling**

| | |
|---|---|
| **PRS ID No.: 57-006 & 57-007** | **Technical Area: 57** |
| **Watershed:** | |
| **Scope of Work:** | Sampling to define nature and extent of potential contamination. |

**PRS Description**

AOC 57-006 is the former location of a plastic-lined, 55-gal. drum that was buried in the ground beneath a trailer at TA-57, Fenton Hill, that served as an analytical chemistry laboratory. Fenton Hill is the site of former geothermal energy experiments. Chemicals that could not be disposed of through the wastewater system were poured into a special drain, which was connected to the 55-gal. drum. When the drum was full, its contents were transported to LANL for disposal. In 1994, the drum was removed.

AOC 57-007 is a leach field located at Fenton Hill, the site of former geothermal energy experiments. The leach field served a trailer used as an analytical chemistry laboratory and was located approximately 20 ft southeast of the trailer. The open-bottom leach field was about 8 ft to 10 ft deep, constructed with cinder blocks and filled with gravel. Chemists working in the trailer used a special drain that was connected to a plastic-lined, 55-gal. drum to dispose of chemicals that could not be disposed of through the wastewater system (AOC 57-006). Wastewater from other activities in the trailer drained to the leach field. Potential contaminants at AOC 57-007 are inorganic and organic chemicals.

The following excerpt is taken from the RFI Report (which encompassed other AOCs in addition to 57-006 and 57-007):

*This report describes the results of surface and shallow subsurface soil sampling at potential release sites (PRSs) 57-001(b), 57-001(c), 57-002, 57-004(a), 57-006, and 57-007 at Technical Area (TA 57 (former Operable Unit {OU} 1154), known as the Fenton Hill facility. From the early 1970s until the early 1990s, the Laboratory carried out geothermal recovery experiments at this facility; these PRSs which include circulation ponds, an outfall, a sludge disposal pit, and discharge areas for an on-site analytical chemical trailer, received fluids and other materials associated with geothermal experiments. The objective of this Phase I investigation was to confirm the presence or infer the absence of Resource Conservation and Recovery Act (RCRA) hazardous constituents at these PRSs.*

*During the summer of 1994, surface and shallow subsurface soil samples were collected from nine locations. All the samples were analyzed for metals. In addition, those samples collected from PRSs at which drilling materials and geothermal circulations fluids had been used were analyzed for semivolatile organic compounds; and those samples collected from the discharge areas for the analytical chemistry trailer were analyzed for volatile organic compounds. Because no RCRA hazardous constituents were found at levels above screening action levels (SALS) in samples collected from PRSs 57-001(b) (pond portion only), 57-001(c), 57-004(a), 57-006, or 57-007, we are recommending NFA (No Further Action) for the pond portion of th PRS 57-001(b) and the other four PRSs.*

## Listed Status

There is no documented evidence that 57-006 and 57-007 are contaminated with F-, K-, P-, or U-listed waste. If potentially listed organics typical of asphalt are detected, the source may be considered to be asphalt, if applicable, which is not a listed source.

| Potential Contaminant Sources | Listed |
|---|---|
| Asphalt/concrete parking lot run-off (e.g., MEK, Methylene Chloride, Toluene, etc.) | No |
| Plastics used in waste storage and/or sampling equipment [i.e., Bis(2-ethylhexyl)phthalate] | No |

## Review Summary and Waste Management Instructions

Guidance provided by EPA's Management of Remediation Waste Under RCRA (EPA 530-F-98-026), Determination of When Contamination is Caused by Listed Hazardous Waste states:

> "Where a facility owner/operator makes a good faith effort to determine if a material is a listed hazardous waste but cannot make such a determination because documentation regarding a source of contamination, contaminant, or waste is unavailable or inconclusive, EPA has stated that one may assume the source, contaminant or waste is not listed hazardous waste and therefore, provided the material in question does not exhibit a characteristic of hazardous waste, RCRA requirements do not apply."

There are no records of U- and/or P-listed spills that would require wastes from 14-001 (a,b,c,d,e) to be listed. F-listed sources are associated with specific processes and operations. There is no documented evidence that any of the following processes/operations have occurred at the Laboratory:

- Production and manufacturing of tri-, tetra- or pentachlorophenol, or tetra-, penta- or hexachlorobenzene (F020, F021, F022, F023, F027, F028)
- Aliphatic hydrocarbon production (F024, F025)
- Wood preserving (F032, F034, F035)
- Petroleum refining (F037, F038)

These F-listings are not applicable to waste from 57-006 and 57-007.

Most K-listed sources are industrial in nature and not typical of Laboratory operations. The Laboratory generates only small amounts of K-listed wastes, primarily spent carbon from high explosives processing that is disposed off-site. The documented amounts of K-listed wastes generated at LANL are not sufficient to have impacted activities at 57-006 and 57-007.

The IDW from the aggregate site may be managed as non-hazardous. Refer to the WCSF for detailed waste management instructions.

## Documents Reviewed

| Document Title | Date | ER ID No. |
|---|---|---|
| LA-UR-96-1062; ERID-053801, RFI Report for TA-57: PRSs 57-001(b,c), 57-002, 57-004(a), 57-006, 57-007 [SAP 57-001(b)] | April, 1996 | 53801 |
| PRS Database :http://wesweb.lanl.gov/PRS/PRSMain.asp | July 2010 | NA |

## Review/Approval

| | |
|---|---|
| **ADEP Representative:** | **Date:** 6-30-14 |
| **EDV-CP Environmental Professional** John M Valdez | **Date:** 6/30/14 |

# Appendix D

*Analytical Program*

## D-1.0 INTRODUCTION

This appendix discusses the analytical methods and data-quality review for samples collected during the 2014 investigation at Technical Area 57 (TA-57) Aggregate Area, located at Fenton Hill, which lies on the western side of the Jemez Mountains, approximately 12 mi west of Los Alamos National Laboratory (LANL or the Laboratory). Additionally, this appendix summarizes the effects of data-quality issues on the acceptability of the analytical data.

Quality assurance (QA), quality control (QC), and data validation procedures were implemented in accordance with the Quality Assurance Project Plan Requirements for Sampling and Analysis (LANL 1996, 054609) and the Laboratory's statement of work (SOW) for analytical laboratories (LANL 2008, 109962). The results of the QA/QC procedures were used to estimate the accuracy, bias, and precision of the analytical measurements. Samples for QC include method blanks, matrix spike samples (MS), laboratory control samples (LCS), internal standards (IS), initial calibration verifications (ICV), continuing calibration verifications (CCV), surrogate monitoring compounds, and tracer compounds.

The type and frequency of laboratory QC analyses are described in the SOW for analytical laboratories (LANL 2008, 109962). Other QC factors, such as sample preservation and holding time, were also assessed in accordance with the requirements outlined in Standard Operating Procedure (SOP) 5056, Sample Containers and Preservation.

The following SOPs, available at http://www.lanl.gov/community-environment/environmental-stewardship/plans-procedures.php, were used for data validation:

- SOP-5161, Routine Validation of Volatile Organic Compound (VOC) Analytical Data
- SOP-5162, Routine Validation of Semivolatile Organic Compound (SVOC) Analytical Data
- SOP-5165, Routine Validation of Metals Analytical Data
- SOP-5166, Routine Validation of Gamma Spectroscopy Data, Chemical Separation Alpha Spectrometry, Gas Proportional Counting, and Liquid Scintillation Analytical Data
- SOP-5191, Routine Validation of LC/MS/MS Perchlorate Analytical Data

Routine data validation was performed for each data package (also referred to as request numbers), and analytical data were reviewed and evaluated based on U.S. Environmental Protection Agency (EPA) National Functional Guidelines, where applicable (EPA 1994, 048639; EPA 1999, 066649). As a result of the data validation and assessment efforts, qualifiers are assigned to the analytical records as appropriate. The data-qualifier definitions are provided in Appendix A. Sample collection logs (SCLs), chain-of-custody (COC) forms, the analytical data, instrument printouts, and data validation reports are provided in Appendix E.

## D-2.0 INORGANIC CHEMICAL ANALYSES

A total of 52 samples (plus 5 field duplicates) collected within the TA-57 Aggregate Area were analyzed for inorganic chemicals. All 52 samples (plus 5 field duplicates) were analyzed for target analyte list (TAL) metals with 4 samples analyzed for arsenic only; 48 samples (plus 5 field duplicates) were analyzed for nitrate, perchlorate, and total cyanide. The analytical methods used for inorganic chemicals are listed in Table D-1.0-1.

Tables within the investigation report summarize the samples collected and the analyses requested for each site. All inorganic chemical results are provided on CD in Appendix E.

### D-3.1 Inorganic Chemical QA/QC Samples

The use of QA/QC samples is designed to produce quantitative measures of the reliability of an analytical procedure. The results of the QA/QC analyses performed on a sample provide confidence about whether the analyte is present and whether the concentration reported is accurate. To assess the accuracy and precision of inorganic chemical analyses, LCS, preparation blanks, MS samples, laboratory duplicate samples, interference check samples (ICS), and serial dilution samples were analyzed as part of the investigation. Each of these QA/QC sample types is defined in the analytical services SOW (LANL 2008, 109962) and is described briefly below.

The LCS serves as a monitor of the overall performance of each step during the analysis, including sample digestion. For inorganic chemicals in soil/tuff, LCS percent recovery (%R) should fall within the control limits of 75%–125%.

The preparation blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing. It is extracted and analyzed in the same manner as the corresponding environmental samples. Preparation blanks are used to measure bias and potential cross-contamination. All inorganic chemical results in the preparation blank should be below the method detection limit (MDL).

MS samples assess the accuracy of inorganic chemical analyses. These samples are designed to provide information about the effect of the sample matrix on the sample preparation procedures and analytical technique. The MS %R should fall within the control limits of 75%–125% for all spiked analytes.

Laboratory duplicate samples assess the precision of inorganic chemical analyses. The relative percent difference (RPD) between the sample and laboratory duplicate should be within ±35%.

The ICSs assess the accuracy of the analytical laboratory's interelement and background correction factors used for inductively coupled plasma emission spectroscopy. The ICS %R should fall within the acceptance range of 80%–120%.

Serial dilution samples measure potential physical or chemical interferences and correspond to a sample dilution ratio of 1:5. The chemical concentration in the undiluted sample must be at least 50 times the MDL (100 times for inductively coupled plasma mass spectrometry) for valid comparison. For sufficiently high concentrations, the RPD should be within 10%.

Details regarding the quality of the inorganic chemical analytical data included in the data sets are summarized in the following sections.

### D-3.2 Data-Quality Results for Inorganic Chemicals

The majority of the analytical results for inorganic chemical analyses did not require data validation qualifiers to be applied as a result of QC issues. Some of the analytical results were qualified as not detected (U) because the associated sample concentration was less than or equal to the MDL. This data qualification is related to detection status only, not to data-quality issues.

#### D-3.2.1 COC

SCL/COC forms were maintained properly for all samples analyzed for inorganic chemicals (Appendix E).

#### D-3.2.2 Sample Documentation

All samples analyzed for inorganic chemicals were properly documented on SCL/COC forms in the field (Appendix E).

#### D-3.2.3 Sample Dilution

Some samples were diluted for inorganic chemical analyses. No qualifiers were applied to any inorganic chemical sample results as a result of sample dilution factors.

#### D-3.2.4 Sample Preservation

Preservation criteria were met for all samples analyzed for inorganic chemicals.

#### D-3.2.5 Holding Time

Holding time criteria were met for all samples analyzed for inorganic chemicals.

#### D-3.2.6 ICV and CCV

ICV and CCV criteria were met for all samples analyzed for inorganic chemicals.

#### D-3.2.7 ICS and/or Serial Dilution Analyses

ICS and serial dilution criteria were met for all samples analyzed for inorganic chemicals.

#### D-3.2.8 Laboratory Duplicate Samples

A total of 11 TAL metals results were qualified as estimated (J) because the sample and the duplicate sample results were greater than or equal to 5 times the reporting limit and the duplicate RPD was greater than 35%.

#### D-3.2.9 Preparation Blanks

Preparation blank criteria were met for all samples analyzed for inorganic chemicals.

#### D-3.2.10 MS Sample Recoveries

MS sample criteria were met for all samples analyzed for inorganic chemicals.

#### D-3.2.11 Laboratory Control Sample Recoveries

LCS criteria were met for all samples analyzed for inorganic chemicals.

#### D-3.2.12 Detection Limits

A total of 65 TAL metals results, 17 mercury results, 7 nitrate results, 11 perchlorate results, and 3 total cyanide results were qualified as estimated (J) because the sampling result was reported as detected between the estimated detection limit and the MDL.

#### D-3.2.13 Rejected Results

No data were rejected and data are usable for their intended purpose. The results of other qualified data did not affect the usability of the sampling results.

## D-4.0 ORGANIC CHEMICAL ANALYSES

A total of 48 samples (plus 5 field duplicates) collected within the TA-57 Aggregate Area were analyzed for organic chemicals. All 48 samples (plus 5 field duplicates) were analyzed for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). The analytical methods used for organic chemicals are listed in Table D-1.0-1.

Tables within the investigation report summarize the samples collected and the analyses requested for each site. All organic chemical results are provided on CD in Appendix E.

### D-4.1 Organic Chemical QA/QC Samples

The use of QA/QC samples is designed to produce quantitative measures of the reliability of an analytical procedure. The results of the QA/QC analyses performed on a sample provide confidence about whether the analyte is present and whether the concentration reported is accurate. To assess the accuracy and precision of organic chemical analyses, calibration verifications, LCS, method blanks, MS samples, surrogate monitoring compounds, and ISs were analyzed as part of the investigation. Each of these QA/QC sample types is defined in the analytical services SOW (LANL 2008, 109962) and described briefly below.

Instrument calibration establishes a quantitative relationship between the response of the analytical procedure and the concentration of the target analyte. The initial calibration verifies the accuracy of the calibration curve as well as the individual calibration standards used to perform the calibration. The continuing calibration ensures the initial calibration is still valid and correct as the instrument is used to process samples. The continuing calibration also serves to determine that analyte identification criteria, such as retention times and spectral matching, are being met.

The LCS is a sample of a known matrix that has been spiked with compounds that are representative of the target analytes. It serves as a monitor of overall performance on a “controlled” sample. The LCS is the primary demonstration of the ability to analyze samples with good qualitative and quantitative accuracy. The LCS recoveries should fall within the method-specific acceptance criteria.

A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing. It is extracted and analyzed in the same manner as the corresponding environmental samples. Method blanks are used to assess the potential for sample contamination during extraction and analysis. All target analytes in the method blank should be below the contract required detection limits.

MS samples are used to measure the ability to recover prescribed analytes from a native sample matrix and consist of aliquots of the submitted samples spiked with a known concentration of the target analyte(s). Spiking typically occurs before sample preparation and analysis. The spike sample recoveries should be between the lower acceptance limit (LAL) and upper acceptance limit (UAL).

Surrogate monitoring compounds (surrogates) are organic compounds that are similar in composition and behavior to the target analytes but are not normally found in environmental samples. Surrogates are added to every sample (field sample and QA/QC samples) to evaluate the efficiency with which analytes are recovered during extraction and analysis. The %R of the surrogates must fall within specified ranges or the sample may be rejected or assigned a qualifier.

ISs are chemical compounds added to every blank, sample, and standard extract at a known concentration. They are used to compensate for analyte concentration changes that might occur during storage of the extract, and quantitation variations that can occur during analysis. ISs are used as the basis for quantifying target analytes. The %R for IS should be within the range of 50%–200%.

Details regarding the quality of the organic chemical analytical data included in the data sets are summarized in the following sections.

### D-4.2 Data-Quality Results for Organic Chemicals

The majority of the analytical results were qualified as not detected (U) because the associated sample concentration was less than or equal to the MDL. This data qualification is related to detection status only, not to data-quality issues.

#### D-4.2.1 Maintenance of COC

SCL/COC forms were maintained properly for all samples analyzed for organic chemicals (Appendix E).

#### D-4.2.2 Sample Documentation

All samples analyzed for organic chemicals were properly documented on the SCL in the field (Appendix E).

#### D-4.2.3 Sample Preservation

Preservation criteria were met for all samples analyzed for organic chemicals.

#### D-4.2.4 Holding Time

Holding time criteria were met for all samples analyzed for organic chemicals.

#### D-4.2.5 ICV and CCV

ICV and CCV criteria were met for all samples analyzed for organic chemicals.

#### D-4.2.6 Surrogate Monitoring Compound Recoveries

Two SVOC results and seven VOC results were qualified as estimated and biased high (J+) because the surrogate %R value is greater than the UAL.

#### D-4.2.7 IS Response

IS response criteria were met for all samples analyzed for organic chemicals.

#### D-4.2.8 Method Blank

Method blank criteria were met for all samples analyzed for organic chemicals.

#### D-4.2.9 MS Samples

MS sample criteria were met for all samples analyzed for organic chemicals.

#### D-4.2.10 Laboratory Duplicate Samples

Laboratory duplicate samples collected for organic chemical analyses indicated acceptable precision for all samples.

#### D-4.2.11 LCS Recoveries

Twelve SVOC results were qualified as estimated not detected (UJ) because a low recovery (%R < LAL) was observed for these analytes in the associated LCS.

#### D-4.2.12 Quantitation and Method Detection Limits

Fourteen SVOC results and seven VOC results were qualified as estimated (J) because the sample result was reported as detected between the practical quantitation limit and the MDL.

#### D-4.2.13 Rejected Data

No data were rejected and data are usable for their intended purpose. The results of other qualified data did not affect the usability of the sampling results.

## D-5.0 RADIONUCLIDE ANALYSES

A total of 48 samples (plus 5 field duplicates) collected within the TA-57 Aggregate Area were analyzed for radionuclides. All 48 samples (plus 5 field duplicates) were analyzed for isotopic uranium. The analytical methods used for radionuclide analyses are listed in Table D-1.0-1.

Tables in the investigation report summarize samples collected and the analyses requested for each site. All radionuclide results are provided on CD (Appendix E).

### D-5.1 Radionuclide QA/QC Samples

The use of QA/QC samples is designed to produce quantitative measures of the reliability of an analytical procedure. The results of the QA/QC analyses performed on a sample provide confidence about whether the analyte is present and whether the concentration reported is accurate. To assess the accuracy and precision of the radionuclide analyses, LCS, method blanks, MS samples, laboratory duplicate samples, and tracer compounds were analyzed as part of the analyses. Each of these QA/QC sample types is

defined in the analytical services SOW (LANL 2008, 109962) and is described briefly in the paragraphs below.

The LCS serves as a monitor of the overall performance of each step during the analysis, including sample digestion. For radionuclides in soil/tuff, LCS %R should fall between the control limits of 80%–120%.

A method blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing. It is analyzed in the same manner as the corresponding environmental samples. Method blanks are used to assess the potential for sample contamination during analysis. All radionuclide results in the method blank should be below the minimum detectable concentration (MDC).

MS samples assess the accuracy of radionuclide analyses. These samples are designed to provide information about the effect of the sample matrix on the sample preparation procedures and analytical technique. The MS acceptance criterion is 75%–125%.

Tracer compounds (tracers) are radioisotopes added to a sample for the purposes of monitoring loss of the target analyte. The tracer is assumed to behave in the same manner as the target analyte. Tracer recoveries should fall between the analyte-specific LAL and UAL.

Laboratory duplicate samples assess the precision of radionuclide analyses. All RPDs between the sample and laboratory duplicate should be ±35%.

Details regarding the quality of the radionuclide analytical data included in the data sets are summarized in the following subsections.

### D-5.2 Data-Quality Results for Radionuclides

The majority of the analytical results for radionuclide analyses did not require data validation qualifiers to be applied as a result of QC issues. Some sample results were qualified as not detected (U) because the associated sample concentration was less than or equal to the MDC. This data qualification is related to detection status only, not to data-quality issues.

#### D-5.2.1 COC

SCL/COC forms were maintained properly for all samples analyzed for radionuclides (Appendix E).

#### D-5.2.2 Sample Documentation

All samples analyzed for radionuclides were properly documented on the SCL in the field (Appendix E).

#### D-5.2.3 Sample Dilution

Samples were not diluted for radionuclide analyses; therefore, no qualifiers were applied to any radionuclide sample results because of dilutions.

#### D-5.2.4 Sample Preservation

Preservation criteria were met for all samples analyzed for radionuclides.

#### D-5.2.5 Holding Time

Holding time criteria were met for all samples analyzed for radionuclides.

#### D-5.2.6 Method Blanks

Method blank criteria were met for all samples analyzed for radionuclides.

#### D-5.2.7 MS Samples

MS sample criteria were met for all samples analyzed for radionuclides.

#### D-5.2.8 Tracer Compound Recoveries

Tracer compound recovery criteria were met for all samples analyzed for radionuclides.

#### D-5.2.9 Laboratory Control Sample Recoveries

LCS recovery criteria were met for all samples analyzed for radionuclides.

#### D-5.2.10 Laboratory Duplicate Samples Recoveries

One isotopic uranium result was qualified as estimated (J) because the associated duplicate sample has a duplicate error ratio or relative error ratio greater than the analytical laboratory's acceptance limits.

#### D-5.2.11 Rejected Data

No data were rejected and data are usable for their intended purpose. The results of other qualified data did not affect the usability of the sampling results.

## D-6.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the ESH Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

EPA (U.S. Environmental Protection Agency), February 1994. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review," EPA-540/R-94/013, Office of Emergency and Remedial Response, Washington, D.C. (EPA 1994, 048639)

EPA (U.S. Environmental Protection Agency), October 1999. “USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review,” EPA540/R-99/008, Office of Emergency and Remedial Response, Washington, D.C. (EPA 1999, 066649)

LANL (Los Alamos National Laboratory), March 1996. “Quality Assurance Project Plan Requirements for Sampling and Analysis,” Los Alamos National Laboratory document LA-UR-96-441, Los Alamos, New Mexico. (LANL 1996, 054609)

LANL (Los Alamos National Laboratory), June 30, 2008. “Exhibit 'D' Scope of Work and Technical Specifications, Analytical Laboratory Services for General Inorganic, Organic, Radiochemical, Asbestos, Low-Level Tritium, Particle Analysis, Bioassay, Dissolved Organic Carbon Fractionation, and PCB Congeners,” Los Alamos National Laboratory document RFP No. 63639-RFP-08, Los Alamos, New Mexico. (LANL 2008, 109962)

**Table D-1.0-1**
**Inorganic Chemical, Organic Chemical, and Radionuclide**
**Analytical Methods for Samples Collected from the TA-57 Aggregate Area**

| Analytical Method | Analytical Description | Analytical Suite |
|---|---|---|
| EPA 300.0 | Ion chromatography | Nitrate |
| EPA SW-846: 6010/6010C | Inductively coupled plasma emission spectroscopy—atomic emission spectroscopy | Aluminum, antimony, barium, calcium, cadmium, cobalt, chromium, copper, iron, lead, magnesium, manganese, potassium, silver, sodium, vanadium, and zinc (TAL metals) |
| EPA SW-846:6020 | Inductively coupled plasma mass spectrometry | Arsenic, beryllium, nickel, selenium, and thallium |
| EPA SW-846: 9012A | Automated colorimetric/off-line distillation | Total cyanide |
| EPA SW-846:6850 | Liquid chromatography–mass spectrometry/mass spectrometry | Perchlorate |
| EPA SW-846:7471A | Cold vapor atomic absorption spectroscopy | Mercury |
| EPA SW-846: 8260 and 8260B | Gas chromatography–mass spectrometry (GC/MS) | VOCs |
| EPA SW-846: 8270 and 8270C | GC/MS | SVOCs |
| HASL Method 300 | Chemical separation alpha spectrometry | Isotopic uranium |

# Appendix E

*Analytical Suites and Results and Analytical Reports*
*(on CD included with this document)*

| FS Result Recno | AOC | Chain Of Custody No. | Field Sample ID | Excavated Flag | Sampling Method | Sample Usage Code | Field Prep Code | Sample Purpose | Location ID | Start Depth | End Depth | Depth Units | Sample Type | Background Comparison Class Code | Parameter Code | Parameter Name | Percent Moisture | Dilution Factor | Report Result | Report Units | Validation Qualifier | Report Min Detectable Activity | Report Method Detection Limit | Report Uncertainty | Report Detection Limit | Best Value Flag | Method Category | Analytical Method | Lab ID | Analysis Date | Date Sampled |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11595882 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595881 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595299 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 67-64-1 | Acetone | 5.08 | 1 | 0.00527 | mg/kg | U | | 0.00176 | | 0.00527 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595092 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Al | Aluminum | 5.08 | 1 | 5190 | mg/kg | NQ | | 6.81 | | 20 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595849 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 62-53-3 | Aniline | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595896 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 120-12-7 | Anthracene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595093 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Sb | Antimony | 5.08 | 1 | 1 | mg/kg | U | | 0.33 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595094 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | As | Arsenic | 5.08 | 2 | 2.47 | mg/kg | NQ | | 0.209 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595892 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 103-33-3 | Azobenzene | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595095 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Ba | Barium | 5.08 | 1 | 147 | mg/kg | NQ | | 0.1 | | 0.501 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595315 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 71-43-2 | Benzene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595901 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595908 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595906 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595911 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595907 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595867 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 5.08 | 1 | 0.702 | mg/kg | U | | 0.176 | | 0.702 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595855 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595096 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Be | Beryllium | 5.08 | 2 | 0.589 | mg/kg | NQ | | 0.0209 | | 0.105 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595865 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595851 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595904 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595340 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595309 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595319 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595336 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-25-2 | Bromoform | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595295 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 74-83-9 | Bromomethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595893 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595306 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 5.08 | 1 | 0.00527 | mg/kg | U | | 0.00176 | | 0.00527 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595349 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595347 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595346 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595900 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595097 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Cd | Cadmium | 5.08 | 1 | 0.501 | mg/kg | U | | 0.1 | | 0.501 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595098 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Ca | Calcium | 5.08 | 1 | 1500 | mg/kg | NQ | | 8.01 | | 25 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595302 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 5.08 | 1 | 0.00527 | mg/kg | U | | 0.00176 | | 0.00527 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595313 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595872 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.14 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595870 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595330 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595328 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595296 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-00-3 | Chloroethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595310 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 67-66-3 | Chloroform | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595293 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 74-87-3 | Chloromethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595877 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595852 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595888 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595342 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595345 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595099 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Cr | Chromium | 5.08 | 1 | 2.92 | mg/kg | NQ | | 0.15 | | 0.501 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595903 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 218-01-9 | Chrysene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595100 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Co | Cobalt | 5.08 | 1 | 1.42 | mg/kg | NQ | | 0.15 | | 0.501 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595101 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Cu | Copper | 5.08 | 1 | 4.3 | mg/kg | NQ | | 0.3 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595230 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 5.08 | 1 | 0.244 | mg/kg | U | | 0.0815 | | 0.244 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |
| 11595897 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595905 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595910 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595884 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595350 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000527 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595329 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595318 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595353 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595856 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595351 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595853 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595352 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595854 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595902 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595292 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595305 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595314 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595298 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595307 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595304 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595866 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595317 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595325 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595308 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595312 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595320 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595323 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595885 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595880 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595864 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595889 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595883 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 5.08 | 1 | 0.702 | mg/kg | U | | 0.105 | | 0.702 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595913 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595914 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595891 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595332 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595898 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595887 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 86-73-7 | Fluorene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595912 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595871 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595874 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595860 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595326 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 5.08 | 1 | 0.00527 | mg/kg | U | | 0.00176 | | 0.00527 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595909 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595301 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 74-88-4 | Iodomethane | 5.08 | 1 | 0.00527 | mg/kg | U | | 0.00176 | | 0.00527 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595102 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Fe | Iron | 5.08 | 1 | 8670 | mg/kg | NQ | | 8.01 | | 25 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595862 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 78-59-1 | Isophorone | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595337 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595348 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595103 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Pb | Lead | 5.08 | 1 | 14 | mg/kg | NQ | | 0.33 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595104 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Mg | Magnesium | 5.08 | 1 | 472 | mg/kg | NQ | | 8.51 | | 30 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595105 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Mn | Manganese | 5.08 | 1 | 350 | mg/kg | NQ | | 0.2 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595106 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Hg | Mercury | 5.08 | 1 | 0.0185 | mg/kg | NQ | | 0.00373 | | 0.0111 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11595321 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 5.08 | 1 | 0.00527 | mg/kg | U | | 0.00176 | | 0.00527 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595303 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 5.08 | 1 | 0.00527 | mg/kg | U | | 0.00176 | | 0.00527 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595873 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595857 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595859 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595869 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 91-20-3 | Naphthalene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595107 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Ni | Nickel | 5.08 | 2 | 3.06 | mg/kg | NQ | | 0.105 | | 0.419 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595231 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | NO3 | Nitrate | 5.08 | 1 | 0.588 | mg/kg | J | | 0.348 | | 1.05 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11595878 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.116 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595879 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595890 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595861 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595863 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595886 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595858 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595847 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595915 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595894 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595249 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | ClO4 | Perchlorate | 5.08 | 1 | 0.00107 | mg/kg | J | | 0.000524 | | 0.0021 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11595895 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595850 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 108-95-2 | Phenol | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595108 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | K | Potassium | 5.08 | 1 | 534 | mg/kg | NQ | | 6.41 | | 25 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595341 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595899 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 129-00-0 | Pyrene | 5.08 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595848 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 110-86-1 | Pyridine | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595109 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Se | Selenium | 5.08 | 2 | 1.05 | mg/kg | U | | 0.346 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595110 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Ag | Silver | 5.08 | 1 | 0.501 | mg/kg | U | | 0.1 | | 0.501 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595111 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Na | Sodium | 5.08 | 1 | 174 | mg/kg | NQ | | 7.01 | | 25 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595335 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 100-42-5 | Styrene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595331 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595338 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595327 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595112 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Tl | Thallium | 5.08 | 2 | 0.419 | mg/kg | U | | 0.0628 | | 0.419 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595322 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 108-88-3 | Toluene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595300 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.08 | 1 | 0.00527 | mg/kg | U | | 0.00176 | | 0.00527 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595868 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595311 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595324 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595316 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595297 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595876 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595875 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 5.08 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595339 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595344 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595343 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595266 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | U-234 | Uranium-234 | 5.08 | 1 | 1.11 | pCi/g | NQ | 0.11 | | 0.0714 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595267 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 5.08 | 1 | 0.0702 | pCi/g | U | 0.0788 | | 0.0223 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595268 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | U-238 | Uranium-238 | 5.08 | 1 | 1.19 | pCi/g | NQ | 0.0688 | | 0.0731 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595113 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | V | Vanadium | 5.08 | 1 | 6.28 | mg/kg | NQ | | 0.1 | | 0.501 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595294 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595334 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 5.08 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595333 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 5.08 | 1 | 0.00211 | mg/kg | U | | 0.000703 | | 0.00211 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595114 | 57-007 | 2014-3718 | RE57-14-84156 | N | HA | INV | NA | REG | 57-4011 | 3 | 4 | ft | R | QBT3 | Zn | Zinc | 5.08 | 1 | 52.2 | mg/kg | NQ | | 0.401 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595951 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 83-32-9 | Acenaphthene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595950 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595361 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 67-64-1 | Acetone | 10.4 | 1 | 0.00558 | mg/kg | U | | 0.00186 | | 0.00558 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595115 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Al | Aluminum | 10.4 | 1 | 5960 | mg/kg | NQ | | 7.18 | | 21.1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595918 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 62-53-3 | Aniline | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595965 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 120-12-7 | Anthracene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595116 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Sb | Antimony | 10.4 | 1 | 1.06 | mg/kg | U | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595117 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | As | Arsenic | 10.4 | 2 | 2.4 | mg/kg | NQ | | 0.222 | | 1.11 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595961 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 103-33-3 | Azobenzene | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595118 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Ba | Barium | 10.4 | 1 | 152 | mg/kg | NQ | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595377 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 71-43-2 | Benzene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595970 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595977 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595975 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595980 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595976 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595936 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 10.4 | 1 | 0.742 | mg/kg | U | | 0.185 | | 0.742 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595924 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595119 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Be | Beryllium | 10.4 | 2 | 0.797 | mg/kg | NQ | | 0.0222 | | 0.111 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595934 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595920 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595973 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595402 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 108-86-1 | Bromobenzene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595371 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595381 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11595398 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-25-2 | Bromoform | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595357 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 74-83-9 | Bromomethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595962 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595368 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 10.4 | 1 | 0.00558 | mg/kg | U | | 0.00186 | | 0.00558 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595411 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595409 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595408 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595969 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595120 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Cd | Cadmium | 10.4 | 1 | 0.528 | mg/kg | U | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595121 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Ca | Calcium | 10.4 | 1 | 1510 | mg/kg | NQ | | 8.45 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595364 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 10.4 | 1 | 0.00558 | mg/kg | U | | 0.00186 | | 0.00558 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595375 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595941 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.148 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595939 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595392 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595390 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595358 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-00-3 | Chloroethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595372 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 67-66-3 | Chloroform | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595355 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 74-87-3 | Chloromethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595946 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595921 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595957 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595404 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595407 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595122 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Cr | Chromium | 10.4 | 1 | 3.91 | mg/kg | NQ | | 0.158 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595972 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 218-01-9 | Chrysene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595123 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Co | Cobalt | 10.4 | 1 | 2.46 | mg/kg | NQ | | 0.158 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595124 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Cu | Copper | 10.4 | 1 | 4.22 | mg/kg | NQ | | 0.317 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595232 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 10.4 | 1 | 0.279 | mg/kg | U | | 0.0932 | | 0.279 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |
| 11595966 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595974 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595979 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595953 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595412 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000558 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595391 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595380 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 74-95-3 | Dibromomethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595415 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595925 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595413 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595922 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595414 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595923 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595971 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595354 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595367 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595376 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595360 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595369 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595366 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595935 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595379 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595387 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595370 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595374 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595382 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595385 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595954 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595949 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595933 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595958 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595952 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 10.4 | 1 | 0.742 | mg/kg | U | | 0.111 | | 0.742 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595982 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595983 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595960 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 122-39-4 | Diphenylamine | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595394 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595967 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 206-44-0 | Fluoranthene | 10.4 | 1 | 0.0145 | mg/kg | J | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595956 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 86-73-7 | Fluorene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595981 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595940 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595943 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595929 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595388 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 10.4 | 1 | 0.00558 | mg/kg | U | | 0.00186 | | 0.00558 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595978 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595363 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 74-88-4 | Iodomethane | 10.4 | 1 | 0.00558 | mg/kg | U | | 0.00186 | | 0.00558 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595125 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Fe | Iron | 10.4 | 1 | 9920 | mg/kg | NQ | | 8.45 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595931 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 78-59-1 | Isophorone | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595399 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595410 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595126 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Pb | Lead | 10.4 | 1 | 15.7 | mg/kg | NQ | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595127 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Mg | Magnesium | 10.4 | 1 | 740 | mg/kg | NQ | | 8.98 | | 31.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595128 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Mn | Manganese | 10.4 | 1 | 578 | mg/kg | NQ | | 0.211 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595129 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Hg | Mercury | 10.4 | 1 | 0.0173 | mg/kg | NQ | | 0.00448 | | 0.0134 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11595383 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 10.4 | 1 | 0.00558 | mg/kg | U | | 0.00186 | | 0.00558 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595365 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 10.4 | 1 | 0.00558 | mg/kg | U | | 0.00186 | | 0.00558 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595942 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595926 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595928 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595938 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 91-20-3 | Naphthalene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595130 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Ni | Nickel | 10.4 | 2 | 4.06 | mg/kg | NQ | | 0.111 | | 0.444 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595233 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | NO3 | Nitrate | 10.4 | 1 | 1.12 | mg/kg | U | | 0.368 | | 1.12 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11595947 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.122 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595948 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595959 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595930 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595932 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595955 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595927 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595916 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595984 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595963 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595250 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | ClO4 | Perchlorate | 10.4 | 1 | 0.000841 | mg/kg | J | | 0.000558 | | 0.00223 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11595964 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 85-01-8 | Phenanthrene | 10.4 | 1 | 0.0134 | mg/kg | J | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595919 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 108-95-2 | Phenol | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595131 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | K | Potassium | 10.4 | 1 | 843 | mg/kg | NQ | | 6.76 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595403 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595968 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 129-00-0 | Pyrene | 10.4 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595917 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 110-86-1 | Pyridine | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595132 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Se | Selenium | 10.4 | 2 | 1.11 | mg/kg | U | | 0.366 | | 1.11 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595133 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Ag | Silver | 10.4 | 1 | 0.255 | mg/kg | J | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595134 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Na | Sodium | 10.4 | 1 | 124 | mg/kg | NQ | | 7.39 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595397 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 100-42-5 | Styrene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595393 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595400 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595389 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595135 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Tl | Thallium | 10.4 | 2 | 0.444 | mg/kg | U | | 0.0665 | | 0.444 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595384 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 108-88-3 | Toluene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595362 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 10.4 | 1 | 0.00558 | mg/kg | U | | 0.00186 | | 0.00558 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595937 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595373 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595386 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595378 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 79-01-6 | Trichloroethene | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595359 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595945 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595944 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 10.4 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595401 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595406 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595405 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595269 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | U-234 | Uranium-234 | 10.4 | 1 | 1.26 | pCi/g | NQ | 0.0973 | | 0.0704 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595270 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 10.4 | 1 | 0.067 | pCi/g | U | 0.0698 | | 0.0192 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595271 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | U-238 | Uranium-238 | 10.4 | 1 | 1.32 | pCi/g | NQ | 0.0609 | | 0.0721 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595136 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | V | Vanadium | 10.4 | 1 | 8.83 | mg/kg | NQ | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595356 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595396 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 10.4 | 1 | 0.00112 | mg/kg | U | | 0.000371 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595395 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 10.4 | 1 | 0.00223 | mg/kg | U | | 0.000744 | | 0.00223 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/09/2014 |
| 11595137 | 57-007 | 2014-3718 | RE57-14-84135 | N | HA | INV | NA | REG | 57-4012 | 0 | 1 | ft | S | SOIL | Zn | Zinc | 10.4 | 1 | 52.9 | mg/kg | NQ | | 0.423 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596195 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 83-32-9 | Acenaphthene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596194 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595423 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 67-64-1 | Acetone | 4.73 | 1 | 0.00525 | mg/kg | U | | 0.00175 | | 0.00525 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595138 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Al | Aluminum | 4.73 | 1 | 4480 | mg/kg | NQ | | 6.71 | | 19.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596162 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 62-53-3 | Aniline | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596209 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 120-12-7 | Anthracene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595139 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Sb | Antimony | 4.73 | 1 | 0.986 | mg/kg | U | | 0.326 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595140 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | As | Arsenic | 4.73 | 2 | 1.32 | mg/kg | NQ | | 0.203 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596205 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 103-33-3 | Azobenzene | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595141 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Ba | Barium | 4.73 | 1 | 62.3 | mg/kg | NQ | | 0.0986 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595439 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 71-43-2 | Benzene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596214 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596221 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596219 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596224 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596220 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596180 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 4.73 | 1 | 1.62 | mg/kg | NQ | | 0.175 | | 0.699 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596168 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595142 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Be | Beryllium | 4.73 | 2 | 0.462 | mg/kg | NQ | | 0.0203 | | 0.102 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596178 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596164 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596217 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595464 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 108-86-1 | Bromobenzene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595433 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595443 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595460 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-25-2 | Bromoform | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595419 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 74-83-9 | Bromomethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596206 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595430 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 4.73 | 1 | 0.00525 | mg/kg | U | | 0.00175 | | 0.00525 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595649 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595647 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595646 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596213 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595143 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Cd | Cadmium | 4.73 | 1 | 0.493 | mg/kg | U | | 0.0986 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595144 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Ca | Calcium | 4.73 | 1 | 1290 | mg/kg | NQ | | 7.89 | | 24.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595426 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 4.73 | 1 | 0.00525 | mg/kg | U | | 0.00175 | | 0.00525 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595437 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596185 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.14 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596183 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595454 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595452 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595420 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-00-3 | Chloroethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595434 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 67-66-3 | Chloroform | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595417 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 74-87-3 | Chloromethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596190 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596165 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596201 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595466 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595645 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595145 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Cr | Chromium | 4.73 | 1 | 3.74 | mg/kg | NQ | | 0.148 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596216 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 218-01-9 | Chrysene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595146 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Co | Cobalt | 4.73 | 1 | 1.8 | mg/kg | NQ | | 0.148 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595147 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Cu | Copper | 4.73 | 1 | 2.74 | mg/kg | NQ | | 0.296 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595234 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 4.73 | 1 | 0.239 | mg/kg | U | | 0.0797 | | 0.239 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |

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| 11596210 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596218 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596223 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596197 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595650 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.000525 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595453 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595442 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 74-95-3 | Dibromomethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595653 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596169 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595651 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596166 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595652 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 4.73 | 1 | 0.000357 | mg/kg | J | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596167 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596215 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595416 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595429 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595438 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595422 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595431 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595428 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596179 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595441 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595449 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595432 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595436 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595444 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595447 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596198 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596193 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596177 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596202 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596196 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 4.73 | 1 | 0.699 | mg/kg | U | | 0.105 | | 0.699 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596226 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596227 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596204 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 122-39-4 | Diphenylamine | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595456 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596211 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 206-44-0 | Fluoranthene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596200 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 86-73-7 | Fluorene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596225 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596184 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596187 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596173 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595450 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 4.73 | 1 | 0.00525 | mg/kg | U | | 0.00175 | | 0.00525 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596222 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595425 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 74-88-4 | Iodomethane | 4.73 | 1 | 0.00525 | mg/kg | U | | 0.00175 | | 0.00525 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595148 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Fe | Iron | 4.73 | 1 | 9510 | mg/kg | NQ | | 7.89 | | 24.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596175 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 78-59-1 | Isophorone | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595461 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595648 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595149 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Pb | Lead | 4.73 | 1 | 8.95 | mg/kg | NQ | | 0.326 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595150 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Mg | Magnesium | 4.73 | 1 | 516 | mg/kg | NQ | | 8.38 | | 29.6 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595151 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Mn | Manganese | 4.73 | 1 | 444 | mg/kg | NQ | | 0.197 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595152 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Hg | Mercury | 4.73 | 1 | 0.0133 | mg/kg | NQ | | 0.00362 | | 0.0108 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11595445 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 4.73 | 1 | 0.00525 | mg/kg | U | | 0.00175 | | 0.00525 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595427 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 4.73 | 1 | 0.00299 | mg/kg | J | | 0.00175 | | 0.00525 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596186 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596170 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596172 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596182 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 91-20-3 | Naphthalene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595153 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Ni | Nickel | 4.73 | 2 | 3.11 | mg/kg | NQ | | 0.102 | | 0.406 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595235 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | NO3 | Nitrate | 4.73 | 1 | 1.05 | mg/kg | U | | 0.346 | | 1.05 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11596191 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.115 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596192 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596203 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596174 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596176 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596199 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596171 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595985 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596228 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596207 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595251 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | ClO4 | Perchlorate | 4.73 | 1 | 0.00209 | mg/kg | U | | 0.000522 | | 0.00209 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11596208 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 85-01-8 | Phenanthrene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596163 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 108-95-2 | Phenol | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595154 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | K | Potassium | 4.73 | 1 | 612 | mg/kg | NQ | | 6.31 | | 24.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595465 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596212 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 129-00-0 | Pyrene | 4.73 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595986 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 110-86-1 | Pyridine | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595155 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Se | Selenium | 4.73 | 2 | 1.02 | mg/kg | U | | 0.335 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595156 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Ag | Silver | 4.73 | 1 | 0.206 | mg/kg | J | | 0.0986 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595157 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Na | Sodium | 4.73 | 1 | 132 | mg/kg | NQ | | 6.91 | | 24.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595459 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 100-42-5 | Styrene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595455 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595462 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595451 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595158 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Tl | Thallium | 4.73 | 2 | 0.406 | mg/kg | U | | 0.0609 | | 0.406 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595446 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 108-88-3 | Toluene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595424 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 4.73 | 1 | 0.00525 | mg/kg | U | | 0.00175 | | 0.00525 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596181 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595435 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595448 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595440 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 79-01-6 | Trichloroethene | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595421 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596189 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596188 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 4.73 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595463 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595644 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595643 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595272 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | U-234 | Uranium-234 | 4.73 | 1 | 1.24 | pCi/g | NQ | 0.195 | | 0.1 | | Y | RAD | HASL-300:ISOU | GELC | 07/29/2014 | 07/09/2014 |
| 11595273 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 4.73 | 1 | 0.0864 | pCi/g | U | 0.14 | | 0.0318 | | Y | RAD | HASL-300:ISOU | GELC | 07/29/2014 | 07/09/2014 |
| 11595274 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | U-238 | Uranium-238 | 4.73 | 1 | 1.41 | pCi/g | NQ | 0.122 | | 0.107 | | Y | RAD | HASL-300:ISOU | GELC | 07/29/2014 | 07/09/2014 |
| 11595159 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | V | Vanadium | 4.73 | 1 | 8.33 | mg/kg | NQ | | 0.0986 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595418 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595458 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 4.73 | 1 | 0.00105 | mg/kg | U | | 0.00035 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595457 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 4.73 | 1 | 0.0021 | mg/kg | U | | 0.0007 | | 0.0021 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595160 | 57-007 | 2014-3718 | RE57-14-84146 | N | HA | INV | NA | REG | 57-4012 | 1.25 | 2.25 | ft | S | SOIL | Zn | Zinc | 4.73 | 1 | 40.7 | mg/kg | NQ | | 0.395 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11582898 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582897 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582453 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 67-64-1 | Acetone | 5.77 | 1 | 0.00531 | mg/kg | U | | 0.00177 | | 0.00531 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582254 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Al | Aluminum | 5.77 | 1 | 3670 | mg/kg | NQ | | 7.2 | | 21.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582865 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 62-53-3 | Aniline | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582912 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 120-12-7 | Anthracene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582255 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Sb | Antimony | 5.77 | 1 | 1.06 | mg/kg | U | | 0.35 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582256 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | As | Arsenic | 5.77 | 2 | 1.14 | mg/kg | NQ | | 0.208 | | 1.04 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582908 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 103-33-3 | Azobenzene | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582257 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Ba | Barium | 5.77 | 1 | 60.5 | mg/kg | NQ | | 0.106 | | 0.53 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582469 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 71-43-2 | Benzene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582917 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582924 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582922 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582927 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582923 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582883 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 5.77 | 1 | 0.707 | mg/kg | U | | 0.177 | | 0.707 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582871 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582258 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Be | Beryllium | 5.77 | 2 | 0.657 | mg/kg | NQ | | 0.0208 | | 0.104 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582881 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582867 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582920 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582494 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582463 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582473 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582490 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-25-2 | Bromoform | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582449 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 74-83-9 | Bromomethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582909 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582460 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 5.77 | 1 | 0.00531 | mg/kg | U | | 0.00177 | | 0.00531 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582503 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582501 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582500 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582916 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582259 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Cd | Cadmium | 5.77 | 1 | 0.53 | mg/kg | U | | 0.106 | | 0.53 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582260 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Ca | Calcium | 5.77 | 1 | 624 | mg/kg | NQ | | 8.47 | | 26.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582456 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 5.77 | 1 | 0.00531 | mg/kg | U | | 0.00177 | | 0.00531 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582467 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582888 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.141 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582886 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582484 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582482 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582450 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-00-3 | Chloroethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582464 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 67-66-3 | Chloroform | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582447 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 74-87-3 | Chloromethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582893 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582868 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582904 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582496 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582499 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582261 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Cr | Chromium | 5.77 | 1 | 68.3 | mg/kg | J | | 0.159 | | 0.53 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582919 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 218-01-9 | Chrysene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582262 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Co | Cobalt | 5.77 | 1 | 1.42 | mg/kg | NQ | | 0.159 | | 0.53 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582263 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Cu | Copper | 5.77 | 1 | 4.63 | mg/kg | NQ | | 0.318 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582622 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 5.77 | 1 | 0.246 | mg/kg | U | | 0.0821 | | 0.246 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11582913 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582921 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582926 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582900 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582504 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000531 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582483 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582472 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582507 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582872 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582505 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582869 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582506 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582870 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582918 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582446 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582459 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582468 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582452 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582461 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582458 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582882 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582471 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582479 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582462 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582466 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582474 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582477 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582901 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582896 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11582880 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582905 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582899 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 5.77 | 1 | 0.707 | mg/kg | U | | 0.106 | | 0.707 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582929 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582930 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582907 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582486 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582914 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582903 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 86-73-7 | Fluorene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582928 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582887 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582890 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582876 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582480 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 5.77 | 1 | 0.00531 | mg/kg | U | | 0.00177 | | 0.00531 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582925 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582455 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 74-88-4 | Iodomethane | 5.77 | 1 | 0.00531 | mg/kg | U | | 0.00177 | | 0.00531 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582264 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Fe | Iron | 5.77 | 1 | 8770 | mg/kg | NQ | | 8.47 | | 26.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582878 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 78-59-1 | Isophorone | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582491 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582502 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582265 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Pb | Lead | 5.77 | 1 | 9.31 | mg/kg | NQ | | 0.35 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582266 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Mg | Magnesium | 5.77 | 1 | 287 | mg/kg | NQ | | 9 | | 31.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582267 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Mn | Manganese | 5.77 | 1 | 376 | mg/kg | NQ | | 0.212 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582268 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Hg | Mercury | 5.77 | 1 | 0.0088 | mg/kg | J | | 0.00418 | | 0.0125 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11582475 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 5.77 | 1 | 0.00531 | mg/kg | U | | 0.00177 | | 0.00531 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582457 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 5.77 | 1 | 0.00531 | mg/kg | U | | 0.00177 | | 0.00531 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582889 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582873 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582875 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582885 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 91-20-3 | Naphthalene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582269 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Ni | Nickel | 5.77 | 2 | 4.87 | mg/kg | NQ | | 0.104 | | 0.416 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582623 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | NO3 | Nitrate | 5.77 | 1 | 1.06 | mg/kg | U | | 0.35 | | 1.06 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11582894 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.117 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582895 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582906 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582877 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582879 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582902 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582874 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582863 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582931 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582910 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582644 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | ClO4 | Perchlorate | 5.77 | 1 | 0.00211 | mg/kg | U | | 0.000528 | | 0.00211 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11582911 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582866 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 108-95-2 | Phenol | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582270 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | K | Potassium | 5.77 | 1 | 811 | mg/kg | NQ | | 6.78 | | 26.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582495 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582915 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 129-00-0 | Pyrene | 5.77 | 1 | 0.0353 | mg/kg | U | | 0.0106 | | 0.0353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582864 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 110-86-1 | Pyridine | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582271 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Se | Selenium | 5.77 | 2 | 1.04 | mg/kg | U | | 0.343 | | 1.04 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582272 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Ag | Silver | 5.77 | 1 | 0.53 | mg/kg | U | | 0.106 | | 0.53 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582273 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Na | Sodium | 5.77 | 1 | 388 | mg/kg | NQ | | 7.41 | | 26.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582489 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 100-42-5 | Styrene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582485 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582492 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582481 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582274 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Tl | Thallium | 5.77 | 2 | 0.416 | mg/kg | U | | 0.0624 | | 0.416 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582476 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 108-88-3 | Toluene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582454 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.77 | 1 | 0.00531 | mg/kg | U | | 0.00177 | | 0.00531 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582884 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582465 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582478 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582470 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582451 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582892 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582891 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 5.77 | 1 | 0.353 | mg/kg | U | | 0.106 | | 0.353 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582493 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582498 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582497 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582830 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | U-234 | Uranium-234 | 5.77 | 1 | 1.3 | pCi/g | NQ | 0.096 | | 0.0717 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582831 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 5.77 | 1 | 0.0472 | pCi/g | U | 0.0689 | | 0.0164 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582832 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | U-238 | Uranium-238 | 5.77 | 1 | 1.2 | pCi/g | NQ | 0.0601 | | 0.0687 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582275 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | V | Vanadium | 5.77 | 1 | 3.55 | mg/kg | NQ | | 0.106 | | 0.53 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582448 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582488 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 5.77 | 1 | 0.00106 | mg/kg | U | | 0.000353 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582487 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 5.77 | 1 | 0.00212 | mg/kg | U | | 0.000708 | | 0.00212 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582276 | 57-007 | 2014-3751 | RE57-14-84157 | N | HA | INV | NA | REG | 57-4012 | 4.25 | 5.25 | ft | R | QBT3 | Zn | Zinc | 5.77 | 1 | 60.3 | mg/kg | NQ | | 0.424 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11596264 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 83-32-9 | Acenaphthene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596263 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 208-96-8 | Acenaphthylene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595723 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 67-64-1 | Acetone | 7.51 | 1 | 0.00541 | mg/kg | U | | 0.0018 | | 0.00541 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595184 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Al | Aluminum | 7.51 | 1 | 4490 | mg/kg | NQ | | 6.87 | | 20.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596231 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 62-53-3 | Aniline | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596278 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 120-12-7 | Anthracene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595185 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Sb | Antimony | 7.51 | 1 | 1.01 | mg/kg | U | | 0.333 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595186 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | As | Arsenic | 7.51 | 2 | 2.22 | mg/kg | NQ | | 0.21 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596274 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 103-33-3 | Azobenzene | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595187 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Ba | Barium | 7.51 | 1 | 151 | mg/kg | NQ | | 0.101 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595739 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 71-43-2 | Benzene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596283 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596290 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596288 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596293 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596289 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596249 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 65-85-0 | Benzoic Acid | 7.51 | 1 | 0.718 | mg/kg | U | | 0.18 | | 0.718 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596237 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595188 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Be | Beryllium | 7.51 | 2 | 0.478 | mg/kg | NQ | | 0.021 | | 0.105 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596247 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596233 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596286 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595764 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 108-86-1 | Bromobenzene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595733 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 74-97-5 | Bromochloromethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595743 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595760 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-25-2 | Bromoform | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595719 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 74-83-9 | Bromomethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596275 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595730 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 78-93-3 | Butanone[2-] | 7.51 | 1 | 0.00541 | mg/kg | U | | 0.0018 | | 0.00541 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595773 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595771 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595770 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596282 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595189 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Cd | Cadmium | 7.51 | 1 | 0.505 | mg/kg | U | | 0.101 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595190 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Ca | Calcium | 7.51 | 1 | 1270 | mg/kg | NQ | | 8.08 | | 25.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595726 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 7.51 | 1 | 0.00541 | mg/kg | U | | 0.0018 | | 0.00541 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595737 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596254 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.144 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596252 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595754 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 108-90-7 | Chlorobenzene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595752 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595720 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-00-3 | Chloroethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595734 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 67-66-3 | Chloroform | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595717 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 74-87-3 | Chloromethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596259 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596234 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596270 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595766 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595769 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595191 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Cr | Chromium | 7.51 | 1 | 3.59 | mg/kg | NQ | | 0.152 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596285 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 218-01-9 | Chrysene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595192 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Co | Cobalt | 7.51 | 1 | 2.04 | mg/kg | NQ | | 0.152 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595193 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Cu | Copper | 7.51 | 1 | 3.35 | mg/kg | NQ | | 0.303 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595236 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 7.51 | 1 | 0.27 | mg/kg | U | | 0.0903 | | 0.27 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |
| 11596279 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596287 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596292 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596266 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 132-64-9 | Dibenzofuran | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595774 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.000541 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595753 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595742 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 74-95-3 | Dibromomethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595777 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596238 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595775 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596235 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595776 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596236 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596284 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595716 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595729 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595738 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595722 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595731 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595728 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596248 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595741 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595749 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595732 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595736 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595744 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595747 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596267 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 84-66-2 | Diethylphthalate | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596262 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596246 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596271 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596265 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 7.51 | 1 | 0.718 | mg/kg | U | | 0.108 | | 0.718 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596295 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596296 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596273 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 122-39-4 | Diphenylamine | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595756 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 100-41-4 | Ethylbenzene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596280 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 206-44-0 | Fluoranthene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596269 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 86-73-7 | Fluorene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596294 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596253 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596256 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596242 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 67-72-1 | Hexachloroethane | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595750 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 7.51 | 1 | 0.00541 | mg/kg | U | | 0.0018 | | 0.00541 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596291 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595725 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 74-88-4 | Iodomethane | 7.51 | 1 | 0.00541 | mg/kg | U | | 0.0018 | | 0.00541 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595194 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Fe | Iron | 7.51 | 1 | 8650 | mg/kg | NQ | | 8.08 | | 25.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596244 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 78-59-1 | Isophorone | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595761 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595772 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595195 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Pb | Lead | 7.51 | 1 | 11.1 | mg/kg | NQ | | 0.333 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595196 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Mg | Magnesium | 7.51 | 1 | 570 | mg/kg | NQ | | 8.59 | | 30.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595197 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Mn | Manganese | 7.51 | 1 | 437 | mg/kg | NQ | | 0.202 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595198 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Hg | Mercury | 7.51 | 1 | 0.013 | mg/kg | NQ | | 0.00408 | | 0.0122 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11595745 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 7.51 | 1 | 0.00541 | mg/kg | U | | 0.0018 | | 0.00541 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595727 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-09-2 | Methylene Chloride | 7.51 | 1 | 0.00541 | mg/kg | U | | 0.0018 | | 0.00541 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596255 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596239 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596241 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11596251 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 91-20-3 | Naphthalene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595199 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Ni | Nickel | 7.51 | 2 | 3.78 | mg/kg | NQ | | 0.105 | | 0.419 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595237 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | NO3 | Nitrate | 7.51 | 1 | 1.16 | mg/kg | NQ | | 0.357 | | 1.08 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11596260 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.119 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596261 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596272 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596243 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 98-95-3 | Nitrobenzene | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596245 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596268 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596240 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596229 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596297 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596276 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595252 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | ClO4 | Perchlorate | 7.51 | 1 | 0.000786 | mg/kg | J | | 0.000538 | | 0.00215 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11596277 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 85-01-8 | Phenanthrene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596232 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 108-95-2 | Phenol | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595200 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | K | Potassium | 7.51 | 1 | 695 | mg/kg | NQ | | 6.47 | | 25.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595765 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596281 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 129-00-0 | Pyrene | 7.51 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596230 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 110-86-1 | Pyridine | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595201 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Se | Selenium | 7.51 | 2 | 1.05 | mg/kg | U | | 0.346 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595202 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Ag | Silver | 7.51 | 1 | 0.121 | mg/kg | J | | 0.101 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595203 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Na | Sodium | 7.51 | 1 | 108 | mg/kg | NQ | | 7.07 | | 25.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595759 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 100-42-5 | Styrene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595755 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595762 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595751 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595204 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Tl | Thallium | 7.51 | 2 | 0.419 | mg/kg | U | | 0.0629 | | 0.419 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595746 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 108-88-3 | Toluene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595724 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 7.51 | 1 | 0.00541 | mg/kg | U | | 0.0018 | | 0.00541 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596250 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595735 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595748 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595740 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 79-01-6 | Trichloroethene | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595721 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596258 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596257 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 7.51 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595763 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595768 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595767 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595275 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | U-234 | Uranium-234 | 7.51 | 1 | 1.27 | pCi/g | NQ | 0.11 | | 0.0754 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595276 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | U-235/236 | Uranium-235/236 | 7.51 | 1 | 0.065 | pCi/g | U | 0.0791 | | 0.0203 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595277 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | U-238 | Uranium-238 | 7.51 | 1 | 1.18 | pCi/g | NQ | 0.069 | | 0.073 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595205 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | V | Vanadium | 7.51 | 1 | 7.17 | mg/kg | NQ | | 0.101 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595718 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595758 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 7.51 | 1 | 0.00108 | mg/kg | U | | 0.00036 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595757 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 7.51 | 1 | 0.00216 | mg/kg | U | | 0.000721 | | 0.00216 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595206 | 57-007 | 2014-3718 | RE57-14-84136 | N | HA | INV | NA | REG | 57-4013 | 0 | 1 | ft | S | FILL | Zn | Zinc | 7.51 | 1 | 41.3 | mg/kg | NQ | | 0.404 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596333 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 83-32-9 | Acenaphthene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596332 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595785 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 67-64-1 | Acetone | 5.31 | 1 | 0.00528 | mg/kg | U | | 0.00176 | | 0.00528 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595207 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Al | Aluminum | 5.31 | 1 | 4800 | mg/kg | NQ | | 6.92 | | 20.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596300 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 62-53-3 | Aniline | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596380 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 120-12-7 | Anthracene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595208 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Sb | Antimony | 5.31 | 1 | 1.02 | mg/kg | U | | 0.336 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595209 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | As | Arsenic | 5.31 | 2 | 1.77 | mg/kg | NQ | | 0.188 | | 0.938 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596376 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 103-33-3 | Azobenzene | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595210 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Ba | Barium | 5.31 | 1 | 101 | mg/kg | NQ | | 0.102 | | 0.509 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595801 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 71-43-2 | Benzene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596385 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596392 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596390 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596395 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596391 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596318 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 5.31 | 1 | 0.701 | mg/kg | U | | 0.175 | | 0.701 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596306 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595211 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Be | Beryllium | 5.31 | 2 | 0.511 | mg/kg | NQ | | 0.0188 | | 0.0938 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596316 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596302 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596388 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595995 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 108-86-1 | Bromobenzene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595795 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595805 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595991 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-25-2 | Bromoform | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595781 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 74-83-9 | Bromomethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596377 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595792 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 5.31 | 1 | 0.00528 | mg/kg | U | | 0.00176 | | 0.00528 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596004 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596002 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596001 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596384 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595212 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Cd | Cadmium | 5.31 | 1 | 0.509 | mg/kg | U | | 0.102 | | 0.509 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595213 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Ca | Calcium | 5.31 | 1 | 1430 | mg/kg | NQ | | 8.14 | | 25.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595788 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 5.31 | 1 | 0.00528 | mg/kg | U | | 0.00176 | | 0.00528 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595799 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596323 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.14 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596321 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595816 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595814 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595782 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-00-3 | Chloroethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595796 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 67-66-3 | Chloroform | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595779 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 74-87-3 | Chloromethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596328 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596303 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596372 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595997 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596000 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595214 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Cr | Chromium | 5.31 | 1 | 4.98 | mg/kg | NQ | | 0.153 | | 0.509 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596387 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 218-01-9 | Chrysene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595215 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Co | Cobalt | 5.31 | 1 | 2.13 | mg/kg | NQ | | 0.153 | | 0.509 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594762 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Cu | Copper | 5.31 | 1 | 3.02 | mg/kg | NQ | | 0.305 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595238 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 5.31 | 1 | 0.171 | mg/kg | J | | 0.0848 | | 0.254 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |
| 11596381 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596389 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596394 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596335 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596005 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000528 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595815 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595804 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 74-95-3 | Dibromomethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596008 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596307 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596006 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596304 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596007 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596305 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596386 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595778 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595791 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595800 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595784 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595793 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595790 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596317 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595803 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595811 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595794 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595798 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595806 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595809 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596336 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596331 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596315 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596373 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596334 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 5.31 | 1 | 0.701 | mg/kg | U | | 0.105 | | 0.701 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596397 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596398 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596375 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 122-39-4 | Diphenylamine | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595987 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596382 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 206-44-0 | Fluoranthene | 5.31 | 1 | 0.013 | mg/kg | J | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596371 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 86-73-7 | Fluorene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596396 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596322 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596325 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596311 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595812 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 5.31 | 1 | 0.00528 | mg/kg | U | | 0.00176 | | 0.00528 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596393 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595787 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 74-88-4 | Iodomethane | 5.31 | 1 | 0.00528 | mg/kg | U | | 0.00176 | | 0.00528 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594763 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Fe | Iron | 5.31 | 1 | 8620 | mg/kg | NQ | | 8.14 | | 25.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596313 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 78-59-1 | Isophorone | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595992 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596003 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594764 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Pb | Lead | 5.31 | 1 | 9.17 | mg/kg | NQ | | 0.336 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594765 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Mg | Magnesium | 5.31 | 1 | 632 | mg/kg | NQ | | 8.65 | | 30.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594766 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Mn | Manganese | 5.31 | 1 | 536 | mg/kg | NQ | | 0.203 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594767 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Hg | Mercury | 5.31 | 1 | 0.0124 | mg/kg | NQ | | 0.00409 | | 0.0122 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11595807 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 5.31 | 1 | 0.00528 | mg/kg | U | | 0.00176 | | 0.00528 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595789 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 5.31 | 1 | 0.00528 | mg/kg | U | | 0.00176 | | 0.00528 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596324 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596308 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596310 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596320 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 91-20-3 | Naphthalene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594768 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Ni | Nickel | 5.31 | 2 | 3.81 | mg/kg | NQ | | 0.0938 | | 0.375 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595239 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | NO3 | Nitrate | 5.31 | 1 | 0.656 | mg/kg | J | | 0.349 | | 1.06 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11596329 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.116 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596330 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596374 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596312 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596314 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596337 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596309 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596298 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596399 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596378 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595253 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | ClO4 | Perchlorate | 5.31 | 1 | 0.0021 | mg/kg | U | | 0.000525 | | 0.0021 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11596379 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 85-01-8 | Phenanthrene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596301 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 108-95-2 | Phenol | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594769 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | K | Potassium | 5.31 | 1 | 672 | mg/kg | NQ | | 6.51 | | 25.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595996 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596383 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 129-00-0 | Pyrene | 5.31 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596299 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 110-86-1 | Pyridine | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594770 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Se | Selenium | 5.31 | 2 | 0.938 | mg/kg | U | | 0.31 | | 0.938 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11594771 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Ag | Silver | 5.31 | 1 | 0.185 | mg/kg | J | | 0.102 | | 0.509 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594772 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Na | Sodium | 5.31 | 1 | 101 | mg/kg | NQ | | 7.12 | | 25.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595990 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 100-42-5 | Styrene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595817 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595993 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595813 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594773 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Tl | Thallium | 5.31 | 2 | 0.375 | mg/kg | U | | 0.0563 | | 0.375 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595808 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 108-88-3 | Toluene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11595786 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.31 | 1 | 0.00528 | mg/kg | U | | 0.00176 | | 0.00528 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596319 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595797 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595810 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595802 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 79-01-6 | Trichloroethene | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595783 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596327 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596326 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 5.31 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595994 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595999 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595998 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595278 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | U-234 | Uranium-234 | 5.31 | 1 | 1.17 | pCi/g | NQ | 0.1 | | 0.0699 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595279 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 5.31 | 1 | 0.0346 | pCi/g | U | 0.072 | | 0.0178 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595280 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | U-238 | Uranium-238 | 5.31 | 1 | 1.25 | pCi/g | NQ | 0.0628 | | 0.0716 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11594774 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | V | Vanadium | 5.31 | 1 | 8.72 | mg/kg | NQ | | 0.102 | | 0.509 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595780 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595989 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 5.31 | 1 | 0.00106 | mg/kg | U | | 0.000352 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595988 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 5.31 | 1 | 0.00211 | mg/kg | U | | 0.000704 | | 0.00211 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594775 | 57-007 | 2014-3718 | RE57-14-84147 | N | HA | INV | NA | REG | 57-4013 | 1 | 2 | ft | S | SOIL | Zn | Zinc | 5.31 | 1 | 39 | mg/kg | NQ | | 0.407 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596435 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596434 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596016 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 67-64-1 | Acetone | 6.77 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594776 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Al | Aluminum | 6.77 | 1 | 4150 | mg/kg | NQ | | 6.73 | | 19.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596402 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 62-53-3 | Aniline | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596449 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 120-12-7 | Anthracene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594777 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Sb | Antimony | 6.77 | 1 | 0.99 | mg/kg | U | | 0.327 | | 0.99 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594778 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | As | Arsenic | 6.77 | 2 | 0.791 | mg/kg | J | | 0.197 | | 0.984 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596445 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594779 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Ba | Barium | 6.77 | 1 | 50.4 | mg/kg | NQ | | 0.099 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596032 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 71-43-2 | Benzene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596454 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596461 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596459 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596464 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596460 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596420 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 6.77 | 1 | 0.715 | mg/kg | U | | 0.179 | | 0.715 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596408 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594780 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Be | Beryllium | 6.77 | 2 | 0.637 | mg/kg | NQ | | 0.0197 | | 0.0984 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596418 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596404 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596457 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596057 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596026 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596036 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596053 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-25-2 | Bromoform | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596012 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596446 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596023 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 6.77 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596066 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596064 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596063 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596453 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594781 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Cd | Cadmium | 6.77 | 1 | 0.495 | mg/kg | U | | 0.099 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594782 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Ca | Calcium | 6.77 | 1 | 305 | mg/kg | NQ | | 7.92 | | 24.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596019 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 6.77 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596030 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596425 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.143 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596423 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596047 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596045 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596013 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596027 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 67-66-3 | Chloroform | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596010 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596430 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596405 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596441 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596059 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596062 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594783 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Cr | Chromium | 6.77 | 1 | 25.9 | mg/kg | NQ | | 0.148 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596456 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 218-01-9 | Chrysene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594784 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Co | Cobalt | 6.77 | 1 | 0.616 | mg/kg | NQ | | 0.148 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594785 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Cu | Copper | 6.77 | 1 | 2.55 | mg/kg | NQ | | 0.297 | | 0.99 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595240 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 6.77 | 1 | 0.227 | mg/kg | U | | 0.0759 | | 0.227 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |
| 11596450 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596458 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596463 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596437 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596067 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000536 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596046 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596035 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596070 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596409 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596068 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596406 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596069 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596407 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596455 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596009 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596022 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596031 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596015 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596024 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596021 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596419 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596034 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596042 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596025 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596029 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596037 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596040 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596438 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596433 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596417 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596442 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596436 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 6.77 | 1 | 0.715 | mg/kg | U | | 0.107 | | 0.715 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596466 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596467 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596444 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596049 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596451 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596440 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 86-73-7 | Fluorene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596465 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596424 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596427 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596413 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596043 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 6.77 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596462 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596018 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 6.77 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594786 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Fe | Iron | 6.77 | 1 | 8210 | mg/kg | NQ | | 7.92 | | 24.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596415 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 78-59-1 | Isophorone | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596054 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596065 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594787 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Pb | Lead | 6.77 | 1 | 8.71 | mg/kg | NQ | | 0.327 | | 0.99 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594788 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Mg | Magnesium | 6.77 | 1 | 156 | mg/kg | NQ | | 8.41 | | 29.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594789 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Mn | Manganese | 6.77 | 1 | 445 | mg/kg | NQ | | 0.198 | | 0.99 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594790 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Hg | Mercury | 6.77 | 1 | 0.0144 | mg/kg | NQ | | 0.00391 | | 0.0117 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11596038 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 6.77 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596020 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 6.77 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596426 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596410 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596412 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596422 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594791 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Ni | Nickel | 6.77 | 2 | 1.32 | mg/kg | NQ | | 0.0984 | | 0.394 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595241 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | NO3 | Nitrate | 6.77 | 1 | 0.521 | mg/kg | J | | 0.354 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11596431 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.118 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596432 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596443 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596414 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596416 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596439 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596411 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596400 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596468 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596447 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595254 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | ClO4 | Perchlorate | 6.77 | 1 | 0.00213 | mg/kg | U | | 0.000534 | | 0.00213 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11596448 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596403 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 108-95-2 | Phenol | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594792 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | K | Potassium | 6.77 | 1 | 612 | mg/kg | NQ | | 6.33 | | 24.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596058 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596452 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 129-00-0 | Pyrene | 6.77 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596401 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 110-86-1 | Pyridine | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594793 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Se | Selenium | 6.77 | 2 | 0.984 | mg/kg | U | | 0.325 | | 0.984 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11594794 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Ag | Silver | 6.77 | 1 | 0.495 | mg/kg | U | | 0.099 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594795 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Na | Sodium | 6.77 | 1 | 304 | mg/kg | NQ | | 6.93 | | 24.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596052 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 100-42-5 | Styrene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596048 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596055 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596044 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594796 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Tl | Thallium | 6.77 | 2 | 0.394 | mg/kg | U | | 0.059 | | 0.394 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596039 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 108-88-3 | Toluene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596017 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.77 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596421 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596028 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596041 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596033 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596014 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596429 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596428 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 6.77 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596056 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596061 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596060 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595281 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | U-234 | Uranium-234 | 6.77 | 1 | 1.46 | pCi/g | NQ | 0.105 | | 0.0788 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595282 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 6.77 | 1 | 0.0978 | pCi/g | NQ | 0.0751 | | 0.0236 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595283 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | U-238 | Uranium-238 | 6.77 | 1 | 1.65 | pCi/g | NQ | 0.0655 | | 0.0831 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11594797 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | V | Vanadium | 6.77 | 1 | 1.65 | mg/kg | NQ | | 0.099 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596011 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596051 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 6.77 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596050 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.77 | 1 | 0.00215 | mg/kg | U | | 0.000715 | | 0.00215 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594798 | 57-007 | 2014-3718 | RE57-14-84158 | N | HA | INV | NA | REG | 57-4013 | 4 | 5 | ft | R | QBT3 | Zn | Zinc | 6.77 | 1 | 65.2 | mg/kg | NQ | | 0.396 | | 0.99 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596573 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 83-32-9 | Acenaphthene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596572 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 208-96-8 | Acenaphthylene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596140 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 67-64-1 | Acetone | 6.73 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594822 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Al | Aluminum | 6.73 | 1 | 4830 | mg/kg | NQ | | 7.05 | | 20.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596540 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 62-53-3 | Aniline | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596587 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 120-12-7 | Anthracene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11594823 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Sb | Antimony | 6.73 | 1 | 1.04 | mg/kg | U | | 0.342 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594824 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | As | Arsenic | 6.73 | 2 | 1.88 | mg/kg | NQ | | 0.211 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596583 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 103-33-3 | Azobenzene | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11594825 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Ba | Barium | 6.73 | 1 | 122 | mg/kg | NQ | | 0.104 | | 0.518 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11596156 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 71-43-2 | Benzene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596592 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596599 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596597 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596602 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596598 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596558 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 65-85-0 | Benzoic Acid | 6.73 | 1 | 0.708 | mg/kg | U | | 0.177 | | 0.708 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596546 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11594826 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Be | Beryllium | 6.73 | 2 | 0.55 | mg/kg | NQ | | 0.0211 | | 0.105 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596556 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596542 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596595 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596357 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 108-86-1 | Bromobenzene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596150 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 74-97-5 | Bromochloromethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596160 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596353 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-25-2 | Bromoform | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596136 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 74-83-9 | Bromomethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596584 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596147 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 78-93-3 | Butanone[2-] | 6.73 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596366 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596364 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596363 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596591 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11594827 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Cd | Cadmium | 6.73 | 1 | 0.518 | mg/kg | U | | 0.104 | | 0.518 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594828 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Ca | Calcium | 6.73 | 1 | 2100 | mg/kg | NQ | | 8.29 | | 25.9 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596143 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 6.73 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596154 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596563 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.142 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596561 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596347 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 108-90-7 | Chlorobenzene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596345 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596137 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-00-3 | Chloroethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596151 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 67-66-3 | Chloroform | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596134 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 74-87-3 | Chloromethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596568 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596543 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596579 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596359 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596362 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594829 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Cr | Chromium | 6.73 | 1 | 15.5 | mg/kg | NQ | | 0.156 | | 0.518 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596594 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 218-01-9 | Chrysene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11594830 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Co | Cobalt | 6.73 | 1 | 2.47 | mg/kg | NQ | | 0.156 | | 0.518 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594831 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Cu | Copper | 6.73 | 1 | 14.1 | mg/kg | NQ | | 0.311 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595244 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 6.73 | 1 | 0.085 | mg/kg | J | | 0.0699 | | 0.209 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |
| 11596588 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596596 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596601 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596575 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 132-64-9 | Dibenzofuran | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596367 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000536 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596346 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596159 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 74-95-3 | Dibromomethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596370 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596547 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596368 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596544 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596369 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 6.73 | 1 | 0.000375 | mg/kg | J | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596545 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596593 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596133 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596146 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596155 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596139 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596148 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596145 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596557 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596158 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596342 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596149 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596153 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596161 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596340 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596576 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 84-66-2 | Diethylphthalate | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596571 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596555 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596580 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596574 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 6.73 | 1 | 0.708 | mg/kg | U | | 0.106 | | 0.708 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596604 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596605 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596582 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 122-39-4 | Diphenylamine | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596349 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 100-41-4 | Ethylbenzene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596589 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 206-44-0 | Fluoranthene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596578 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 86-73-7 | Fluorene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596603 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596562 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596565 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596551 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 67-72-1 | Hexachloroethane | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596343 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 6.73 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596600 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596142 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 74-88-4 | Iodomethane | 6.73 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594832 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Fe | Iron | 6.73 | 1 | 9170 | mg/kg | NQ | | 8.29 | | 25.9 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596553 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 78-59-1 | Isophorone | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596354 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596365 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594833 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Pb | Lead | 6.73 | 1 | 16.3 | mg/kg | NQ | | 0.342 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594834 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Mg | Magnesium | 6.73 | 1 | 919 | mg/kg | NQ | | 8.81 | | 31.1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594835 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Mn | Manganese | 6.73 | 1 | 389 | mg/kg | NQ | | 0.207 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594836 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Hg | Mercury | 6.73 | 50 | 4.2 | mg/kg | NQ | | 0.21 | | 0.627 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11596338 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 6.73 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596144 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-09-2 | Methylene Chloride | 6.73 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596564 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596548 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596550 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596560 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 91-20-3 | Naphthalene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11594837 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Ni | Nickel | 6.73 | 2 | 5.45 | mg/kg | NQ | | 0.105 | | 0.421 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595245 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | NO3 | Nitrate | 6.73 | 1 | 0.432 | mg/kg | J | | 0.354 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11596569 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.117 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596570 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596581 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596552 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 98-95-3 | Nitrobenzene | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596554 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596577 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596549 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596538 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596606 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596585 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11595256 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | ClO4 | Perchlorate | 6.73 | 1 | 0.00214 | mg/kg | U | | 0.000536 | | 0.00214 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11596586 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 85-01-8 | Phenanthrene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596541 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 108-95-2 | Phenol | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11594838 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | K | Potassium | 6.73 | 1 | 759 | mg/kg | NQ | | 6.64 | | 25.9 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596358 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596590 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 129-00-0 | Pyrene | 6.73 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596539 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 110-86-1 | Pyridine | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11594839 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Se | Selenium | 6.73 | 2 | 1.05 | mg/kg | U | | 0.348 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11594840 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Ag | Silver | 6.73 | 1 | 2.13 | mg/kg | NQ | | 0.104 | | 0.518 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594841 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Na | Sodium | 6.73 | 1 | 133 | mg/kg | NQ | | 7.26 | | 25.9 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596352 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 100-42-5 | Styrene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596348 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596355 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596344 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594842 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Tl | Thallium | 6.73 | 2 | 0.421 | mg/kg | U | | 0.0632 | | 0.421 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596339 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 108-88-3 | Toluene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596141 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.73 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596559 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596152 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596341 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596157 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 79-01-6 | Trichloroethene | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596138 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596567 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596566 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 6.73 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/09/2014 |
| 11596356 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596361 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596360 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595287 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | U-234 | Uranium-234 | 6.73 | 1 | 1.17 | pCi/g | NQ | 0.0997 | | 0.0691 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595288 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | U-235/236 | Uranium-235/236 | 6.73 | 1 | 0.0589 | pCi/g | U | 0.0716 | | 0.0184 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595289 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | U-238 | Uranium-238 | 6.73 | 1 | 1.27 | pCi/g | NQ | 0.0624 | | 0.0711 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11594843 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | V | Vanadium | 6.73 | 1 | 10.6 | mg/kg | NQ | | 0.104 | | 0.518 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596135 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596351 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 6.73 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596350 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.73 | 1 | 0.00214 | mg/kg | U | | 0.000715 | | 0.00214 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594844 | 57-007 | 2014-3718 | RE57-14-84148 | N | HA | INV | NA | REG | 57-4014 | 1 | 2 | ft | S | FILL | Zn | Zinc | 6.73 | 1 | 59.2 | mg/kg | NQ | | 0.415 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596504 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596503 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596078 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 67-64-1 | Acetone | 3.85 | 1 | 0.0052 | mg/kg | U | | 0.00173 | | 0.0052 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594799 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Al | Aluminum | 3.85 | 1 | 3410 | mg/kg | NQ | | 6.75 | | 19.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596471 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 62-53-3 | Aniline | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596518 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 120-12-7 | Anthracene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594800 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Sb | Antimony | 3.85 | 1 | 0.992 | mg/kg | U | | 0.327 | | 0.992 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594801 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | As | Arsenic | 3.85 | 2 | 0.76 | mg/kg | J | | 0.194 | | 0.97 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596514 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 103-33-3 | Azobenzene | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594802 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Ba | Barium | 3.85 | 1 | 51.2 | mg/kg | NQ | | 0.0992 | | 0.496 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596094 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 71-43-2 | Benzene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596523 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596530 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596528 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596533 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596529 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596489 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 3.85 | 1 | 0.693 | mg/kg | U | | 0.173 | | 0.693 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596477 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594803 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Be | Beryllium | 3.85 | 2 | 0.543 | mg/kg | NQ | | 0.0194 | | 0.097 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596487 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596473 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596526 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596119 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596088 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596098 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596115 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-25-2 | Bromoform | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596074 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 74-83-9 | Bromomethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596515 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596085 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 3.85 | 1 | 0.0052 | mg/kg | U | | 0.00173 | | 0.0052 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596128 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596126 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596125 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596522 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594804 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Cd | Cadmium | 3.85 | 1 | 0.121 | mg/kg | J | | 0.0992 | | 0.496 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594805 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Ca | Calcium | 3.85 | 1 | 492 | mg/kg | NQ | | 7.94 | | 24.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596081 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 3.85 | 1 | 0.0052 | mg/kg | U | | 0.00173 | | 0.0052 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596092 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596494 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.139 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596492 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11596109 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596107 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596075 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-00-3 | Chloroethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596089 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 67-66-3 | Chloroform | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596072 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 74-87-3 | Chloromethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596499 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596474 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596510 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596121 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596124 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594806 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Cr | Chromium | 3.85 | 1 | 8.89 | mg/kg | NQ | | 0.149 | | 0.496 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596525 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 218-01-9 | Chrysene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594807 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Co | Cobalt | 3.85 | 1 | 0.561 | mg/kg | NQ | | 0.149 | | 0.496 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594808 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Cu | Copper | 3.85 | 1 | 7.49 | mg/kg | NQ | | 0.298 | | 0.992 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595242 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 3.85 | 1 | 0.22 | mg/kg | U | | 0.0736 | | 0.22 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |
| 11596519 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596527 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596532 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596506 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596129 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.00052 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596108 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596097 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596132 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596478 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596130 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596475 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596131 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596476 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596524 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596071 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596084 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596093 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596077 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596086 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596083 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596488 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596096 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596104 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596087 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596091 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596099 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596102 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596507 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596502 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596486 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596511 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596505 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 3.85 | 1 | 0.693 | mg/kg | U | | 0.104 | | 0.693 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596535 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596536 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596513 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596111 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596520 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596509 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 86-73-7 | Fluorene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596534 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596493 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596496 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596482 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596105 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 3.85 | 1 | 0.0052 | mg/kg | U | | 0.00173 | | 0.0052 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596531 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596080 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 74-88-4 | Iodomethane | 3.85 | 1 | 0.0052 | mg/kg | U | | 0.00173 | | 0.0052 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594809 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Fe | Iron | 3.85 | 1 | 7100 | mg/kg | NQ | | 7.94 | | 24.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596484 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 78-59-1 | Isophorone | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596116 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596127 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594810 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Pb | Lead | 3.85 | 1 | 11.6 | mg/kg | NQ | | 0.327 | | 0.992 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594811 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Mg | Magnesium | 3.85 | 1 | 271 | mg/kg | NQ | | 8.44 | | 29.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594812 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Mn | Manganese | 3.85 | 1 | 156 | mg/kg | NQ | | 0.198 | | 0.992 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594813 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Hg | Mercury | 3.85 | 20 | 0.919 | mg/kg | NQ | | 0.0817 | | 0.244 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11596100 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 3.85 | 1 | 0.0052 | mg/kg | U | | 0.00173 | | 0.0052 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596082 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 3.85 | 1 | 0.0052 | mg/kg | U | | 0.00173 | | 0.0052 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596495 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596479 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596481 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596491 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 91-20-3 | Naphthalene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594814 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Ni | Nickel | 3.85 | 2 | 0.79 | mg/kg | NQ | | 0.097 | | 0.388 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595243 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | NO3 | Nitrate | 3.85 | 1 | 1.04 | mg/kg | U | | 0.343 | | 1.04 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11596500 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.114 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596501 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596512 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596483 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596485 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596508 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596480 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596469 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596537 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596516 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595255 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | ClO4 | Perchlorate | 3.85 | 1 | 0.00206 | mg/kg | U | | 0.000515 | | 0.00206 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11596517 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596472 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 108-95-2 | Phenol | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594815 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | K | Potassium | 3.85 | 1 | 629 | mg/kg | NQ | | 6.35 | | 24.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596120 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596521 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 129-00-0 | Pyrene | 3.85 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596470 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 110-86-1 | Pyridine | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594816 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Se | Selenium | 3.85 | 2 | 0.97 | mg/kg | U | | 0.32 | | 0.97 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11594817 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Ag | Silver | 3.85 | 1 | 0.647 | mg/kg | NQ | | 0.0992 | | 0.496 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594818 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Na | Sodium | 3.85 | 1 | 295 | mg/kg | NQ | | 6.95 | | 24.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596114 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 100-42-5 | Styrene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596110 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596117 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596106 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594819 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Tl | Thallium | 3.85 | 2 | 0.388 | mg/kg | U | | 0.0582 | | 0.388 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11596101 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 108-88-3 | Toluene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596079 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 3.85 | 1 | 0.0052 | mg/kg | U | | 0.00173 | | 0.0052 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596490 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596090 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596103 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596095 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596076 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596498 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596497 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 3.85 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11596118 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596123 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596122 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595284 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | U-234 | Uranium-234 | 3.85 | 1 | 1.44 | pCi/g | NQ | 0.1 | | 0.0763 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595285 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 3.85 | 1 | 0.0642 | pCi/g | U | 0.0721 | | 0.0226 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595286 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | U-238 | Uranium-238 | 3.85 | 1 | 1.44 | pCi/g | NQ | 0.0629 | | 0.0764 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11594820 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | V | Vanadium | 3.85 | 1 | 3.07 | mg/kg | NQ | | 0.0992 | | 0.496 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11596073 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596113 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 3.85 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11596112 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 3.85 | 1 | 0.00208 | mg/kg | U | | 0.000694 | | 0.00208 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594821 | 57-007 | 2014-3718 | RE57-14-84137 | N | HA | INV | NA | REG | 57-4014 | 2 | 3 | ft | R | QBT3 | Zn | Zinc | 3.85 | 1 | 73.7 | mg/kg | NQ | | 0.397 | | 0.992 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11582967 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582966 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582515 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 67-64-1 | Acetone | 6.35 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582277 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Al | Aluminum | 6.35 | 1 | 5260 | mg/kg | NQ | | 6.98 | | 20.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582934 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 62-53-3 | Aniline | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581919 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 120-12-7 | Anthracene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582278 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Sb | Antimony | 6.35 | 1 | 1.03 | mg/kg | U | | 0.339 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582279 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | As | Arsenic | 6.35 | 2 | 0.92 | mg/kg | J | | 0.209 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11581915 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582280 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Ba | Barium | 6.35 | 1 | 36 | mg/kg | NQ | | 0.103 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582531 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 71-43-2 | Benzene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581924 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581931 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581929 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581934 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581930 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582952 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 6.35 | 1 | 0.71 | mg/kg | U | | 0.178 | | 0.71 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582940 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582281 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Be | Beryllium | 6.35 | 2 | 0.781 | mg/kg | NQ | | 0.0209 | | 0.105 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582950 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582936 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581927 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582556 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582525 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582535 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582552 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-25-2 | Bromoform | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582511 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581916 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582522 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 6.35 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582650 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582648 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582647 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581923 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582282 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Cd | Cadmium | 6.35 | 1 | 0.112 | mg/kg | J | | 0.103 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582283 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Ca | Calcium | 6.35 | 1 | 482 | mg/kg | NQ | | 8.21 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582518 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 6.35 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582529 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582957 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.142 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582955 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582546 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582544 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582512 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582526 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 67-66-3 | Chloroform | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582509 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582962 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582937 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581911 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582558 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582646 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582284 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Cr | Chromium | 6.35 | 1 | 4.97 | mg/kg | NQ | | 0.154 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11581926 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 218-01-9 | Chrysene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582285 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Co | Cobalt | 6.35 | 1 | 0.396 | mg/kg | J | | 0.154 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582286 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Cu | Copper | 6.35 | 1 | 3.99 | mg/kg | NQ | | 0.308 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582624 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 6.35 | 1 | 0.243 | mg/kg | U | | 0.0811 | | 0.243 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11581920 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581928 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581933 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582969 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582651 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000534 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582545 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582534 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582654 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582941 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582652 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582938 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582653 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582939 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581925 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11582508 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582521 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582530 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582514 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582523 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582520 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582951 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582533 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582541 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582524 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582528 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582536 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582539 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582970 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582965 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582949 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581912 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582968 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 6.35 | 1 | 0.71 | mg/kg | U | | 0.107 | | 0.71 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581936 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581937 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581914 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582548 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581921 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581910 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 86-73-7 | Fluorene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581935 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582956 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582959 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582945 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582542 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 6.35 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581932 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582517 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 6.35 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582287 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Fe | Iron | 6.35 | 1 | 7540 | mg/kg | NQ | | 8.21 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582947 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 78-59-1 | Isophorone | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582553 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582649 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582288 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Pb | Lead | 6.35 | 1 | 12.7 | mg/kg | NQ | | 0.339 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582289 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Mg | Magnesium | 6.35 | 1 | 245 | mg/kg | NQ | | 8.73 | | 30.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582290 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Mn | Manganese | 6.35 | 1 | 126 | mg/kg | NQ | | 0.205 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582291 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Hg | Mercury | 6.35 | 1 | 0.257 | mg/kg | NQ | | 0.00428 | | 0.0128 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11582537 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 6.35 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582519 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 6.35 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582958 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582942 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582944 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582954 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582292 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Ni | Nickel | 6.35 | 2 | 1.5 | mg/kg | NQ | | 0.105 | | 0.419 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582625 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | NO3 | Nitrate | 6.35 | 1 | 1.07 | mg/kg | U | | 0.352 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11582963 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.117 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582964 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581913 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582946 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582948 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582971 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582943 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582932 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581938 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581917 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582645 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | ClO4 | Perchlorate | 6.35 | 1 | 0.00214 | mg/kg | U | | 0.000534 | | 0.00214 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11581918 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582935 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 108-95-2 | Phenol | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582293 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | K | Potassium | 6.35 | 1 | 587 | mg/kg | NQ | | 6.57 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582557 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581922 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 129-00-0 | Pyrene | 6.35 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582933 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 110-86-1 | Pyridine | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582294 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Se | Selenium | 6.35 | 2 | 1.05 | mg/kg | U | | 0.345 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582295 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Ag | Silver | 6.35 | 1 | 0.513 | mg/kg | U | | 0.103 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582296 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Na | Sodium | 6.35 | 1 | 249 | mg/kg | NQ | | 7.19 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582551 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 100-42-5 | Styrene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582547 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582554 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582543 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582297 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Tl | Thallium | 6.35 | 2 | 0.419 | mg/kg | U | | 0.0628 | | 0.419 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582538 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 108-88-3 | Toluene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582516 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.35 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582953 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582527 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582540 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582532 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582513 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582961 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582960 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 6.35 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582555 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582560 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582559 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582833 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | U-234 | Uranium-234 | 6.35 | 1 | 1.3 | pCi/g | NQ | 0.105 | | 0.0747 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582834 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 6.35 | 1 | 0.083 | pCi/g | NQ | 0.0757 | | 0.0232 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582835 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | U-238 | Uranium-238 | 6.35 | 1 | 1.43 | pCi/g | NQ | 0.066 | | 0.0785 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582298 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | V | Vanadium | 6.35 | 1 | 2.74 | mg/kg | NQ | | 0.103 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582510 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582550 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 6.35 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582549 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.35 | 1 | 0.00214 | mg/kg | U | | 0.000712 | | 0.00214 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582299 | 57-007 | 2014-3751 | RE57-14-84159 | N | HA | INV | NA | REG | 57-4014 | 4 | 5 | ft | R | QBT3 | Zn | Zinc | 6.35 | 1 | 73.3 | mg/kg | NQ | | 0.411 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582043 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 83-32-9 | Acenaphthene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582042 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 208-96-8 | Acenaphthylene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582724 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 67-64-1 | Acetone | 6.76 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582323 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Al | Aluminum | 6.76 | 1 | 5230 | mg/kg | NQ | | 7.16 | | 21.1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582010 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 62-53-3 | Aniline | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582057 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 120-12-7 | Anthracene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582324 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Sb | Antimony | 6.76 | 1 | 1.05 | mg/kg | U | | 0.348 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582325 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | As | Arsenic | 6.76 | 2 | 2.64 | mg/kg | NQ | | 0.209 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582053 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 103-33-3 | Azobenzene | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582326 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Ba | Barium | 6.76 | 1 | 384 | mg/kg | NQ | | 0.105 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582740 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 71-43-2 | Benzene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582062 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582069 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582067 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582072 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582068 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582028 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 65-85-0 | Benzoic Acid | 6.76 | 1 | 0.714 | mg/kg | U | | 0.178 | | 0.714 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582016 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582327 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Be | Beryllium | 6.76 | 2 | 0.704 | mg/kg | NQ | | 0.0209 | | 0.105 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582026 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582012 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582065 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.76 | 1 | 0.13 | mg/kg | J | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582765 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 108-86-1 | Bromobenzene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582734 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 74-97-5 | Bromochloromethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582744 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582761 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-25-2 | Bromoform | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582720 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 74-83-9 | Bromomethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582054 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582731 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 78-93-3 | Butanone[2-] | 6.76 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582774 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582772 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582771 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582061 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 6.76 | 1 | 0.339 | mg/kg | J | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582328 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Cd | Cadmium | 6.76 | 1 | 0.574 | mg/kg | NQ | | 0.105 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582329 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Ca | Calcium | 6.76 | 1 | 4550 | mg/kg | NQ | | 8.43 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582727 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 6.76 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582738 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582033 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.143 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582031 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582755 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 108-90-7 | Chlorobenzene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582753 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582721 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-00-3 | Chloroethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582735 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 67-66-3 | Chloroform | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582718 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 74-87-3 | Chloromethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582038 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582013 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582049 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582767 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582770 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582330 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Cr | Chromium | 6.76 | 1 | 19.1 | mg/kg | NQ | | 0.158 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582064 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 218-01-9 | Chrysene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582331 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Co | Cobalt | 6.76 | 1 | 3.82 | mg/kg | NQ | | 0.158 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582332 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Cu | Copper | 6.76 | 1 | 65.1 | mg/kg | NQ | | 0.316 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582628 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 6.76 | 1 | 0.248 | mg/kg | U | | 0.0829 | | 0.248 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11582058 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582066 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582071 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582045 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 132-64-9 | Dibenzofuran | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582775 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000536 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582754 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582743 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 74-95-3 | Dibromomethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582778 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582017 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582776 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582014 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582777 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582015 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582063 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582717 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582730 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582739 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582723 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582732 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582729 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582027 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582742 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582750 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582733 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582737 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582745 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582748 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582046 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 84-66-2 | Diethylphthalate | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582041 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582025 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582050 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582044 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 6.76 | 1 | 0.714 | mg/kg | U | | 0.107 | | 0.714 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582074 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582075 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582052 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 122-39-4 | Diphenylamine | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582757 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 100-41-4 | Ethylbenzene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582059 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 206-44-0 | Fluoranthene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582048 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 86-73-7 | Fluorene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582073 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582032 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582035 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582021 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 67-72-1 | Hexachloroethane | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582751 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 6.76 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |

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| 11582070 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582726 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 74-88-4 | Iodomethane | 6.76 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582333 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Fe | Iron | 6.76 | 1 | 11300 | mg/kg | NQ | | 8.43 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582023 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 78-59-1 | Isophorone | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582762 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582773 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582334 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Pb | Lead | 6.76 | 1 | 33.6 | mg/kg | NQ | | 0.348 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582335 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Mg | Magnesium | 6.76 | 1 | 2180 | mg/kg | NQ | | 8.96 | | 31.6 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582336 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Mn | Manganese | 6.76 | 1 | 227 | mg/kg | NQ | | 0.211 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582337 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Hg | Mercury | 6.76 | 50 | 20.6 | mg/kg | NQ | | 0.213 | | 0.637 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11582746 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 6.76 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582728 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-09-2 | Methylene Chloride | 6.76 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582034 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582018 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582020 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582030 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 91-20-3 | Naphthalene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582338 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Ni | Nickel | 6.76 | 2 | 9.64 | mg/kg | NQ | | 0.105 | | 0.418 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582629 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | NO3 | Nitrate | 6.76 | 1 | 1.07 | mg/kg | U | | 0.354 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11582039 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.118 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582040 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582051 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582022 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 98-95-3 | Nitrobenzene | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582024 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582047 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582019 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582008 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582076 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582055 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582822 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | ClO4 | Perchlorate | 6.76 | 1 | 0.0011 | mg/kg | J | | 0.000534 | | 0.00213 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11582056 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 85-01-8 | Phenanthrene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582011 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 108-95-2 | Phenol | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582339 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | K | Potassium | 6.76 | 1 | 1040 | mg/kg | NQ | | 6.74 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582766 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582060 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 129-00-0 | Pyrene | 6.76 | 1 | 0.0357 | mg/kg | U | | 0.0107 | | 0.0357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582009 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 110-86-1 | Pyridine | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582340 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Se | Selenium | 6.76 | 2 | 1.05 | mg/kg | U | | 0.345 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582341 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Ag | Silver | 6.76 | 1 | 15.2 | mg/kg | NQ | | 0.105 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582342 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Na | Sodium | 6.76 | 1 | 137 | mg/kg | NQ | | 7.37 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582760 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 100-42-5 | Styrene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582756 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582763 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582752 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582343 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Tl | Thallium | 6.76 | 2 | 0.418 | mg/kg | U | | 0.0627 | | 0.418 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582747 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 108-88-3 | Toluene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582725 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.76 | 1 | 0.00536 | mg/kg | U | | 0.00179 | | 0.00536 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582029 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582736 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582749 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582741 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 79-01-6 | Trichloroethene | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582722 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582037 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582036 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 6.76 | 1 | 0.357 | mg/kg | U | | 0.107 | | 0.357 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582764 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582769 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582768 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582839 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | U-234 | Uranium-234 | 6.76 | 1 | 1.55 | pCi/g | NQ | 0.0957 | | 0.0775 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582840 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | U-235/236 | Uranium-235/236 | 6.76 | 1 | 0.0848 | pCi/g | NQ | 0.0687 | | 0.0221 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582841 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | U-238 | Uranium-238 | 6.76 | 1 | 1.25 | pCi/g | NQ | 0.0599 | | 0.0697 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582344 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | V | Vanadium | 6.76 | 1 | 21.6 | mg/kg | NQ | | 0.105 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582719 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582759 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 6.76 | 1 | 0.00107 | mg/kg | U | | 0.000357 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582758 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.76 | 1 | 0.00215 | mg/kg | U | | 0.000715 | | 0.00215 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582345 | 57-007 | 2014-3751 | RE57-14-84149 | N | HA | INV | NA | REG | 57-4015 | 1.5 | 2.5 | ft | S | FILL | Zn | Zinc | 6.76 | 1 | 113 | mg/kg | NQ | | 0.421 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11581974 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581973 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582662 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 67-64-1 | Acetone | 2.87 | 1 | 0.00515 | mg/kg | U | | 0.00172 | | 0.00515 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582300 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Al | Aluminum | 2.87 | 1 | 2540 | mg/kg | NQ | | 6.6 | | 19.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11581941 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 62-53-3 | Aniline | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581988 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 120-12-7 | Anthracene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582301 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Sb | Antimony | 2.87 | 1 | 0.486 | mg/kg | J | | 0.321 | | 0.971 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582302 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | As | Arsenic | 2.87 | 2 | 0.585 | mg/kg | J | | 0.197 | | 0.984 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11581984 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582303 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Ba | Barium | 2.87 | 1 | 28.9 | mg/kg | NQ | | 0.0971 | | 0.486 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582678 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 71-43-2 | Benzene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581993 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582000 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581998 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582003 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581999 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581959 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 2.87 | 1 | 0.684 | mg/kg | U | | 0.171 | | 0.684 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581947 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582304 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Be | Beryllium | 2.87 | 2 | 0.595 | mg/kg | NQ | | 0.0197 | | 0.0984 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11581957 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581943 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581996 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582703 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582672 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582682 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582699 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-25-2 | Bromoform | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582658 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581985 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582669 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 2.87 | 1 | 0.00515 | mg/kg | U | | 0.00172 | | 0.00515 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582712 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582710 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582709 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581992 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582305 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Cd | Cadmium | 2.87 | 1 | 0.486 | mg/kg | U | | 0.0971 | | 0.486 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582306 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Ca | Calcium | 2.87 | 1 | 170 | mg/kg | NQ | | 7.77 | | 24.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582665 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 2.87 | 1 | 0.00515 | mg/kg | U | | 0.00172 | | 0.00515 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582676 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581964 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.137 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581962 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582693 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582691 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582659 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582673 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 67-66-3 | Chloroform | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582656 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581969 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581944 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581980 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582705 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582708 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582307 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Cr | Chromium | 2.87 | 1 | 27.7 | mg/kg | NQ | | 0.146 | | 0.486 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11581995 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 218-01-9 | Chrysene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582308 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Co | Cobalt | 2.87 | 1 | 0.336 | mg/kg | J | | 0.146 | | 0.486 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582309 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Cu | Copper | 2.87 | 1 | 4.6 | mg/kg | NQ | | 0.291 | | 0.971 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582626 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 2.87 | 1 | 0.252 | mg/kg | U | | 0.0843 | | 0.252 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11581989 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581997 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582002 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581976 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582713 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000515 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582692 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582681 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582716 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581948 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582714 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581945 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582715 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581946 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581994 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582655 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582668 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582677 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582661 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582670 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582667 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581958 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582680 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582688 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582671 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582675 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582683 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582686 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581977 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581972 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581956 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581981 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581975 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 2.87 | 1 | 0.684 | mg/kg | U | | 0.103 | | 0.684 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582005 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582006 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581983 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582695 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581990 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581979 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 86-73-7 | Fluorene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582004 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581963 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581966 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581952 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582689 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 2.87 | 1 | 0.00515 | mg/kg | U | | 0.00172 | | 0.00515 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582001 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582664 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 2.87 | 1 | 0.00515 | mg/kg | U | | 0.00172 | | 0.00515 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582310 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Fe | Iron | 2.87 | 1 | 6780 | mg/kg | NQ | | 7.77 | | 24.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11581954 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 78-59-1 | Isophorone | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582700 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582711 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582311 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Pb | Lead | 2.87 | 1 | 10.1 | mg/kg | NQ | | 0.321 | | 0.971 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582312 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Mg | Magnesium | 2.87 | 1 | 72.6 | mg/kg | NQ | | 8.26 | | 29.1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582313 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Mn | Manganese | 2.87 | 1 | 145 | mg/kg | NQ | | 0.194 | | 0.971 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582314 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Hg | Mercury | 2.87 | 1 | 0.0267 | mg/kg | NQ | | 0.00397 | | 0.0119 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11582684 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 2.87 | 1 | 0.00515 | mg/kg | U | | 0.00172 | | 0.00515 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582666 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 2.87 | 1 | 0.00515 | mg/kg | U | | 0.00172 | | 0.00515 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581965 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581949 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581951 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581961 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582315 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Ni | Nickel | 2.87 | 2 | 0.813 | mg/kg | NQ | | 0.0984 | | 0.394 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582627 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | NO3 | Nitrate | 2.87 | 1 | 1.03 | mg/kg | U | | 0.34 | | 1.03 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11581970 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.113 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581971 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581982 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581953 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581955 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581978 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581950 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581939 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582007 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581986 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582821 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | ClO4 | Perchlorate | 2.87 | 1 | 0.00206 | mg/kg | U | | 0.000515 | | 0.00206 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |

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| 11581987 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581942 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 108-95-2 | Phenol | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582316 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | K | Potassium | 2.87 | 1 | 618 | mg/kg | NQ | | 6.22 | | 24.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582704 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581991 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 129-00-0 | Pyrene | 2.87 | 1 | 0.0342 | mg/kg | U | | 0.0103 | | 0.0342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581940 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 110-86-1 | Pyridine | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582317 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Se | Selenium | 2.87 | 2 | 0.984 | mg/kg | U | | 0.325 | | 0.984 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582318 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Ag | Silver | 2.87 | 1 | 0.486 | mg/kg | U | | 0.0971 | | 0.486 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582319 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Na | Sodium | 2.87 | 1 | 387 | mg/kg | NQ | | 6.8 | | 24.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582698 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 100-42-5 | Styrene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582694 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582701 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582690 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582320 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Tl | Thallium | 2.87 | 2 | 0.394 | mg/kg | U | | 0.0591 | | 0.394 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582685 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 108-88-3 | Toluene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582663 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 2.87 | 1 | 0.00515 | mg/kg | U | | 0.00172 | | 0.00515 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581960 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582674 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582687 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582679 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582660 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11581968 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11581967 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 2.87 | 1 | 0.342 | mg/kg | U | | 0.103 | | 0.342 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/10/2014 |
| 11582702 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582707 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582706 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582836 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | U-234 | Uranium-234 | 2.87 | 1 | 1.23 | pCi/g | NQ | 0.091 | | 0.0672 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582837 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 2.87 | 1 | 0.0627 | pCi/g | U | 0.0653 | | 0.0179 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582838 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | U-238 | Uranium-238 | 2.87 | 1 | 1.14 | pCi/g | NQ | 0.057 | | 0.065 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582321 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | V | Vanadium | 2.87 | 1 | 1.41 | mg/kg | NQ | | 0.0971 | | 0.486 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582657 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582697 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 2.87 | 1 | 0.00103 | mg/kg | U | | 0.000343 | | 0.00103 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582696 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 2.87 | 1 | 0.00206 | mg/kg | U | | 0.000687 | | 0.00206 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582322 | 57-007 | 2014-3751 | RE57-14-84138 | N | HA | INV | NA | REG | 57-4015 | 2.5 | 3.5 | ft | R | QBT3 | Zn | Zinc | 2.87 | 1 | 75.4 | mg/kg | NQ | | 0.388 | | 0.971 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583180 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583179 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582786 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 67-64-1 | Acetone | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582346 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Al | Aluminum | 3.67 | 1 | 2720 | mg/kg | NQ | | 6.74 | | 19.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583147 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 62-53-3 | Aniline | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583194 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 120-12-7 | Anthracene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582347 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Sb | Antimony | 3.67 | 1 | 0.991 | mg/kg | U | | 0.327 | | 0.991 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582348 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | As | Arsenic | 3.67 | 2 | 0.527 | mg/kg | J | | 0.196 | | 0.981 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583190 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582349 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Ba | Barium | 3.67 | 1 | 50.5 | mg/kg | NQ | | 0.0991 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582802 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 71-43-2 | Benzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583199 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583206 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583204 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583209 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583205 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583165 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 3.67 | 1 | 0.692 | mg/kg | U | | 0.173 | | 0.692 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583153 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582350 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Be | Beryllium | 3.67 | 2 | 1.08 | mg/kg | NQ | | 0.0196 | | 0.0981 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583163 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583149 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583202 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582978 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582796 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582806 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582974 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-25-2 | Bromoform | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582782 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583191 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582793 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582987 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582985 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582984 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583198 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582351 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Cd | Cadmium | 3.67 | 1 | 0.106 | mg/kg | J | | 0.0991 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582352 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Ca | Calcium | 3.67 | 1 | 93.5 | mg/kg | NQ | | 7.92 | | 24.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582789 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582800 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583170 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.138 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583168 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582817 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582815 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582783 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582797 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 67-66-3 | Chloroform | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582780 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583175 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583150 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583186 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582980 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582983 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582353 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Cr | Chromium | 3.67 | 1 | 4.2 | mg/kg | NQ | | 0.149 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583201 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 218-01-9 | Chrysene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582354 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Co | Cobalt | 3.67 | 1 | 0.188 | mg/kg | J | | 0.149 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582355 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Cu | Copper | 3.67 | 1 | 5.83 | mg/kg | NQ | | 0.297 | | 0.991 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582630 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 3.67 | 1 | 0.245 | mg/kg | U | | 0.0818 | | 0.245 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11583195 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583203 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583208 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583182 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582988 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000519 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582816 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582805 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582991 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583154 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582989 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583151 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582990 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583152 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583200 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582779 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582792 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582801 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582785 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582794 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582791 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583164 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582804 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582812 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582795 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582799 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582807 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582810 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583183 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583178 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583162 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583187 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583181 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 3.67 | 1 | 0.692 | mg/kg | U | | 0.104 | | 0.692 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583211 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583212 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583189 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582819 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583196 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583185 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 86-73-7 | Fluorene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583210 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583169 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583172 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583158 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582813 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583207 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582788 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582356 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Fe | Iron | 3.67 | 1 | 7070 | mg/kg | NQ | | 7.92 | | 24.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583160 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 78-59-1 | Isophorone | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582975 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582986 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582357 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Pb | Lead | 3.67 | 1 | 10.1 | mg/kg | NQ | | 0.327 | | 0.991 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582358 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Mg | Magnesium | 3.67 | 1 | 63.1 | mg/kg | NQ | | 8.42 | | 29.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582359 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Mn | Manganese | 3.67 | 1 | 141 | mg/kg | NQ | | 0.198 | | 0.991 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582360 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Hg | Mercury | 3.67 | 1 | 0.00941 | mg/kg | J | | 0.00389 | | 0.0116 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11582808 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582790 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583171 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583155 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583157 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583167 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582361 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Ni | Nickel | 3.67 | 2 | 1.23 | mg/kg | NQ | | 0.0981 | | 0.392 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582631 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | NO3 | Nitrate | 3.67 | 1 | 1.04 | mg/kg | U | | 0.343 | | 1.04 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11583176 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.114 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583177 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583188 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583159 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583161 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583184 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583156 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582077 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583213 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583192 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582823 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | ClO4 | Perchlorate | 3.67 | 1 | 0.00208 | mg/kg | U | | 0.000519 | | 0.00208 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11583193 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583148 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 108-95-2 | Phenol | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582362 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | K | Potassium | 3.67 | 1 | 678 | mg/kg | NQ | | 6.34 | | 24.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582979 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583197 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 129-00-0 | Pyrene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582078 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 110-86-1 | Pyridine | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582363 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Se | Selenium | 3.67 | 2 | 0.981 | mg/kg | U | | 0.324 | | 0.981 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582364 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Ag | Silver | 3.67 | 1 | 0.495 | mg/kg | U | | 0.0991 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582365 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Na | Sodium | 3.67 | 1 | 416 | mg/kg | NQ | | 6.93 | | 24.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582973 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 100-42-5 | Styrene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582818 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582976 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582814 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582366 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Tl | Thallium | 3.67 | 2 | 0.392 | mg/kg | U | | 0.0589 | | 0.392 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582809 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 108-88-3 | Toluene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582787 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583166 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582798 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582811 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582803 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582784 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583174 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583173 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582977 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582982 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582981 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582842 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | U-234 | Uranium-234 | 3.67 | 1 | 1.18 | pCi/g | NQ | 0.0909 | | 0.0664 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582843 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 3.67 | 1 | 0.0715 | pCi/g | NQ | 0.0652 | | 0.019 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582844 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | U-238 | Uranium-238 | 3.67 | 1 | 1.19 | pCi/g | NQ | 0.0569 | | 0.0661 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11582367 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | V | Vanadium | 3.67 | 1 | 1.03 | mg/kg | NQ | | 0.0991 | | 0.495 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582781 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582972 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582820 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 3.67 | 1 | 0.00208 | mg/kg | U | | 0.000692 | | 0.00208 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582368 | 57-007 | 2014-3751 | RE57-14-84160 | N | HA | INV | NA | REG | 57-4015 | 4.5 | 5.5 | ft | R | QBT3 | Zn | Zinc | 3.67 | 1 | 64.8 | mg/kg | NQ | | 0.396 | | 0.991 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583249 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 83-32-9 | Acenaphthene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583248 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582999 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 67-64-1 | Acetone | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582369 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Al | Aluminum | 4.55 | 1 | 4070 | mg/kg | NQ | | 6.8 | | 20 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583216 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 62-53-3 | Aniline | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583263 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 120-12-7 | Anthracene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582370 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Sb | Antimony | 4.55 | 1 | 1 | mg/kg | U | | 0.33 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582371 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | As | Arsenic | 4.55 | 2 | 1.33 | mg/kg | NQ | | 0.199 | | 0.994 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583259 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 103-33-3 | Azobenzene | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582372 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Ba | Barium | 4.55 | 1 | 111 | mg/kg | NQ | | 0.1 | | 0.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583015 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 71-43-2 | Benzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583268 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583275 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583273 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583278 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583274 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583234 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 4.55 | 1 | 0.697 | mg/kg | U | | 0.174 | | 0.697 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583222 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582373 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Be | Beryllium | 4.55 | 2 | 0.516 | mg/kg | NQ | | 0.0199 | | 0.0994 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583232 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583218 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583271 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583040 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 108-86-1 | Bromobenzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583009 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583019 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583036 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-25-2 | Bromoform | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582995 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 74-83-9 | Bromomethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583260 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583006 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583049 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583047 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583046 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583267 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582374 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Cd | Cadmium | 4.55 | 1 | 0.194 | mg/kg | J | | 0.1 | | 0.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582375 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Ca | Calcium | 4.55 | 1 | 1200 | mg/kg | NQ | | 8 | | 25 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583002 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583013 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583239 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.139 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583237 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583030 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583028 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582996 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-00-3 | Chloroethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583010 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 67-66-3 | Chloroform | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582993 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 74-87-3 | Chloromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583244 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583219 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583255 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583042 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583045 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582376 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Cr | Chromium | 4.55 | 1 | 3.17 | mg/kg | NQ | | 0.15 | | 0.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583270 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 218-01-9 | Chrysene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582377 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Co | Cobalt | 4.55 | 1 | 1.43 | mg/kg | NQ | | 0.15 | | 0.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582378 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Cu | Copper | 4.55 | 1 | 3.21 | mg/kg | NQ | | 0.3 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582632 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 4.55 | 1 | 0.252 | mg/kg | U | | 0.0841 | | 0.252 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11583264 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583272 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583277 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583251 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583050 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000524 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583029 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583018 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 74-95-3 | Dibromomethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583053 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583223 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583051 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583220 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583052 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583221 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583269 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582992 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583005 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583014 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582998 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583007 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583004 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583233 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583017 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583025 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583008 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583012 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583020 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583023 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583252 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583247 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583231 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583256 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583250 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 4.55 | 1 | 0.697 | mg/kg | U | | 0.105 | | 0.697 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583280 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583281 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583258 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 122-39-4 | Diphenylamine | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583032 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583265 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 206-44-0 | Fluoranthene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583254 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 86-73-7 | Fluorene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583279 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583238 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583241 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583227 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583026 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583276 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583001 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 74-88-4 | Iodomethane | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582379 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Fe | Iron | 4.55 | 1 | 7700 | mg/kg | NQ | | 8 | | 25 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583229 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 78-59-1 | Isophorone | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583037 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583048 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582380 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Pb | Lead | 4.55 | 1 | 12 | mg/kg | NQ | | 0.33 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582381 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Mg | Magnesium | 4.55 | 1 | 506 | mg/kg | NQ | | 8.5 | | 30 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582382 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Mn | Manganese | 4.55 | 1 | 387 | mg/kg | NQ | | 0.2 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582383 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Hg | Mercury | 4.55 | 1 | 0.0361 | mg/kg | NQ | | 0.00398 | | 0.0119 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11583021 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583003 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583240 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583224 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583226 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583236 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 91-20-3 | Naphthalene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582384 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Ni | Nickel | 4.55 | 2 | 2.75 | mg/kg | NQ | | 0.0994 | | 0.398 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582633 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | NO3 | Nitrate | 4.55 | 1 | 1.05 | mg/kg | U | | 0.346 | | 1.05 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11583245 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.115 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583246 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583257 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583228 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583230 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583253 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583225 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583214 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583282 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583261 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582824 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | ClO4 | Perchlorate | 4.55 | 1 | 0.0021 | mg/kg | U | | 0.000524 | | 0.0021 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11583262 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 85-01-8 | Phenanthrene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583217 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 108-95-2 | Phenol | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582385 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | K | Potassium | 4.55 | 1 | 599 | mg/kg | NQ | | 6.4 | | 25 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583041 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583266 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 129-00-0 | Pyrene | 4.55 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583215 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 110-86-1 | Pyridine | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582386 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Se | Selenium | 4.55 | 2 | 0.994 | mg/kg | U | | 0.328 | | 0.994 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582387 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Ag | Silver | 4.55 | 1 | 0.105 | mg/kg | J | | 0.1 | | 0.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582388 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Na | Sodium | 4.55 | 1 | 112 | mg/kg | NQ | | 7 | | 25 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583035 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 100-42-5 | Styrene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583031 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583038 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583027 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582389 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Tl | Thallium | 4.55 | 2 | 0.398 | mg/kg | U | | 0.0596 | | 0.398 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583022 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 108-88-3 | Toluene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583000 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583235 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583011 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583024 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583016 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 79-01-6 | Trichloroethene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582997 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583243 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583242 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 4.55 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583039 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583044 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583043 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582845 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | U-234 | Uranium-234 | 4.55 | 1 | 1.34 | pCi/g | NQ | 0.12 | | 0.081 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582846 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 4.55 | 1 | 0.0768 | pCi/g | U | 0.0862 | | 0.0229 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582847 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | U-238 | Uranium-238 | 4.55 | 1 | 1.5 | pCi/g | NQ | 0.0752 | | 0.0849 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582390 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | V | Vanadium | 4.55 | 1 | 6.49 | mg/kg | NQ | | 0.1 | | 0.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582994 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583034 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583033 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 4.55 | 1 | 0.0021 | mg/kg | U | | 0.000699 | | 0.0021 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582391 | 57-007 | 2014-3751 | RE57-14-84139 | N | HA | INV | NA | REG | 57-4016 | 0 | 1 | ft | S | SOIL | Zn | Zinc | 4.55 | 1 | 44.5 | mg/kg | NQ | | 0.4 | | 1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11597197 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 83-32-9 | Acenaphthene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597196 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597376 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 67-64-1 | Acetone | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597075 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Al | Aluminum | 7.96 | 1 | 5430 | mg/kg | NQ | | 7.02 | | 20.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597164 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 62-53-3 | Aniline | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597211 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 120-12-7 | Anthracene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597076 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Sb | Antimony | 7.96 | 1 | 1.03 | mg/kg | U | | 0.341 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597077 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | As | Arsenic | 7.96 | 2 | 1.62 | mg/kg | J | | 0.215 | | 1.07 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597207 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 103-33-3 | Azobenzene | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597078 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Ba | Barium | 7.96 | 1 | 33.7 | mg/kg | NQ | | 0.103 | | 0.516 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597392 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 71-43-2 | Benzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597216 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597223 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597221 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597226 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597222 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597182 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 7.96 | 1 | 0.724 | mg/kg | U | | 0.181 | | 0.724 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597170 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597079 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Be | Beryllium | 7.96 | 2 | 0.491 | mg/kg | NQ | | 0.0215 | | 0.107 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597180 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597166 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597219 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596921 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 108-86-1 | Bromobenzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597386 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |

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| 11596900 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596917 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-25-2 | Bromoform | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597372 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 74-83-9 | Bromomethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597208 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597383 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596930 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596928 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596927 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597215 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597080 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Cd | Cadmium | 7.96 | 1 | 0.516 | mg/kg | U | | 0.103 | | 0.516 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597081 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Ca | Calcium | 7.96 | 1 | 518 | mg/kg | NQ | | 8.26 | | 25.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597379 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597390 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597187 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.145 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597185 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596911 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596909 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597373 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-00-3 | Chloroethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597387 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 67-66-3 | Chloroform | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597370 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 74-87-3 | Chloromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597192 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597167 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597203 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596923 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596926 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597082 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Cr | Chromium | 7.96 | 1 | 3.23 | mg/kg | J | | 0.155 | | 0.516 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597218 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 218-01-9 | Chrysene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597083 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Co | Cobalt | 7.96 | 1 | 0.807 | mg/kg | NQ | | 0.155 | | 0.516 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597084 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Cu | Copper | 7.96 | 1 | 1.65 | mg/kg | NQ | | 0.31 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597144 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 7.96 | 1 | 0.256 | mg/kg | U | | 0.0856 | | 0.256 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/17/2014 |
| 11597212 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597220 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597225 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597199 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596931 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000543 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596910 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597395 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 74-95-3 | Dibromomethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596934 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597171 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596932 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597168 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596933 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597169 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597217 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597369 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597382 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597391 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597375 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597384 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597381 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597181 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597394 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596906 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597385 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597389 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596901 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596904 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597200 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597195 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597179 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597204 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597198 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 7.96 | 1 | 0.724 | mg/kg | U | | 0.109 | | 0.724 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597228 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597229 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597206 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 122-39-4 | Diphenylamine | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596913 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597213 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 206-44-0 | Fluoranthene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597202 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 86-73-7 | Fluorene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597227 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597186 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597189 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597175 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596907 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597224 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597378 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 74-88-4 | Iodomethane | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597085 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Fe | Iron | 7.96 | 1 | 7220 | mg/kg | NQ | | 8.26 | | 25.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597177 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 78-59-1 | Isophorone | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596918 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596929 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597086 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Pb | Lead | 7.96 | 1 | 9.89 | mg/kg | NQ | | 0.341 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597087 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Mg | Magnesium | 7.96 | 1 | 289 | mg/kg | NQ | | 8.78 | | 31 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597088 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Mn | Manganese | 7.96 | 1 | 319 | mg/kg | J | | 0.207 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597089 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Hg | Mercury | 7.96 | 1 | 0.0101 | mg/kg | J | | 0.00385 | | 0.0115 | Y | INORGANIC | SW-846:7471A | GELC | 07/31/2014 | 07/17/2014 |
| 11596902 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597380 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597188 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597172 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597174 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597184 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 91-20-3 | Naphthalene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597090 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Ni | Nickel | 7.96 | 2 | 2.19 | mg/kg | NQ | | 0.107 | | 0.429 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597145 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | NO3 | Nitrate | 7.96 | 1 | 1.09 | mg/kg | U | | 0.359 | | 1.09 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/31/2014 | 07/17/2014 |
| 11597193 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.12 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597194 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597205 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597176 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597178 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597201 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597173 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597162 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597230 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597209 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597150 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | ClO4 | Perchlorate | 7.96 | 1 | 0.00215 | mg/kg | U | | 0.000538 | | 0.00215 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/17/2014 |
| 11597210 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 85-01-8 | Phenanthrene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597165 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 108-95-2 | Phenol | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597091 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | K | Potassium | 7.96 | 1 | 337 | mg/kg | NQ | | 6.61 | | 25.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11596922 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597214 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 129-00-0 | Pyrene | 7.96 | 1 | 0.0362 | mg/kg | U | | 0.0109 | | 0.0362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597163 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 110-86-1 | Pyridine | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597092 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Se | Selenium | 7.96 | 2 | 1.07 | mg/kg | U | | 0.354 | | 1.07 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597093 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Ag | Silver | 7.96 | 1 | 0.17 | mg/kg | J | | 0.103 | | 0.516 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597094 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Na | Sodium | 7.96 | 1 | 97.9 | mg/kg | NQ | | 7.23 | | 25.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11596916 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 100-42-5 | Styrene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596912 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596919 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596908 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597095 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Tl | Thallium | 7.96 | 2 | 0.429 | mg/kg | U | | 0.0644 | | 0.429 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11596903 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 108-88-3 | Toluene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597377 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597183 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597388 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596905 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597393 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 79-01-6 | Trichloroethene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597374 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597191 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597190 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 7.96 | 1 | 0.362 | mg/kg | U | | 0.109 | | 0.362 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596920 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596925 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596924 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597153 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | U-234 | Uranium-234 | 7.96 | 1 | 1.35 | pCi/g | NQ | 0.0703 | | 0.0727 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597154 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 7.96 | 1 | 0.0861 | pCi/g | NQ | 0.0395 | | 0.0214 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597155 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | U-238 | Uranium-238 | 7.96 | 1 | 1.34 | pCi/g | NQ | 0.0499 | | 0.0725 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597096 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | V | Vanadium | 7.96 | 1 | 3.81 | mg/kg | NQ | | 0.103 | | 0.516 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597371 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596915 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596914 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 7.96 | 1 | 0.00217 | mg/kg | U | | 0.000725 | | 0.00217 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597097 | 57-007 | 2014-3910 | RE57-14-84990 | N | HA | INV | NA | REG | 57-4016 | 2.5 | 3.5 | ft | S | SOIL | Zn | Zinc | 7.96 | 1 | 44.9 | mg/kg | NQ | | 0.413 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11583318 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 83-32-9 | Acenaphthene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583317 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583061 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 67-64-1 | Acetone | 13.5 | 1 | 0.00578 | mg/kg | U | | 0.00193 | | 0.00578 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582392 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Al | Aluminum | 13.5 | 1 | 29600 | mg/kg | NQ | | 7.82 | | 23 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583285 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 62-53-3 | Aniline | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583498 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 120-12-7 | Anthracene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582393 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Sb | Antimony | 13.5 | 1 | 1.15 | mg/kg | U | | 0.379 | | 1.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582394 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | As | Arsenic | 13.5 | 2 | 3.85 | mg/kg | NQ | | 0.207 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583494 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 103-33-3 | Azobenzene | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582395 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Ba | Barium | 13.5 | 1 | 70.5 | mg/kg | NQ | | 0.115 | | 0.575 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583077 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 71-43-2 | Benzene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583503 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583510 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583508 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583513 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583509 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583303 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 13.5 | 1 | 0.77 | mg/kg | U | | 0.193 | | 0.77 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583291 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582396 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Be | Beryllium | 13.5 | 2 | 2.29 | mg/kg | NQ | | 0.0207 | | 0.103 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583301 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583287 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583506 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583102 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 108-86-1 | Bromobenzene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583071 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583081 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583098 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-25-2 | Bromoform | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583057 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 74-83-9 | Bromomethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583495 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583068 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 13.5 | 1 | 0.00578 | mg/kg | U | | 0.00193 | | 0.00578 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583111 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583109 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583108 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583502 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582397 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Cd | Cadmium | 13.5 | 1 | 0.575 | mg/kg | U | | 0.115 | | 0.575 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582398 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Ca | Calcium | 13.5 | 1 | 4290 | mg/kg | NQ | | 9.2 | | 28.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583064 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 13.5 | 1 | 0.00578 | mg/kg | U | | 0.00193 | | 0.00578 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583075 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583308 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.154 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583306 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583092 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583090 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583058 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-00-3 | Chloroethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583072 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 67-66-3 | Chloroform | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583055 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 74-87-3 | Chloromethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583313 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583288 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583490 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583104 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583107 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582399 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Cr | Chromium | 13.5 | 1 | 11.9 | mg/kg | NQ | | 0.172 | | 0.575 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583505 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 218-01-9 | Chrysene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582400 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Co | Cobalt | 13.5 | 1 | 2.62 | mg/kg | NQ | | 0.172 | | 0.575 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582401 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Cu | Copper | 13.5 | 1 | 11.4 | mg/kg | NQ | | 0.345 | | 1.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11582634 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 13.5 | 1 | 0.283 | mg/kg | U | | 0.0947 | | 0.283 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11583499 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583507 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583512 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583320 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583112 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000578 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583091 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583080 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 74-95-3 | Dibromomethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583115 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583292 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583113 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583289 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583114 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583290 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583504 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583054 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583067 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583076 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583060 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583069 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583066 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583302 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583079 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583087 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583070 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583074 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583082 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583085 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583321 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583316 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583300 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583491 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583319 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 13.5 | 1 | 0.77 | mg/kg | U | | 0.116 | | 0.77 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583515 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583516 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583493 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 122-39-4 | Diphenylamine | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583094 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583500 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 206-44-0 | Fluoranthene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583489 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 86-73-7 | Fluorene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583514 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583307 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583310 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583296 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583088 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 13.5 | 1 | 0.00578 | mg/kg | U | | 0.00193 | | 0.00578 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583511 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583063 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 74-88-4 | Iodomethane | 13.5 | 1 | 0.00578 | mg/kg | U | | 0.00193 | | 0.00578 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582402 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Fe | Iron | 13.5 | 1 | 20800 | mg/kg | NQ | | 9.2 | | 28.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583298 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 78-59-1 | Isophorone | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583099 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583110 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582403 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Pb | Lead | 13.5 | 1 | 18.6 | mg/kg | NQ | | 0.379 | | 1.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582404 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Mg | Magnesium | 13.5 | 1 | 2830 | mg/kg | NQ | | 9.77 | | 34.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582405 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Mn | Manganese | 13.5 | 1 | 92.5 | mg/kg | NQ | | 0.23 | | 1.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582406 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Hg | Mercury | 13.5 | 1 | 0.0145 | mg/kg | NQ | | 0.0045 | | 0.0134 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11583083 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 13.5 | 1 | 0.00578 | mg/kg | U | | 0.00193 | | 0.00578 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583065 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 13.5 | 1 | 0.00578 | mg/kg | U | | 0.00193 | | 0.00578 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583309 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583293 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583295 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583305 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 91-20-3 | Naphthalene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582407 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Ni | Nickel | 13.5 | 2 | 9.16 | mg/kg | NQ | | 0.103 | | 0.414 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582635 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | NO3 | Nitrate | 13.5 | 1 | 1.16 | mg/kg | U | | 0.382 | | 1.16 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11583314 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.127 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583315 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583492 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583297 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583299 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583322 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583294 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583283 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583517 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583496 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582825 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | ClO4 | Perchlorate | 13.5 | 1 | 0.00159 | mg/kg | J | | 0.00057 | | 0.00228 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11583497 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 85-01-8 | Phenanthrene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583286 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 108-95-2 | Phenol | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582408 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | K | Potassium | 13.5 | 1 | 1740 | mg/kg | NQ | | 7.36 | | 28.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583103 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583501 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 129-00-0 | Pyrene | 13.5 | 1 | 0.0385 | mg/kg | U | | 0.0116 | | 0.0385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583284 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 110-86-1 | Pyridine | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582409 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Se | Selenium | 13.5 | 2 | 1.03 | mg/kg | U | | 0.341 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582410 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Ag | Silver | 13.5 | 1 | 0.25 | mg/kg | J | | 0.115 | | 0.575 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582411 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Na | Sodium | 13.5 | 1 | 196 | mg/kg | NQ | | 8.05 | | 28.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583097 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 100-42-5 | Styrene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583093 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583100 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583089 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582412 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Tl | Thallium | 13.5 | 2 | 0.156 | mg/kg | J | | 0.0621 | | 0.414 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583084 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 108-88-3 | Toluene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583062 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 13.5 | 1 | 0.00578 | mg/kg | U | | 0.00193 | | 0.00578 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583304 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583073 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583086 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583078 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 79-01-6 | Trichloroethene | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583059 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583312 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583311 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 13.5 | 1 | 0.385 | mg/kg | U | | 0.116 | | 0.385 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583101 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583106 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583105 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582848 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | U-234 | Uranium-234 | 13.5 | 1 | 1.55 | pCi/g | NQ | 0.108 | | 0.0823 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582849 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 13.5 | 1 | 0.0479 | pCi/g | U | 0.0777 | | 0.022 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582850 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | U-238 | Uranium-238 | 13.5 | 1 | 1.67 | pCi/g | NQ | 0.0678 | | 0.0857 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582413 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | V | Vanadium | 13.5 | 1 | 21.6 | mg/kg | NQ | | 0.115 | | 0.575 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583056 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583096 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 13.5 | 1 | 0.00116 | mg/kg | U | | 0.000385 | | 0.00116 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583095 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 13.5 | 1 | 0.00231 | mg/kg | U | | 0.000771 | | 0.00231 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582414 | 57-007 | 2014-3751 | RE57-14-84150 | N | HA | INV | NA | REG | 57-4016 | 3 | 4 | ft | S | SOIL | Zn | Zinc | 13.5 | 1 | 47.3 | mg/kg | NQ | | 0.46 | | 1.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583553 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583552 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583123 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 67-64-1 | Acetone | 3.65 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582415 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Al | Aluminum | 3.65 | 1 | 4140 | mg/kg | NQ | | 6.39 | | 18.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583520 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 62-53-3 | Aniline | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583567 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 120-12-7 | Anthracene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582416 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Sb | Antimony | 3.65 | 1 | 0.94 | mg/kg | U | | 0.31 | | 0.94 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582417 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | As | Arsenic | 3.65 | 2 | 0.842 | mg/kg | J | | 0.207 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583563 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 103-33-3 | Azobenzene | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582418 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Ba | Barium | 3.65 | 1 | 28.1 | mg/kg | NQ | | 0.094 | | 0.47 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583139 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 71-43-2 | Benzene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583572 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583579 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583577 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583582 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583578 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583538 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 3.65 | 1 | 0.691 | mg/kg | U | | 0.173 | | 0.691 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583526 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582419 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Be | Beryllium | 3.65 | 2 | 0.504 | mg/kg | NQ | | 0.0207 | | 0.103 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583536 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583522 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583575 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582096 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583133 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583143 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582092 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-25-2 | Bromoform | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583119 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 74-83-9 | Bromomethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583564 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583130 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 3.65 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582105 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582103 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582102 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583571 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582420 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Cd | Cadmium | 3.65 | 1 | 0.47 | mg/kg | U | | 0.094 | | 0.47 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582421 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Ca | Calcium | 3.65 | 1 | 284 | mg/kg | NQ | | 7.52 | | 23.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583126 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 3.65 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583137 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583543 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.138 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583541 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582086 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582084 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583120 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-00-3 | Chloroethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583134 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 67-66-3 | Chloroform | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583117 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 74-87-3 | Chloromethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583548 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583523 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583559 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582098 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582101 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582422 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Cr | Chromium | 3.65 | 1 | 29.1 | mg/kg | NQ | | 0.141 | | 0.47 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583574 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 218-01-9 | Chrysene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582423 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Co | Cobalt | 3.65 | 1 | 0.794 | mg/kg | NQ | | 0.141 | | 0.47 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582424 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Cu | Copper | 3.65 | 1 | 2.56 | mg/kg | NQ | | 0.282 | | 0.94 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582636 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 3.65 | 1 | 0.236 | mg/kg | U | | 0.0788 | | 0.236 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11583568 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583576 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583581 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583555 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582106 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000519 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582085 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583142 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582109 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583527 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582107 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583524 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582108 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583525 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583573 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583116 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583129 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583138 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583122 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583131 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583128 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583537 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583141 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582081 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583132 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583136 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583144 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582079 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583556 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |

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| 11583551 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583535 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583560 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583554 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 3.65 | 1 | 0.691 | mg/kg | U | | 0.104 | | 0.691 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583584 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583585 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583562 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582088 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583569 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583558 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 86-73-7 | Fluorene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583583 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583542 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583545 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583531 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582082 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 3.65 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583580 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583125 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 74-88-4 | Iodomethane | 3.65 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582425 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Fe | Iron | 3.65 | 1 | 7890 | mg/kg | NQ | | 7.52 | | 23.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583533 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 78-59-1 | Isophorone | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582093 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582104 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582426 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Pb | Lead | 3.65 | 1 | 7.96 | mg/kg | NQ | | 0.31 | | 0.94 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582427 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Mg | Magnesium | 3.65 | 1 | 136 | mg/kg | NQ | | 7.99 | | 28.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582428 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Mn | Manganese | 3.65 | 1 | 339 | mg/kg | NQ | | 0.188 | | 0.94 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582429 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Hg | Mercury | 3.65 | 1 | 0.0201 | mg/kg | NQ | | 0.00367 | | 0.0109 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11583145 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 3.65 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583127 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 3.65 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583544 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583528 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583530 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583540 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 91-20-3 | Naphthalene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582430 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Ni | Nickel | 3.65 | 2 | 2.68 | mg/kg | NQ | | 0.103 | | 0.413 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582637 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | NO3 | Nitrate | 3.65 | 1 | 1.04 | mg/kg | U | | 0.342 | | 1.04 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11583549 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.114 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583550 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583561 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583532 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583534 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583557 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583529 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583518 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583586 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583565 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582826 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | ClO4 | Perchlorate | 3.65 | 1 | 0.000636 | mg/kg | J | | 0.000519 | | 0.00208 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11583566 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583521 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 108-95-2 | Phenol | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582431 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | K | Potassium | 3.65 | 1 | 580 | mg/kg | NQ | | 6.02 | | 23.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582097 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583570 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 129-00-0 | Pyrene | 3.65 | 1 | 0.0345 | mg/kg | U | | 0.0104 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583519 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 110-86-1 | Pyridine | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582432 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Se | Selenium | 3.65 | 2 | 1.03 | mg/kg | U | | 0.341 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582433 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Ag | Silver | 3.65 | 1 | 0.47 | mg/kg | U | | 0.094 | | 0.47 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582434 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Na | Sodium | 3.65 | 1 | 317 | mg/kg | NQ | | 6.58 | | 23.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582091 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 100-42-5 | Styrene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582087 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582094 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582083 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582435 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Tl | Thallium | 3.65 | 2 | 0.413 | mg/kg | U | | 0.062 | | 0.413 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583146 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 108-88-3 | Toluene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583124 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 3.65 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583539 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583135 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582080 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583140 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583121 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583547 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583546 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 3.65 | 1 | 0.345 | mg/kg | U | | 0.104 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582095 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582100 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582099 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582851 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | U-234 | Uranium-234 | 3.65 | 1 | 1.34 | pCi/g | NQ | 0.108 | | 0.0777 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582852 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 3.65 | 1 | 0.0956 | pCi/g | NQ | 0.0775 | | 0.0238 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582853 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | U-238 | Uranium-238 | 3.65 | 1 | 1.37 | pCi/g | NQ | 0.0676 | | 0.0774 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582436 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | V | Vanadium | 3.65 | 1 | 1.91 | mg/kg | NQ | | 0.094 | | 0.47 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583118 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582090 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 3.65 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582089 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 3.65 | 1 | 0.00208 | mg/kg | U | | 0.000692 | | 0.00208 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582437 | 57-007 | 2014-3751 | RE57-14-84161 | N | HA | INV | NA | REG | 57-4016 | 6 | 7 | ft | R | QBT3 | Zn | Zinc | 3.65 | 1 | 52.6 | mg/kg | NQ | | 0.376 | | 0.94 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11598241 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 83-32-9 | Acenaphthene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598240 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598100 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 67-64-1 | Acetone | 7.93 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597442 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Al | Aluminum | 7.93 | 1 | 5730 | mg/kg | NQ | | 7.13 | | 21 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598208 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 62-53-3 | Aniline | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598255 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 120-12-7 | Anthracene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597443 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Sb | Antimony | 7.93 | 1 | 0.488 | mg/kg | J | | 0.346 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597444 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | As | Arsenic | 7.93 | 2 | 1.28 | mg/kg | J | | 0.215 | | 1.08 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598251 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 103-33-3 | Azobenzene | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597445 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Ba | Barium | 7.93 | 1 | 77.3 | mg/kg | NQ | | 0.105 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598116 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 71-43-2 | Benzene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598260 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598267 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598265 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598270 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598266 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598226 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 7.93 | 1 | 0.722 | mg/kg | U | | 0.181 | | 0.722 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598214 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597446 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Be | Beryllium | 7.93 | 2 | 0.472 | mg/kg | NQ | | 0.0215 | | 0.108 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598224 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598210 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598263 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598141 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 108-86-1 | Bromobenzene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598110 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598120 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598137 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-25-2 | Bromoform | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598096 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 74-83-9 | Bromomethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598252 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598107 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 7.93 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598288 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598148 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598147 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598259 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597447 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Cd | Cadmium | 7.93 | 1 | 0.524 | mg/kg | U | | 0.105 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597448 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Ca | Calcium | 7.93 | 1 | 1100 | mg/kg | NQ | | 8.39 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598103 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 7.93 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598114 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598231 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.144 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598229 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598131 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598129 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598097 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-00-3 | Chloroethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598111 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 67-66-3 | Chloroform | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598094 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 74-87-3 | Chloromethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598236 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598211 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598247 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598143 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598146 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597449 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Cr | Chromium | 7.93 | 1 | 3.67 | mg/kg | NQ | | 0.157 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598262 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 218-01-9 | Chrysene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597450 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Co | Cobalt | 7.93 | 1 | 1.86 | mg/kg | NQ | | 0.157 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597451 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Cu | Copper | 7.93 | 1 | 2.66 | mg/kg | NQ | | 0.315 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598066 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 7.93 | 1 | 0.272 | mg/kg | U | | 0.0907 | | 0.272 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11598256 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598264 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598269 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598243 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598289 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000543 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598130 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598119 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 74-95-3 | Dibromomethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598292 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598215 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598290 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598212 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598291 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598213 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598261 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598093 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598106 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598115 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598099 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598108 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598105 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598225 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598118 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598126 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598109 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598113 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598121 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598124 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598244 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598239 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598223 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598248 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598242 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 7.93 | 1 | 0.722 | mg/kg | U | | 0.108 | | 0.722 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598272 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598273 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598250 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 122-39-4 | Diphenylamine | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598133 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598257 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 206-44-0 | Fluoranthene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598246 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 86-73-7 | Fluorene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598271 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598230 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598233 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598219 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598127 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 7.93 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598268 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598102 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 74-88-4 | Iodomethane | 7.93 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597452 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Fe | Iron | 7.93 | 1 | 8540 | mg/kg | NQ | | 8.39 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598221 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 78-59-1 | Isophorone | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598138 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598287 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597453 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Pb | Lead | 7.93 | 1 | 9.8 | mg/kg | NQ | | 0.346 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597454 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Mg | Magnesium | 7.93 | 1 | 596 | mg/kg | NQ | | 8.91 | | 31.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597455 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Mn | Manganese | 7.93 | 1 | 412 | mg/kg | NQ | | 0.21 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597456 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Hg | Mercury | 7.93 | 1 | 0.0114 | mg/kg | J | | 0.00423 | | 0.0126 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11598122 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 7.93 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598104 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 7.93 | 1 | 0.00277 | mg/kg | J+ | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598232 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598216 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |

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| 11598218 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598228 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 91-20-3 | Naphthalene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597457 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Ni | Nickel | 7.93 | 2 | 3.24 | mg/kg | NQ | | 0.108 | | 0.43 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598067 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | NO3 | Nitrate | 7.93 | 1 | 1.09 | mg/kg | U | | 0.358 | | 1.09 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11598237 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.119 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598238 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598249 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598220 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598222 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598245 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598217 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598206 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598274 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598253 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598150 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | ClO4 | Perchlorate | 7.93 | 1 | 0.00217 | mg/kg | U | | 0.000543 | | 0.00217 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11598254 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 85-01-8 | Phenanthrene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598209 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 108-95-2 | Phenol | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597458 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | K | Potassium | 7.93 | 1 | 711 | mg/kg | NQ | | 6.71 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598142 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598258 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 129-00-0 | Pyrene | 7.93 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598207 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 110-86-1 | Pyridine | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597459 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Se | Selenium | 7.93 | 2 | 1.08 | mg/kg | U | | 0.355 | | 1.08 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597460 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Ag | Silver | 7.93 | 1 | 0.115 | mg/kg | J | | 0.105 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597461 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Na | Sodium | 7.93 | 1 | 103 | mg/kg | NQ | | 7.34 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598136 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 100-42-5 | Styrene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598132 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598139 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598128 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597462 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Tl | Thallium | 7.93 | 2 | 0.0873 | mg/kg | J | | 0.0645 | | 0.43 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598123 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 108-88-3 | Toluene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598101 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 7.93 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598227 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598112 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598125 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598117 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 79-01-6 | Trichloroethene | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598098 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598235 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598234 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 7.93 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598140 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598145 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598144 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598164 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | U-234 | Uranium-234 | 7.93 | 1 | 1.09 | pCi/g | NQ | 0.114 | | 0.0713 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598165 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 7.93 | 1 | 0.0844 | pCi/g | NQ | 0.0821 | | 0.0232 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598166 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | U-238 | Uranium-238 | 7.93 | 1 | 1.02 | pCi/g | J | 0.0716 | | 0.0685 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597463 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | V | Vanadium | 7.93 | 1 | 8.3 | mg/kg | NQ | | 0.105 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598095 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598135 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 7.93 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598134 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 7.93 | 1 | 0.00217 | mg/kg | U | | 0.000724 | | 0.00217 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597464 | 57-007 | 2014-3795 | RE57-14-84140 | N | HA | INV | NA | REG | 57-4017 | 0 | 1 | ft | S | SOIL | Zn | Zinc | 7.93 | 1 | 43.1 | mg/kg | NQ | | 0.419 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598485 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 83-32-9 | Acenaphthene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598484 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598300 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 67-64-1 | Acetone | 4.46 | 1 | 0.00523 | mg/kg | U | | 0.00174 | | 0.00523 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597465 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Al | Aluminum | 4.46 | 1 | 4510 | mg/kg | NQ | | 6.52 | | 19.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598277 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 62-53-3 | Aniline | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598499 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 120-12-7 | Anthracene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597466 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Sb | Antimony | 4.46 | 1 | 0.437 | mg/kg | J | | 0.316 | | 0.959 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597467 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | As | Arsenic | 4.46 | 2 | 1.01 | mg/kg | J | | 0.206 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598495 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 103-33-3 | Azobenzene | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597468 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Ba | Barium | 4.46 | 1 | 54.8 | mg/kg | NQ | | 0.0959 | | 0.479 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598316 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 71-43-2 | Benzene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598504 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598511 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598509 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598514 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598510 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598470 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 4.46 | 1 | 0.697 | mg/kg | U | | 0.174 | | 0.697 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598283 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597469 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Be | Beryllium | 4.46 | 2 | 0.393 | mg/kg | NQ | | 0.0206 | | 0.103 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598468 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598279 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598507 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598341 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 108-86-1 | Bromobenzene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598310 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598320 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598337 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-25-2 | Bromoform | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598296 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 74-83-9 | Bromomethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598496 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598307 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 4.46 | 1 | 0.00523 | mg/kg | U | | 0.00174 | | 0.00523 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598350 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598348 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598347 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598503 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597470 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Cd | Cadmium | 4.46 | 1 | 0.479 | mg/kg | U | | 0.0959 | | 0.479 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597471 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Ca | Calcium | 4.46 | 1 | 1020 | mg/kg | NQ | | 7.67 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598303 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 4.46 | 1 | 0.00523 | mg/kg | U | | 0.00174 | | 0.00523 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598314 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598475 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.139 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598473 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598331 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598329 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598297 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-00-3 | Chloroethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598311 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 67-66-3 | Chloroform | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598294 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 74-87-3 | Chloromethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598480 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598280 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598491 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598343 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598346 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597472 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Cr | Chromium | 4.46 | 1 | 3.63 | mg/kg | NQ | | 0.144 | | 0.479 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598506 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 218-01-9 | Chrysene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597473 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Co | Cobalt | 4.46 | 1 | 1.69 | mg/kg | NQ | | 0.144 | | 0.479 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597474 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Cu | Copper | 4.46 | 1 | 2.2 | mg/kg | NQ | | 0.288 | | 0.959 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598068 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 4.46 | 1 | 0.252 | mg/kg | U | | 0.084 | | 0.252 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11598500 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598508 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598513 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598487 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598351 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000523 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598330 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598319 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 74-95-3 | Dibromomethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598354 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598284 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598352 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598281 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598353 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598282 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598505 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598293 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598306 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598315 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598299 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598308 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598305 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598469 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598318 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598326 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598309 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598313 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598321 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598324 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598488 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598483 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598467 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598492 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598486 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 4.46 | 1 | 0.697 | mg/kg | U | | 0.105 | | 0.697 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598516 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598517 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598494 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 122-39-4 | Diphenylamine | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598333 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598501 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 206-44-0 | Fluoranthene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598490 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 86-73-7 | Fluorene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598515 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598474 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598477 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598463 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598327 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 4.46 | 1 | 0.00523 | mg/kg | U | | 0.00174 | | 0.00523 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598512 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598302 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 74-88-4 | Iodomethane | 4.46 | 1 | 0.00523 | mg/kg | U | | 0.00174 | | 0.00523 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597475 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Fe | Iron | 4.46 | 1 | 7730 | mg/kg | NQ | | 7.67 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598465 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 78-59-1 | Isophorone | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598338 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598349 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597476 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Pb | Lead | 4.46 | 1 | 9.28 | mg/kg | NQ | | 0.316 | | 0.959 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597477 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Mg | Magnesium | 4.46 | 1 | 525 | mg/kg | NQ | | 8.15 | | 28.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597478 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Mn | Manganese | 4.46 | 1 | 313 | mg/kg | NQ | | 0.192 | | 0.959 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597479 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Hg | Mercury | 4.46 | 1 | 0.0114 | mg/kg | J | | 0.0041 | | 0.0122 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11598322 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 4.46 | 1 | 0.00523 | mg/kg | U | | 0.00174 | | 0.00523 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598304 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 4.46 | 1 | 0.00523 | mg/kg | U | | 0.00174 | | 0.00523 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598476 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598285 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598462 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598472 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 91-20-3 | Naphthalene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597480 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Ni | Nickel | 4.46 | 2 | 2.74 | mg/kg | NQ | | 0.103 | | 0.413 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598069 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | NO3 | Nitrate | 4.46 | 1 | 1.05 | mg/kg | U | | 0.345 | | 1.05 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11598481 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.115 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598482 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598493 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598464 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598466 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598489 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598286 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598275 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598518 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598497 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598151 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | ClO4 | Perchlorate | 4.46 | 1 | 0.00206 | mg/kg | U | | 0.000516 | | 0.00206 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11598498 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 85-01-8 | Phenanthrene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598278 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 108-95-2 | Phenol | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597481 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | K | Potassium | 4.46 | 1 | 635 | mg/kg | NQ | | 6.13 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598342 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598502 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 129-00-0 | Pyrene | 4.46 | 1 | 0.0348 | mg/kg | U | | 0.0105 | | 0.0348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598276 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 110-86-1 | Pyridine | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597482 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Se | Selenium | 4.46 | 2 | 1.03 | mg/kg | U | | 0.341 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597483 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Ag | Silver | 4.46 | 1 | 0.479 | mg/kg | U | | 0.0959 | | 0.479 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597484 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Na | Sodium | 4.46 | 1 | 107 | mg/kg | NQ | | 6.71 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598336 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 100-42-5 | Styrene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598332 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598339 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598328 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597485 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Tl | Thallium | 4.46 | 2 | 0.413 | mg/kg | U | | 0.0619 | | 0.413 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |

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| 11598323 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 108-88-3 | Toluene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598301 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 4.46 | 1 | 0.00523 | mg/kg | U | | 0.00174 | | 0.00523 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598471 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598312 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598325 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598317 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 79-01-6 | Trichloroethene | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598298 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598479 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598478 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 4.46 | 1 | 0.348 | mg/kg | U | | 0.105 | | 0.348 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598340 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598345 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598344 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598167 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | U-234 | Uranium-234 | 4.46 | 1 | 1.37 | pCi/g | NQ | 0.149 | | 0.091 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598168 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 4.46 | 1 | 0.0512 | pCi/g | U | 0.107 | | 0.0284 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598169 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | U-238 | Uranium-238 | 4.46 | 1 | 1.33 | pCi/g | NQ | 0.0932 | | 0.0904 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597486 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | V | Vanadium | 4.46 | 1 | 7.1 | mg/kg | NQ | | 0.0959 | | 0.479 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598295 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598335 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 4.46 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598334 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 4.46 | 1 | 0.00209 | mg/kg | U | | 0.000698 | | 0.00209 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597487 | 57-007 | 2014-3795 | RE57-14-84151 | N | HA | INV | NA | REG | 57-4017 | 1 | 2 | ft | S | SOIL | Zn | Zinc | 4.46 | 1 | 41.4 | mg/kg | NQ | | 0.383 | | 0.959 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597266 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597265 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596942 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 67-64-1 | Acetone | 3.5 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597098 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Al | Aluminum | 3.5 | 1 | 3300 | mg/kg | NQ | | 5.95 | | 17.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597233 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 62-53-3 | Aniline | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597280 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 120-12-7 | Anthracene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597099 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Sb | Antimony | 3.5 | 1 | 0.875 | mg/kg | U | | 0.289 | | 0.875 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597100 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | As | Arsenic | 3.5 | 2 | 0.997 | mg/kg | NQ | | 0.183 | | 0.917 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597276 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597101 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Ba | Barium | 3.5 | 1 | 19.6 | mg/kg | NQ | | 0.0875 | | 0.438 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11596958 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 71-43-2 | Benzene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597285 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597292 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597290 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597295 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597291 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597251 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 3.5 | 1 | 0.688 | mg/kg | U | | 0.172 | | 0.688 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597239 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597102 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Be | Beryllium | 3.5 | 2 | 0.592 | mg/kg | NQ | | 0.0183 | | 0.0917 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597249 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597235 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597288 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596983 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596952 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596962 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596979 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-25-2 | Bromoform | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596938 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597277 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596949 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 3.5 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596992 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596990 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596989 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597284 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597103 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Cd | Cadmium | 3.5 | 1 | 0.438 | mg/kg | U | | 0.0875 | | 0.438 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597104 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Ca | Calcium | 3.5 | 1 | 415 | mg/kg | NQ | | 7 | | 21.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11596945 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 3.5 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596956 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597256 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.138 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597254 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596973 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596971 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596939 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596953 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 67-66-3 | Chloroform | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596936 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597261 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597236 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597272 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596985 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596988 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597105 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Cr | Chromium | 3.5 | 1 | 10.7 | mg/kg | NQ | | 0.131 | | 0.438 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597287 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 218-01-9 | Chrysene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597106 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Co | Cobalt | 3.5 | 1 | 0.831 | mg/kg | NQ | | 0.131 | | 0.438 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597107 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Cu | Copper | 3.5 | 1 | 1.28 | mg/kg | NQ | | 0.263 | | 0.875 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597146 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 3.5 | 1 | 0.254 | mg/kg | U | | 0.0848 | | 0.254 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/17/2014 |
| 11597281 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597289 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597294 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597268 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596993 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000518 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596972 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596961 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596996 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597240 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596994 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597237 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596995 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597238 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597286 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596935 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596948 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596957 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596941 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596950 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596947 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597250 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596960 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596968 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596951 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596955 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596963 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596966 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597269 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597264 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597248 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597273 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597267 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 3.5 | 1 | 0.688 | mg/kg | U | | 0.103 | | 0.688 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597297 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597298 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597275 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596975 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597282 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597271 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 86-73-7 | Fluorene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597296 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597255 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597258 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597244 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596969 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 3.5 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597293 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596944 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 3.5 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597108 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Fe | Iron | 3.5 | 1 | 7280 | mg/kg | NQ | | 7 | | 21.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597246 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 78-59-1 | Isophorone | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596980 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596991 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597109 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Pb | Lead | 3.5 | 1 | 8.02 | mg/kg | NQ | | 0.289 | | 0.875 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597110 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Mg | Magnesium | 3.5 | 1 | 195 | mg/kg | NQ | | 7.44 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597111 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Mn | Manganese | 3.5 | 1 | 279 | mg/kg | NQ | | 0.175 | | 0.875 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597112 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Hg | Mercury | 3.5 | 1 | 0.0137 | mg/kg | NQ | | 0.004 | | 0.0119 | Y | INORGANIC | SW-846:7471A | GELC | 07/31/2014 | 07/17/2014 |
| 11596964 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 3.5 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596946 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 3.5 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597257 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597241 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597243 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597253 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597113 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Ni | Nickel | 3.5 | 2 | 1.63 | mg/kg | NQ | | 0.0917 | | 0.367 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597147 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | NO3 | Nitrate | 3.5 | 1 | 1.04 | mg/kg | U | | 0.342 | | 1.04 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/31/2014 | 07/17/2014 |
| 11597262 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.113 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597263 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597274 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597245 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597247 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597270 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597242 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597231 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597299 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597278 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597151 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | ClO4 | Perchlorate | 3.5 | 1 | 0.00204 | mg/kg | U | | 0.00051 | | 0.00204 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/17/2014 |
| 11597279 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597234 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 108-95-2 | Phenol | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597114 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | K | Potassium | 3.5 | 1 | 282 | mg/kg | NQ | | 5.6 | | 21.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11596984 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597283 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 129-00-0 | Pyrene | 3.5 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597232 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 110-86-1 | Pyridine | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597115 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Se | Selenium | 3.5 | 2 | 0.917 | mg/kg | U | | 0.303 | | 0.917 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597116 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Ag | Silver | 3.5 | 1 | 0.438 | mg/kg | U | | 0.0875 | | 0.438 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597117 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Na | Sodium | 3.5 | 1 | 96.1 | mg/kg | NQ | | 6.13 | | 21.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11596978 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 100-42-5 | Styrene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596974 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596981 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596970 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597118 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Tl | Thallium | 3.5 | 2 | 0.367 | mg/kg | U | | 0.055 | | 0.367 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11596965 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 108-88-3 | Toluene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596943 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 3.5 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597252 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596954 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596967 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596959 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596940 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597260 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11597259 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 3.5 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/17/2014 |
| 11596982 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596987 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596986 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597156 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | U-234 | Uranium-234 | 3.5 | 1 | 1.3 | pCi/g | NQ | 0.0771 | | 0.0747 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597157 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 3.5 | 1 | 0.0577 | pCi/g | NQ | 0.0433 | | 0.0189 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597158 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | U-238 | Uranium-238 | 3.5 | 1 | 1.4 | pCi/g | NQ | 0.0547 | | 0.0774 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597119 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | V | Vanadium | 3.5 | 1 | 2.4 | mg/kg | NQ | | 0.0875 | | 0.438 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11596937 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596977 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 3.5 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596976 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 3.5 | 1 | 0.00207 | mg/kg | U | | 0.000691 | | 0.00207 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597120 | 57-007 | 2014-3910 | RE57-14-85005 | N | HA | INV | NA | REG | 57-4017 | 2.5 | 3.5 | ft | R | QBT3 | Zn | Zinc | 3.5 | 1 | 53.2 | mg/kg | NQ | | 0.35 | | 0.875 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11598554 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598553 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598362 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 67-64-1 | Acetone | 4.29 | 1 | 0.00522 | mg/kg | U | | 0.00174 | | 0.00522 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597488 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Al | Aluminum | 4.29 | 1 | 3660 | mg/kg | NQ | | 6.7 | | 19.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598521 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 62-53-3 | Aniline | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598568 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 120-12-7 | Anthracene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597489 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Sb | Antimony | 4.29 | 1 | 0.986 | mg/kg | U | | 0.325 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597490 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | As | Arsenic | 4.29 | 2 | 0.789 | mg/kg | J | | 0.197 | | 0.984 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598564 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11597491 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Ba | Barium | 4.29 | 1 | 22 | mg/kg | NQ | | 0.0986 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598378 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 71-43-2 | Benzene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598573 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598580 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598578 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598583 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598579 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598539 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 4.29 | 1 | 0.695 | mg/kg | U | | 0.174 | | 0.695 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598527 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597492 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Be | Beryllium | 4.29 | 2 | 0.749 | mg/kg | NQ | | 0.0197 | | 0.0984 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598537 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598523 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598576 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598403 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598372 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598382 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598399 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-25-2 | Bromoform | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598358 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598565 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598369 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 4.29 | 1 | 0.00522 | mg/kg | U | | 0.00174 | | 0.00522 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598412 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598410 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598409 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598572 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597493 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Cd | Cadmium | 4.29 | 1 | 0.493 | mg/kg | U | | 0.0986 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597494 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Ca | Calcium | 4.29 | 1 | 228 | mg/kg | NQ | | 7.89 | | 24.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598365 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 4.29 | 1 | 0.00522 | mg/kg | U | | 0.00174 | | 0.00522 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598376 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598544 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.139 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598542 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598393 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598391 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598359 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598373 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 67-66-3 | Chloroform | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598356 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598549 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598524 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598560 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598405 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598408 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597495 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Cr | Chromium | 4.29 | 1 | 46.9 | mg/kg | NQ | | 0.148 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598575 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 218-01-9 | Chrysene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597496 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Co | Cobalt | 4.29 | 1 | 0.78 | mg/kg | NQ | | 0.148 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597497 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Cu | Copper | 4.29 | 1 | 2.79 | mg/kg | NQ | | 0.296 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598070 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 4.29 | 1 | 0.251 | mg/kg | U | | 0.0839 | | 0.251 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11598569 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598577 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598582 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598556 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598413 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000522 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598392 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598381 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598416 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598528 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598414 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598525 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598415 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598526 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598574 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598355 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598368 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598377 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598361 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598370 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598367 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598538 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598380 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598388 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598371 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598375 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598383 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598386 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598557 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598552 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598536 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598561 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598555 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 4.29 | 1 | 0.695 | mg/kg | U | | 0.104 | | 0.695 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598585 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598586 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598563 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598395 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598570 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598559 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 86-73-7 | Fluorene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598584 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598543 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598546 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598532 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598389 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 4.29 | 1 | 0.00522 | mg/kg | U | | 0.00174 | | 0.00522 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598581 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598364 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 4.29 | 1 | 0.00522 | mg/kg | U | | 0.00174 | | 0.00522 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597498 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Fe | Iron | 4.29 | 1 | 7820 | mg/kg | NQ | | 7.89 | | 24.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598534 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 78-59-1 | Isophorone | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598400 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598411 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597499 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Pb | Lead | 4.29 | 1 | 11.5 | mg/kg | NQ | | 0.325 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597500 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Mg | Magnesium | 4.29 | 1 | 108 | mg/kg | NQ | | 8.38 | | 29.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597501 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Mn | Manganese | 4.29 | 1 | 434 | mg/kg | NQ | | 0.197 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597502 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Hg | Mercury | 4.29 | 1 | 0.00703 | mg/kg | J | | 0.00406 | | 0.0121 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11598384 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 4.29 | 1 | 0.00522 | mg/kg | U | | 0.00174 | | 0.00522 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598366 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 4.29 | 1 | 0.00522 | mg/kg | U | | 0.00174 | | 0.00522 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598545 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598529 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598531 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598541 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597503 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Ni | Nickel | 4.29 | 2 | 1.85 | mg/kg | NQ | | 0.0984 | | 0.394 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598071 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | NO3 | Nitrate | 4.29 | 1 | 1.04 | mg/kg | U | | 0.345 | | 1.04 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11598550 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.115 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598551 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598562 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598533 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598535 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598558 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598530 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598519 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598587 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598566 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598152 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | ClO4 | Perchlorate | 4.29 | 1 | 0.00209 | mg/kg | U | | 0.000522 | | 0.00209 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11598567 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598522 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 108-95-2 | Phenol | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597504 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | K | Potassium | 4.29 | 1 | 727 | mg/kg | NQ | | 6.31 | | 24.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598404 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598571 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 129-00-0 | Pyrene | 4.29 | 1 | 0.0347 | mg/kg | U | | 0.0104 | | 0.0347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598520 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 110-86-1 | Pyridine | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597505 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Se | Selenium | 4.29 | 2 | 0.984 | mg/kg | U | | 0.325 | | 0.984 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597506 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Ag | Silver | 4.29 | 1 | 0.493 | mg/kg | U | | 0.0986 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597507 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Na | Sodium | 4.29 | 1 | 434 | mg/kg | NQ | | 6.9 | | 24.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598398 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 100-42-5 | Styrene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598394 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598401 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598390 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597508 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Tl | Thallium | 4.29 | 2 | 0.394 | mg/kg | U | | 0.059 | | 0.394 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598385 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 108-88-3 | Toluene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598363 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 4.29 | 1 | 0.00522 | mg/kg | U | | 0.00174 | | 0.00522 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598540 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598374 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598387 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598379 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598360 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598548 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598547 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 4.29 | 1 | 0.347 | mg/kg | U | | 0.104 | | 0.347 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598402 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598407 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598406 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598170 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | U-234 | Uranium-234 | 4.29 | 1 | 1.51 | pCi/g | NQ | 0.106 | | 0.0804 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 |
| 11598171 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 4.29 | 1 | 0.11 | pCi/g | NQ | 0.0763 | | 0.0251 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 |
| 11598172 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | U-238 | Uranium-238 | 4.29 | 1 | 1.52 | pCi/g | NQ | 0.0666 | | 0.0808 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 |
| 11597509 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | V | Vanadium | 4.29 | 1 | 1.39 | mg/kg | NQ | | 0.0986 | | 0.493 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598357 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598397 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 4.29 | 1 | 0.00104 | mg/kg | U | | 0.000348 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598396 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 4.29 | 1 | 0.00209 | mg/kg | U | | 0.000697 | | 0.00209 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597510 | 57-007 | 2014-3795 | RE57-14-84162 | N | HA | INV | NA | REG | 57-4017 | 4 | 5 | ft | R | QBT3 | Zn | Zinc | 4.29 | 1 | 64.3 | mg/kg | NQ | | 0.394 | | 0.986 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11583622 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 83-32-9 | Acenaphthene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583621 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 208-96-8 | Acenaphthylene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582117 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 67-64-1 | Acetone | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582438 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Al | Aluminum | 10.2 | 1 | 8710 | mg/kg | NQ | | 7.08 | | 20.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583589 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 62-53-3 | Aniline | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583636 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 120-12-7 | Anthracene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582439 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Sb | Antimony | 10.2 | 1 | 1.04 | mg/kg | U | | 0.344 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582440 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | As | Arsenic | 10.2 | 2 | 1.73 | mg/kg | NQ | | 0.203 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583632 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 103-33-3 | Azobenzene | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582441 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Ba | Barium | 10.2 | 1 | 89.1 | mg/kg | NQ | | 0.104 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582133 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 71-43-2 | Benzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583641 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583648 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583646 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583651 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583647 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583607 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 65-85-0 | Benzoic Acid | 10.2 | 1 | 0.742 | mg/kg | U | | 0.185 | | 0.742 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583595 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582442 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Be | Beryllium | 10.2 | 2 | 0.794 | mg/kg | NQ | | 0.0203 | | 0.102 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583605 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583591 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583644 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582158 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 108-86-1 | Bromobenzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582127 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 74-97-5 | Bromochloromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582137 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582154 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-25-2 | Bromoform | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582113 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 74-83-9 | Bromomethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583633 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582124 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 78-93-3 | Butanone[2-] | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582167 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582165 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582164 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583640 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582443 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Cd | Cadmium | 10.2 | 1 | 0.521 | mg/kg | U | | 0.104 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582444 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Ca | Calcium | 10.2 | 1 | 1090 | mg/kg | NQ | | 8.33 | | 26 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582120 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582131 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583612 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.148 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11583610 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582148 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 108-90-7 | Chlorobenzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582146 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582114 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-00-3 | Chloroethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582128 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 67-66-3 | Chloroform | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582111 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 74-87-3 | Chloromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583617 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583592 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583628 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582160 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582163 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582445 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Cr | Chromium | 10.2 | 1 | 3.36 | mg/kg | NQ | | 0.156 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583643 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 218-01-9 | Chrysene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582561 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Co | Cobalt | 10.2 | 1 | 2.06 | mg/kg | NQ | | 0.156 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582562 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Cu | Copper | 10.2 | 1 | 3.83 | mg/kg | NQ | | 0.312 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582638 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 10.2 | 1 | 0.273 | mg/kg | U | | 0.0912 | | 0.273 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/10/2014 |
| 11583637 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583645 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583650 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583624 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 132-64-9 | Dibenzofuran | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582168 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000557 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582147 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582136 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 74-95-3 | Dibromomethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582171 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583596 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582169 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583593 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582170 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583594 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583642 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582110 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582123 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582132 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582116 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582125 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582122 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583606 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582135 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582143 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582126 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582130 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582138 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582141 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583625 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 84-66-2 | Diethylphthalate | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583620 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583604 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583629 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583623 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 10.2 | 1 | 0.742 | mg/kg | U | | 0.111 | | 0.742 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583653 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583654 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583631 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 122-39-4 | Diphenylamine | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582150 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 100-41-4 | Ethylbenzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583638 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 206-44-0 | Fluoranthene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583627 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 86-73-7 | Fluorene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583652 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583611 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583614 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583600 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 67-72-1 | Hexachloroethane | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582144 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583649 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582119 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 74-88-4 | Iodomethane | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582563 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Fe | Iron | 10.2 | 1 | 10700 | mg/kg | NQ | | 8.33 | | 26 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583602 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 78-59-1 | Isophorone | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582155 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582166 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582564 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Pb | Lead | 10.2 | 1 | 13.4 | mg/kg | NQ | | 0.344 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582565 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Mg | Magnesium | 10.2 | 1 | 707 | mg/kg | NQ | | 8.85 | | 31.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582566 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Mn | Manganese | 10.2 | 1 | 369 | mg/kg | NQ | | 0.208 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582567 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Hg | Mercury | 10.2 | 1 | 0.0165 | mg/kg | NQ | | 0.00432 | | 0.0129 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11582139 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582121 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-09-2 | Methylene Chloride | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583613 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583597 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583599 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583609 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 91-20-3 | Naphthalene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582568 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Ni | Nickel | 10.2 | 2 | 3.91 | mg/kg | NQ | | 0.102 | | 0.407 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582639 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | NO3 | Nitrate | 10.2 | 1 | 1.11 | mg/kg | U | | 0.368 | | 1.11 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11583618 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.122 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583619 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583630 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583601 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 98-95-3 | Nitrobenzene | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583603 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583626 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583598 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583587 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583655 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583634 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582827 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | ClO4 | Perchlorate | 10.2 | 1 | 0.00223 | mg/kg | U | | 0.000557 | | 0.00223 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11583635 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 85-01-8 | Phenanthrene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583590 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 108-95-2 | Phenol | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582569 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | K | Potassium | 10.2 | 1 | 1250 | mg/kg | NQ | | 6.66 | | 26 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582159 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583639 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 129-00-0 | Pyrene | 10.2 | 1 | 0.0371 | mg/kg | U | | 0.0111 | | 0.0371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583588 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 110-86-1 | Pyridine | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582570 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Se | Selenium | 10.2 | 2 | 1.02 | mg/kg | U | | 0.335 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582571 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Ag | Silver | 10.2 | 1 | 0.244 | mg/kg | J | | 0.104 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582572 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Na | Sodium | 10.2 | 1 | 315 | mg/kg | NQ | | 7.29 | | 26 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582153 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 100-42-5 | Styrene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582149 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582156 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582145 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582573 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Tl | Thallium | 10.2 | 2 | 0.407 | mg/kg | U | | 0.061 | | 0.407 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582140 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 108-88-3 | Toluene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582118 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583608 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582129 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582142 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582134 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 79-01-6 | Trichloroethene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582115 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583616 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583615 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 10.2 | 1 | 0.371 | mg/kg | U | | 0.111 | | 0.371 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582157 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582162 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582161 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582854 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | U-234 | Uranium-234 | 10.2 | 1 | 1.33 | pCi/g | NQ | 0.107 | | 0.0765 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582855 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | U-235/236 | Uranium-235/236 | 10.2 | 1 | 0.0634 | pCi/g | U | 0.0771 | | 0.0211 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582856 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | U-238 | Uranium-238 | 10.2 | 1 | 1.28 | pCi/g | NQ | 0.0673 | | 0.0744 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582574 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | V | Vanadium | 10.2 | 1 | 7.69 | mg/kg | NQ | | 0.104 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582112 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582152 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582151 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 10.2 | 1 | 0.00223 | mg/kg | U | | 0.000743 | | 0.00223 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582575 | 57-007 | 2014-3751 | RE57-14-84141 | N | HA | INV | NA | REG | 57-4018 | 0 | 1 | ft | S | FILL | Zn | Zinc | 10.2 | 1 | 55.7 | mg/kg | NQ | | 0.416 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11597335 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 83-32-9 | Acenaphthene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597334 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597004 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 67-64-1 | Acetone | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597121 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Al | Aluminum | 4.55 | 1 | 4070 | mg/kg | NQ | | 6.54 | | 19.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597302 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 62-53-3 | Aniline | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597349 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 120-12-7 | Anthracene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597122 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Sb | Antimony | 4.55 | 1 | 0.961 | mg/kg | U | | 0.317 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597123 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | As | Arsenic | 4.55 | 2 | 1.98 | mg/kg | NQ | | 0.192 | | 0.959 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597345 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 103-33-3 | Azobenzene | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597124 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Ba | Barium | 4.55 | 1 | 82.1 | mg/kg | NQ | | 0.0961 | | 0.481 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597020 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 71-43-2 | Benzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597354 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597361 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597359 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597364 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597360 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597320 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 4.55 | 1 | 0.324 | mg/kg | J | | 0.175 | | 0.698 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597308 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597125 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Be | Beryllium | 4.55 | 2 | 0.419 | mg/kg | NQ | | 0.0192 | | 0.0959 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597318 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597304 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597357 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597045 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 108-86-1 | Bromobenzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597014 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597024 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597041 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-25-2 | Bromoform | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597000 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 74-83-9 | Bromomethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597346 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597011 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597054 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597052 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597051 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597353 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597126 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Cd | Cadmium | 4.55 | 1 | 0.481 | mg/kg | U | | 0.0961 | | 0.481 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597127 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Ca | Calcium | 4.55 | 1 | 2180 | mg/kg | NQ | | 7.69 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597007 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597018 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597325 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.14 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597323 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597035 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597033 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597001 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-00-3 | Chloroethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597015 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 67-66-3 | Chloroform | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11596998 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 74-87-3 | Chloromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597330 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597305 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597341 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597047 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597050 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597128 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Cr | Chromium | 4.55 | 1 | 3.99 | mg/kg | NQ | | 0.144 | | 0.481 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597356 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 218-01-9 | Chrysene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597129 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Co | Cobalt | 4.55 | 1 | 1.64 | mg/kg | NQ | | 0.144 | | 0.481 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597130 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Cu | Copper | 4.55 | 1 | 3.24 | mg/kg | NQ | | 0.288 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597148 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 4.55 | 1 | 0.142 | mg/kg | J | | 0.0825 | | 0.247 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/17/2014 |
| 11597350 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597358 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597363 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597337 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597055 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000524 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597034 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597023 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 74-95-3 | Dibromomethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597058 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597309 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597056 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597306 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597057 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 4.55 | 1 | 0.00043 | mg/kg | J+ | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597307 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11597355 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11596997 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597010 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597019 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597003 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597012 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597009 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597319 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597022 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597030 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597013 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597017 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597025 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597028 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597338 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597333 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597317 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597342 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597336 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 4.55 | 1 | 0.698 | mg/kg | U | | 0.105 | | 0.698 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597366 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597367 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597344 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 122-39-4 | Diphenylamine | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597037 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597351 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 206-44-0 | Fluoranthene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597340 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 86-73-7 | Fluorene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597365 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597324 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597327 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597313 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597031 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597362 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597006 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 74-88-4 | Iodomethane | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597131 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Fe | Iron | 4.55 | 1 | 8200 | mg/kg | NQ | | 7.69 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597315 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 78-59-1 | Isophorone | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597042 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597053 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597132 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Pb | Lead | 4.55 | 1 | 10.4 | mg/kg | NQ | | 0.317 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597133 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Mg | Magnesium | 4.55 | 1 | 685 | mg/kg | NQ | | 8.17 | | 28.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597134 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Mn | Manganese | 4.55 | 1 | 475 | mg/kg | NQ | | 0.192 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597135 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Hg | Mercury | 4.55 | 1 | 0.0302 | mg/kg | NQ | | 0.0042 | | 0.0125 | Y | INORGANIC | SW-846:7471A | GELC | 07/31/2014 | 07/17/2014 |
| 11597026 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597008 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597326 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597310 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597312 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597322 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 91-20-3 | Naphthalene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597136 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Ni | Nickel | 4.55 | 2 | 3.77 | mg/kg | NQ | | 0.0959 | | 0.384 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597149 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | NO3 | Nitrate | 4.55 | 1 | 1.05 | mg/kg | U | | 0.346 | | 1.05 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/31/2014 | 07/17/2014 |
| 11597331 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.115 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597332 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597343 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597314 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597316 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597339 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597311 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597300 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597368 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597347 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597152 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | ClO4 | Perchlorate | 4.55 | 1 | 0.00209 | mg/kg | U | | 0.000521 | | 0.00209 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/17/2014 |
| 11597348 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 85-01-8 | Phenanthrene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597303 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 108-95-2 | Phenol | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597137 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | K | Potassium | 4.55 | 1 | 615 | mg/kg | NQ | | 6.15 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597046 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597352 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 129-00-0 | Pyrene | 4.55 | 1 | 0.0349 | mg/kg | U | | 0.0105 | | 0.0349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597301 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 110-86-1 | Pyridine | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597138 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Se | Selenium | 4.55 | 2 | 0.959 | mg/kg | U | | 0.317 | | 0.959 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597139 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Ag | Silver | 4.55 | 1 | 0.258 | mg/kg | J | | 0.0961 | | 0.481 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597140 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Na | Sodium | 4.55 | 1 | 63 | mg/kg | NQ | | 6.73 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11597040 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 100-42-5 | Styrene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597036 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597043 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597032 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597141 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Tl | Thallium | 4.55 | 2 | 0.384 | mg/kg | U | | 0.0576 | | 0.384 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/17/2014 |
| 11597027 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 108-88-3 | Toluene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597005 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 4.55 | 1 | 0.00524 | mg/kg | U | | 0.00175 | | 0.00524 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597321 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597016 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597029 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597021 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 79-01-6 | Trichloroethene | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597002 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597329 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597328 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 4.55 | 1 | 0.349 | mg/kg | U | | 0.105 | | 0.349 | Y | SVOC | SW-846:8270D | GELC | 07/28/2014 | 07/17/2014 |
| 11597044 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597049 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597048 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597159 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | U-234 | Uranium-234 | 4.55 | 1 | 1.18 | pCi/g | NQ | 0.127 | | 0.0927 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597160 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 4.55 | 1 | 0.0433 | pCi/g | U | 0.0715 | | 0.0229 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597161 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | U-238 | Uranium-238 | 4.55 | 1 | 1.26 | pCi/g | NQ | 0.0903 | | 0.0961 | | Y | RAD | HASL-300:ISOU | GELC | 07/31/2014 | 07/17/2014 |
| 11597142 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | V | Vanadium | 4.55 | 1 | 7.17 | mg/kg | NQ | | 0.0961 | | 0.481 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11596999 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597039 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 4.55 | 1 | 0.00105 | mg/kg | U | | 0.000349 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597038 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 4.55 | 1 | 0.0021 | mg/kg | U | | 0.000699 | | 0.0021 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597143 | 57-007 | 2014-3910 | RE57-14-84991 | N | HA | INV | NA | REG | 57-4018 | 2.5 | 3.5 | ft | S | SOIL | Zn | Zinc | 4.55 | 1 | 46.2 | mg/kg | NQ | | 0.384 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/08/2014 | 07/17/2014 |
| 11583691 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 83-32-9 | Acenaphthene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583690 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582179 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 67-64-1 | Acetone | 5.01 | 1 | 0.00526 | mg/kg | U | | 0.00175 | | 0.00526 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582576 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Al | Aluminum | 5.01 | 1 | 4190 | mg/kg | NQ | | 6.9 | | 20.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583658 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 62-53-3 | Aniline | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583705 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 120-12-7 | Anthracene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582577 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Sb | Antimony | 5.01 | 1 | 1.01 | mg/kg | U | | 0.335 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582578 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | As | Arsenic | 5.01 | 2 | 1.29 | mg/kg | NQ | | 0.204 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583701 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 103-33-3 | Azobenzene | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582579 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Ba | Barium | 5.01 | 1 | 33.8 | mg/kg | NQ | | 0.101 | | 0.507 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582195 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 71-43-2 | Benzene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583710 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583717 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583715 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583720 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583716 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583676 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 5.01 | 1 | 2.83 | mg/kg | NQ | | 0.175 | | 0.702 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583664 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582580 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Be | Beryllium | 5.01 | 2 | 0.39 | mg/kg | NQ | | 0.0204 | | 0.102 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583674 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583660 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583713 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582220 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 108-86-1 | Bromobenzene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582189 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582199 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582216 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-25-2 | Bromoform | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582175 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 74-83-9 | Bromomethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583702 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582186 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 5.01 | 1 | 0.00526 | mg/kg | U | | 0.00175 | | 0.00526 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582229 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582227 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582226 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583709 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582581 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Cd | Cadmium | 5.01 | 1 | 0.507 | mg/kg | U | | 0.101 | | 0.507 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582582 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Ca | Calcium | 5.01 | 1 | 877 | mg/kg | NQ | | 8.11 | | 25.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582182 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 5.01 | 1 | 0.00526 | mg/kg | U | | 0.00175 | | 0.00526 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582193 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583681 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.14 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583679 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582210 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582208 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582176 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-00-3 | Chloroethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582190 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 67-66-3 | Chloroform | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582173 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 74-87-3 | Chloromethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583686 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583661 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583697 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582222 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582225 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582583 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Cr | Chromium | 5.01 | 1 | 3.35 | mg/kg | NQ | | 0.152 | | 0.507 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583712 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 218-01-9 | Chrysene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582584 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Co | Cobalt | 5.01 | 1 | 0.675 | mg/kg | NQ | | 0.152 | | 0.507 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582585 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Cu | Copper | 5.01 | 1 | 1.75 | mg/kg | NQ | | 0.304 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582640 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 5.01 | 1 | 0.223 | mg/kg | U | | 0.0745 | | 0.223 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/10/2014 |
| 11583706 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583714 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583719 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583693 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582230 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000526 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582209 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582198 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 74-95-3 | Dibromomethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582233 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583665 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582231 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583662 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582232 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583663 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583711 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582172 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582185 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582194 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582178 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582187 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582184 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583675 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582197 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582205 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582188 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582192 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582200 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582203 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583694 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583689 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583673 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583698 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583692 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 5.01 | 1 | 0.702 | mg/kg | U | | 0.105 | | 0.702 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583722 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583723 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583700 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 122-39-4 | Diphenylamine | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582212 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583707 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 206-44-0 | Fluoranthene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583696 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 86-73-7 | Fluorene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583721 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583680 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583683 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583669 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11582206 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 5.01 | 1 | 0.00526 | mg/kg | U | | 0.00175 | | 0.00526 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583718 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582181 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 74-88-4 | Iodomethane | 5.01 | 1 | 0.00526 | mg/kg | U | | 0.00175 | | 0.00526 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582586 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Fe | Iron | 5.01 | 1 | 7970 | mg/kg | NQ | | 8.11 | | 25.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583671 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 78-59-1 | Isophorone | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582217 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582228 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582587 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Pb | Lead | 5.01 | 1 | 7.74 | mg/kg | NQ | | 0.335 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582588 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Mg | Magnesium | 5.01 | 1 | 344 | mg/kg | NQ | | 8.62 | | 30.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582589 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Mn | Manganese | 5.01 | 1 | 169 | mg/kg | NQ | | 0.203 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582590 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Hg | Mercury | 5.01 | 1 | 0.0626 | mg/kg | NQ | | 0.00397 | | 0.0119 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11582201 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 5.01 | 1 | 0.00526 | mg/kg | U | | 0.00175 | | 0.00526 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582183 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 5.01 | 1 | 0.00526 | mg/kg | U | | 0.00175 | | 0.00526 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583682 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583666 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583668 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583678 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 91-20-3 | Naphthalene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582591 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Ni | Nickel | 5.01 | 2 | 2.1 | mg/kg | NQ | | 0.102 | | 0.409 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582641 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | NO3 | Nitrate | 5.01 | 1 | 1.05 | mg/kg | U | | 0.347 | | 1.05 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11583687 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.116 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583688 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583699 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583670 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583672 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583695 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583667 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583656 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583724 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583703 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582828 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | ClO4 | Perchlorate | 5.01 | 1 | 0.000582 | mg/kg | J | | 0.000526 | | 0.00211 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11583704 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 85-01-8 | Phenanthrene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583659 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 108-95-2 | Phenol | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582592 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | K | Potassium | 5.01 | 1 | 532 | mg/kg | NQ | | 6.49 | | 25.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582221 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583708 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 129-00-0 | Pyrene | 5.01 | 1 | 0.0351 | mg/kg | U | | 0.0105 | | 0.0351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583657 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 110-86-1 | Pyridine | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582593 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Se | Selenium | 5.01 | 2 | 1.02 | mg/kg | U | | 0.337 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582594 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Ag | Silver | 5.01 | 1 | 0.114 | mg/kg | J | | 0.101 | | 0.507 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582595 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Na | Sodium | 5.01 | 1 | 213 | mg/kg | NQ | | 7.1 | | 25.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582215 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 100-42-5 | Styrene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582211 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582218 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582207 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582596 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Tl | Thallium | 5.01 | 2 | 0.409 | mg/kg | U | | 0.0613 | | 0.409 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582202 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 108-88-3 | Toluene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582180 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.01 | 1 | 0.00526 | mg/kg | U | | 0.00175 | | 0.00526 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583677 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582191 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582204 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582196 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 79-01-6 | Trichloroethene | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582177 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583685 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583684 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 5.01 | 1 | 0.351 | mg/kg | U | | 0.105 | | 0.351 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582219 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582224 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582223 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582857 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | U-234 | Uranium-234 | 5.01 | 1 | 1.34 | pCi/g | NQ | 0.0998 | | 0.0735 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582858 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 5.01 | 1 | 0.0835 | pCi/g | NQ | 0.0716 | | 0.0225 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582859 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | U-238 | Uranium-238 | 5.01 | 1 | 1.54 | pCi/g | NQ | 0.0625 | | 0.0784 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582597 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | V | Vanadium | 5.01 | 1 | 4.78 | mg/kg | NQ | | 0.101 | | 0.507 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582174 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582214 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 5.01 | 1 | 0.00105 | mg/kg | U | | 0.000351 | | 0.00105 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582213 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 5.01 | 1 | 0.00211 | mg/kg | U | | 0.000702 | | 0.00211 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582598 | 57-007 | 2014-3751 | RE57-14-84152 | N | HA | INV | NA | REG | 57-4018 | 4.4 | 5.4 | ft | S | SOIL | Zn | Zinc | 5.01 | 1 | 43.4 | mg/kg | NQ | | 0.406 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11598623 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598622 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598424 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 67-64-1 | Acetone | 3.4 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597511 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Al | Aluminum | 3.4 | 1 | 4780 | mg/kg | NQ | | 6.65 | | 19.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598590 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 62-53-3 | Aniline | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598637 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 120-12-7 | Anthracene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597512 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Sb | Antimony | 3.4 | 1 | 0.978 | mg/kg | U | | 0.323 | | 0.978 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597513 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | As | Arsenic | 3.4 | 2 | 1.44 | mg/kg | NQ | | 0.202 | | 1.01 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598633 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 103-33-3 | Azobenzene | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597514 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Ba | Barium | 3.4 | 1 | 35.6 | mg/kg | NQ | | 0.0978 | | 0.489 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598440 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 71-43-2 | Benzene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598817 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598824 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598822 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598827 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598823 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598608 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 3.4 | 1 | 0.689 | mg/kg | U | | 0.172 | | 0.689 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598596 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597515 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Be | Beryllium | 3.4 | 2 | 0.676 | mg/kg | NQ | | 0.0202 | | 0.101 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598606 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598592 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598820 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598642 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598434 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598444 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598461 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-25-2 | Bromoform | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598420 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 74-83-9 | Bromomethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598634 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598431 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 3.4 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598651 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598649 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598648 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598816 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597516 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Cd | Cadmium | 3.4 | 1 | 0.489 | mg/kg | U | | 0.0978 | | 0.489 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597517 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Ca | Calcium | 3.4 | 1 | 543 | mg/kg | NQ | | 7.83 | | 24.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598427 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 3.4 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598438 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598613 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.138 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598611 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598455 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598453 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598421 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-00-3 | Chloroethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598435 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 67-66-3 | Chloroform | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598418 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 74-87-3 | Chloromethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598618 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598593 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598629 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598644 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598647 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597518 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Cr | Chromium | 3.4 | 1 | 60.6 | mg/kg | NQ | | 0.147 | | 0.489 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598819 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 218-01-9 | Chrysene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597519 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Co | Cobalt | 3.4 | 1 | 1.4 | mg/kg | NQ | | 0.147 | | 0.489 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597520 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Cu | Copper | 3.4 | 1 | 3.43 | mg/kg | NQ | | 0.294 | | 0.978 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598072 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 3.4 | 1 | 0.259 | mg/kg | U | | 0.0864 | | 0.259 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11598638 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598821 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598826 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598625 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598652 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000518 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598454 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598443 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598655 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598597 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598653 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598594 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598654 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598595 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598818 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598417 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598430 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598439 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598423 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598432 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598429 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598607 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598442 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598450 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598433 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598437 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598445 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598448 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598626 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598621 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598605 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598630 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598624 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 3.4 | 1 | 0.689 | mg/kg | U | | 0.103 | | 0.689 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598829 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598830 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598632 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598457 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598814 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598628 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 86-73-7 | Fluorene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598828 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598612 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598615 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598601 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598451 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 3.4 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598825 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598426 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 74-88-4 | Iodomethane | 3.4 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597521 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Fe | Iron | 3.4 | 1 | 8010 | mg/kg | NQ | | 7.83 | | 24.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598603 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 78-59-1 | Isophorone | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598639 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598650 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597522 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Pb | Lead | 3.4 | 1 | 11.2 | mg/kg | NQ | | 0.323 | | 0.978 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597523 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Mg | Magnesium | 3.4 | 1 | 276 | mg/kg | NQ | | 8.32 | | 29.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597524 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Mn | Manganese | 3.4 | 1 | 361 | mg/kg | NQ | | 0.196 | | 0.978 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597525 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Hg | Mercury | 3.4 | 1 | 0.0198 | mg/kg | NQ | | 0.00414 | | 0.0123 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11598446 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 3.4 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598428 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 3.4 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598614 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598598 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598600 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598610 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 91-20-3 | Naphthalene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597526 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Ni | Nickel | 3.4 | 2 | 4.81 | mg/kg | NQ | | 0.101 | | 0.404 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598073 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | NO3 | Nitrate | 3.4 | 1 | 1.04 | mg/kg | U | | 0.342 | | 1.04 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11598619 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.114 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598620 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598631 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598602 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598604 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598627 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598599 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598588 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598831 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598635 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11598153 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | ClO4 | Perchlorate | 3.4 | 1 | 0.00206 | mg/kg | U | | 0.000515 | | 0.00206 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11598636 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598591 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 108-95-2 | Phenol | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597527 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | K | Potassium | 3.4 | 1 | 755 | mg/kg | NQ | | 6.26 | | 24.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598643 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598815 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 129-00-0 | Pyrene | 3.4 | 1 | 0.0344 | mg/kg | U | | 0.0103 | | 0.0344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598589 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 110-86-1 | Pyridine | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597528 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Se | Selenium | 3.4 | 2 | 1.01 | mg/kg | U | | 0.333 | | 1.01 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597529 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Ag | Silver | 3.4 | 1 | 0.489 | mg/kg | U | | 0.0978 | | 0.489 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597530 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Na | Sodium | 3.4 | 1 | 377 | mg/kg | NQ | | 6.85 | | 24.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598460 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 100-42-5 | Styrene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598456 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598640 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598452 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597531 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Tl | Thallium | 3.4 | 2 | 0.404 | mg/kg | U | | 0.0605 | | 0.404 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598447 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 108-88-3 | Toluene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598425 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 3.4 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598609 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598436 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598449 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598441 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598422 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598617 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598616 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 3.4 | 1 | 0.344 | mg/kg | U | | 0.103 | | 0.344 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598641 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598646 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598645 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598173 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | U-234 | Uranium-234 | 3.4 | 1 | 1.16 | pCi/g | NQ | 0.111 | | 0.0737 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598174 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 3.4 | 1 | 0.0437 | pCi/g | U | 0.0797 | | 0.0173 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598175 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | U-238 | Uranium-238 | 3.4 | 1 | 1.14 | pCi/g | NQ | 0.0695 | | 0.0718 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597532 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | V | Vanadium | 3.4 | 1 | 3.77 | mg/kg | NQ | | 0.0978 | | 0.489 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598419 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598459 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 3.4 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598458 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 3.4 | 1 | 0.00207 | mg/kg | U | | 0.00069 | | 0.00207 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597533 | 57-007 | 2014-3795 | RE57-14-84163 | N | HA | INV | NA | REG | 57-4018 | 7.4 | 8.4 | ft | R | QBT3 | Zn | Zinc | 3.4 | 1 | 52.3 | mg/kg | NQ | | 0.391 | | 0.978 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598936 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 83-32-9 | Acenaphthene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598935 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598725 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 67-64-1 | Acetone | 10.1 | 1 | 0.00556 | mg/kg | U | | 0.00185 | | 0.00556 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597557 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Al | Aluminum | 10.1 | 1 | 7590 | mg/kg | NQ | | 7.12 | | 21 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598903 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 62-53-3 | Aniline | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598950 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 120-12-7 | Anthracene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597558 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Sb | Antimony | 10.1 | 1 | 1.05 | mg/kg | U | | 0.346 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597559 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | As | Arsenic | 10.1 | 2 | 2.05 | mg/kg | NQ | | 0.205 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598946 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 103-33-3 | Azobenzene | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597560 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Ba | Barium | 10.1 | 1 | 105 | mg/kg | NQ | | 0.105 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598741 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 71-43-2 | Benzene | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598955 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598962 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598960 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598965 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598961 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598921 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 10.1 | 1 | 0.741 | mg/kg | U | | 0.185 | | 0.741 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598909 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597561 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Be | Beryllium | 10.1 | 2 | 0.829 | mg/kg | NQ | | 0.0205 | | 0.102 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598919 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598905 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598958 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598766 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 108-86-1 | Bromobenzene | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598735 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598745 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598762 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-25-2 | Bromoform | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598721 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 74-83-9 | Bromomethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598947 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598732 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 10.1 | 1 | 0.00556 | mg/kg | U | | 0.00185 | | 0.00556 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598775 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598773 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598772 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598954 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597562 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Cd | Cadmium | 10.1 | 1 | 0.524 | mg/kg | U | | 0.105 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597563 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Ca | Calcium | 10.1 | 1 | 1140 | mg/kg | NQ | | 8.38 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598728 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 10.1 | 1 | 0.00556 | mg/kg | U | | 0.00185 | | 0.00556 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598739 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598926 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.148 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598924 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598756 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598754 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598722 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-00-3 | Chloroethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598736 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 67-66-3 | Chloroform | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598719 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 74-87-3 | Chloromethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598931 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598906 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598942 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598768 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598771 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597564 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Cr | Chromium | 10.1 | 1 | 10.3 | mg/kg | NQ | | 0.157 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598957 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 218-01-9 | Chrysene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597565 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Co | Cobalt | 10.1 | 1 | 3.42 | mg/kg | NQ | | 0.157 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597566 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Cu | Copper | 10.1 | 1 | 3.92 | mg/kg | NQ | | 0.314 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598076 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 10.1 | 1 | 0.236 | mg/kg | U | | 0.0787 | | 0.236 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11598951 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598959 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598964 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598938 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598776 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.000556 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598755 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598744 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 74-95-3 | Dibromomethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598779 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598910 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598777 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598907 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598778 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598908 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598956 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598718 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598731 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598740 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598724 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598733 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598730 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598920 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598743 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598751 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598734 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598738 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598746 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598749 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598939 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598934 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598918 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598943 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598937 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 10.1 | 1 | 0.741 | mg/kg | U | | 0.111 | | 0.741 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598967 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598968 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598945 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 122-39-4 | Diphenylamine | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598758 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598952 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 206-44-0 | Fluoranthene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598941 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 86-73-7 | Fluorene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598966 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598925 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598928 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598914 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598752 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 10.1 | 1 | 0.00556 | mg/kg | U | | 0.00185 | | 0.00556 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598963 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598727 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 74-88-4 | Iodomethane | 10.1 | 1 | 0.00556 | mg/kg | U | | 0.00185 | | 0.00556 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597567 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Fe | Iron | 10.1 | 1 | 10600 | mg/kg | NQ | | 8.38 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598916 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 78-59-1 | Isophorone | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598763 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598774 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597568 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Pb | Lead | 10.1 | 1 | 13.5 | mg/kg | NQ | | 0.346 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597569 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Mg | Magnesium | 10.1 | 1 | 1020 | mg/kg | NQ | | 8.9 | | 31.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597570 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Mn | Manganese | 10.1 | 1 | 565 | mg/kg | NQ | | 0.21 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597571 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Hg | Mercury | 10.1 | 1 | 0.018 | mg/kg | NQ | | 0.0038 | | 0.0113 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11598747 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 10.1 | 1 | 0.00556 | mg/kg | U | | 0.00185 | | 0.00556 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598729 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 10.1 | 1 | 0.00556 | mg/kg | U | | 0.00185 | | 0.00556 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598927 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598911 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598913 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598923 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 91-20-3 | Naphthalene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597572 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Ni | Nickel | 10.1 | 2 | 5.48 | mg/kg | NQ | | 0.102 | | 0.41 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598077 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | NO3 | Nitrate | 10.1 | 1 | 1.11 | mg/kg | U | | 0.367 | | 1.11 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11598932 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.122 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598933 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598944 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598915 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598917 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598940 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598912 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598901 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598969 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598948 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598155 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | ClO4 | Perchlorate | 10.1 | 1 | 0.00221 | mg/kg | U | | 0.000553 | | 0.00221 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11598949 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 85-01-8 | Phenanthrene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598904 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 108-95-2 | Phenol | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597573 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | K | Potassium | 10.1 | 1 | 975 | mg/kg | NQ | | 6.7 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598767 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598953 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 129-00-0 | Pyrene | 10.1 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598902 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 110-86-1 | Pyridine | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597574 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Se | Selenium | 10.1 | 2 | 1.02 | mg/kg | U | | 0.338 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597575 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Ag | Silver | 10.1 | 1 | 0.149 | mg/kg | J | | 0.105 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597576 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Na | Sodium | 10.1 | 1 | 125 | mg/kg | NQ | | 7.33 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598761 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 100-42-5 | Styrene | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598757 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598764 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598753 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597577 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Tl | Thallium | 10.1 | 2 | 0.0899 | mg/kg | J | | 0.0615 | | 0.41 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598748 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 108-88-3 | Toluene | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598726 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 10.1 | 1 | 0.00556 | mg/kg | U | | 0.00185 | | 0.00556 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598922 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598737 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598750 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598742 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 79-01-6 | Trichloroethene | 10.1 | 1 | 0.00108 | mg/kg | J | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598723 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598930 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598929 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 10.1 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598765 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598770 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598769 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598179 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | U-234 | Uranium-234 | 10.1 | 1 | 1.37 | pCi/g | NQ | 0.162 | | 0.0951 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598180 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 10.1 | 1 | 0.0637 | pCi/g | U | 0.116 | | 0.0276 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11598181 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | U-238 | Uranium-238 | 10.1 | 1 | 1.39 | pCi/g | NQ | 0.101 | | 0.0951 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597578 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | V | Vanadium | 10.1 | 1 | 15.1 | mg/kg | NQ | | 0.105 | | 0.524 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598720 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598760 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 10.1 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598759 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 10.1 | 1 | 0.00222 | mg/kg | U | | 0.000742 | | 0.00222 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597579 | 57-007 | 2014-3795 | RE57-14-84164 | N | HA | INV | NA | REG | 57-4019 | 0 | 1 | ft | S | SOIL | Zn | Zinc | 10.1 | 1 | 41.1 | mg/kg | NQ | | 0.419 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598867 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 83-32-9 | Acenaphthene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598866 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598663 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 67-64-1 | Acetone | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597534 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Al | Aluminum | 7.96 | 1 | 5300 | mg/kg | NQ | | 6.87 | | 20.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598834 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 62-53-3 | Aniline | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598881 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 120-12-7 | Anthracene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597535 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Sb | Antimony | 7.96 | 1 | 0.465 | mg/kg | J | | 0.333 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597536 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | As | Arsenic | 7.96 | 2 | 1.55 | mg/kg | NQ | | 0.212 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598877 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 103-33-3 | Azobenzene | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597537 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Ba | Barium | 7.96 | 1 | 83.3 | mg/kg | NQ | | 0.101 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598679 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 71-43-2 | Benzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598886 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598893 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598891 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598896 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598892 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598852 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 7.96 | 1 | 0.722 | mg/kg | U | | 0.181 | | 0.722 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598840 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597538 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Be | Beryllium | 7.96 | 2 | 0.488 | mg/kg | NQ | | 0.0212 | | 0.106 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598850 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598836 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598889 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598704 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 108-86-1 | Bromobenzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598673 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598683 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598700 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-25-2 | Bromoform | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598659 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 74-83-9 | Bromomethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598878 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598670 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598713 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598711 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598710 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598885 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597539 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Cd | Cadmium | 7.96 | 1 | 0.505 | mg/kg | U | | 0.101 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597540 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Ca | Calcium | 7.96 | 1 | 1250 | mg/kg | NQ | | 8.08 | | 25.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598666 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598677 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598857 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.144 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598855 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598694 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598692 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598660 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-00-3 | Chloroethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598674 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 67-66-3 | Chloroform | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598657 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 74-87-3 | Chloromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598862 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598837 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598873 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598706 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598709 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597541 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Cr | Chromium | 7.96 | 1 | 4.49 | mg/kg | NQ | | 0.151 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598888 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 218-01-9 | Chrysene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597542 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Co | Cobalt | 7.96 | 1 | 1.88 | mg/kg | NQ | | 0.151 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597543 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Cu | Copper | 7.96 | 1 | 3.1 | mg/kg | NQ | | 0.303 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598074 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 7.96 | 1 | 0.73 | mg/kg | NQ | | 0.0889 | | 0.266 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11598882 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598890 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598895 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598869 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598714 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000543 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598693 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598682 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 74-95-3 | Dibromomethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598717 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598841 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598715 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598838 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598716 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598839 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598887 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598656 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598669 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598678 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598662 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598671 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598668 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598851 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598681 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598689 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598672 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598676 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598684 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598687 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598870 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598865 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598849 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598874 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598868 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 7.96 | 1 | 0.722 | mg/kg | U | | 0.108 | | 0.722 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598898 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598899 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598876 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 122-39-4 | Diphenylamine | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598696 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598883 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 206-44-0 | Fluoranthene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598872 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 86-73-7 | Fluorene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598897 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598856 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598859 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598845 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598690 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598894 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598665 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 74-88-4 | Iodomethane | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597544 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Fe | Iron | 7.96 | 1 | 8300 | mg/kg | NQ | | 8.08 | | 25.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598847 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 78-59-1 | Isophorone | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598701 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598712 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597545 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Pb | Lead | 7.96 | 1 | 10.2 | mg/kg | NQ | | 0.333 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597546 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Mg | Magnesium | 7.96 | 1 | 700 | mg/kg | NQ | | 8.58 | | 30.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597547 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Mn | Manganese | 7.96 | 1 | 412 | mg/kg | NQ | | 0.202 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597548 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Hg | Mercury | 7.96 | 1 | 0.0112 | mg/kg | J | | 0.00427 | | 0.0128 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11598685 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598667 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598858 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598842 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598844 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598854 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 91-20-3 | Naphthalene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597549 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Ni | Nickel | 7.96 | 2 | 3.69 | mg/kg | NQ | | 0.106 | | 0.424 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598075 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | NO3 | Nitrate | 7.96 | 1 | 0.947 | mg/kg | J | | 0.359 | | 1.09 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11598863 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.119 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598864 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598875 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598846 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598848 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598871 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598843 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598832 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598900 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598879 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598154 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | ClO4 | Perchlorate | 7.96 | 1 | 0.00216 | mg/kg | U | | 0.000541 | | 0.00216 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11598880 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 85-01-8 | Phenanthrene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598835 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 108-95-2 | Phenol | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597550 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | K | Potassium | 7.96 | 1 | 741 | mg/kg | NQ | | 6.46 | | 25.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598705 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598884 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 129-00-0 | Pyrene | 7.96 | 1 | 0.0361 | mg/kg | U | | 0.0108 | | 0.0361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598833 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 110-86-1 | Pyridine | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597551 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Se | Selenium | 7.96 | 2 | 1.06 | mg/kg | U | | 0.35 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597552 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Ag | Silver | 7.96 | 1 | 0.505 | mg/kg | U | | 0.101 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597553 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Na | Sodium | 7.96 | 1 | 106 | mg/kg | NQ | | 7.07 | | 25.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598699 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 100-42-5 | Styrene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598695 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598702 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598691 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597554 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Tl | Thallium | 7.96 | 2 | 0.424 | mg/kg | U | | 0.0637 | | 0.424 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598686 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 108-88-3 | Toluene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598664 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 7.96 | 1 | 0.00543 | mg/kg | U | | 0.00181 | | 0.00543 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598853 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598675 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598688 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598680 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 79-01-6 | Trichloroethene | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598661 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598861 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598860 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 7.96 | 1 | 0.361 | mg/kg | U | | 0.108 | | 0.361 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598703 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598708 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598707 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598176 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | U-234 | Uranium-234 | 7.96 | 1 | 1.31 | pCi/g | NQ | 0.113 | | 0.0777 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598177 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 7.96 | 1 | 0.0999 | pCi/g | NQ | 0.0809 | | 0.026 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598178 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | U-238 | Uranium-238 | 7.96 | 1 | 1.21 | pCi/g | NQ | 0.0706 | | 0.0742 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597555 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | V | Vanadium | 7.96 | 1 | 8.84 | mg/kg | NQ | | 0.101 | | 0.505 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598658 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598698 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 7.96 | 1 | 0.00109 | mg/kg | U | | 0.000362 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598697 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 7.96 | 1 | 0.00217 | mg/kg | U | | 0.000725 | | 0.00217 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597556 | 57-007 | 2014-3795 | RE57-14-84142 | N | HA | INV | NA | REG | 57-4019 | 1.5 | 2.5 | ft | S | SOIL | Zn | Zinc | 7.96 | 1 | 43.2 | mg/kg | NQ | | 0.404 | | 1.01 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599180 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599179 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598787 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 67-64-1 | Acetone | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597580 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Al | Aluminum | 10.2 | 1 | 7010 | mg/kg | NQ | | 7.52 | | 22.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598972 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 62-53-3 | Aniline | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599194 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 120-12-7 | Anthracene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597581 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Sb | Antimony | 10.2 | 1 | 1.11 | mg/kg | U | | 0.365 | | 1.11 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597582 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | As | Arsenic | 10.2 | 2 | 1.95 | mg/kg | NQ | | 0.212 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599190 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597583 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Ba | Barium | 10.2 | 1 | 53.4 | mg/kg | NQ | | 0.111 | | 0.553 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598803 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 71-43-2 | Benzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599199 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599206 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599204 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599209 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599205 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599165 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 10.2 | 1 | 0.74 | mg/kg | U | | 0.185 | | 0.74 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598978 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597584 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Be | Beryllium | 10.2 | 2 | 0.618 | mg/kg | NQ | | 0.0212 | | 0.106 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599163 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598974 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599202 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598996 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |

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| 11598797 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598807 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598992 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-25-2 | Bromoform | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598783 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599191 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598794 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599005 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599003 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599002 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599198 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597585 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Cd | Cadmium | 10.2 | 1 | 0.553 | mg/kg | U | | 0.111 | | 0.553 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597586 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Ca | Calcium | 10.2 | 1 | 759 | mg/kg | NQ | | 8.85 | | 27.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598790 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598801 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599170 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.148 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599168 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598986 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598984 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598784 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598798 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 67-66-3 | Chloroform | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598781 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599175 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598975 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599186 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598998 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599001 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597587 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Cr | Chromium | 10.2 | 1 | 6.69 | mg/kg | NQ | | 0.166 | | 0.553 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599201 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 218-01-9 | Chrysene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597588 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Co | Cobalt | 10.2 | 1 | 1.41 | mg/kg | NQ | | 0.166 | | 0.553 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597589 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Cu | Copper | 10.2 | 1 | 3.11 | mg/kg | NQ | | 0.332 | | 1.11 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598078 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 10.2 | 1 | 0.268 | mg/kg | U | | 0.0894 | | 0.268 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11599195 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599203 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599208 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599182 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599006 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000557 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598985 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598806 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599009 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598979 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599007 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598976 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599008 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598977 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599200 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598780 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598793 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598802 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598786 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598795 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598792 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599164 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598805 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598813 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598796 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598800 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598808 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598811 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599183 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599178 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599162 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599187 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599181 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 10.2 | 1 | 0.74 | mg/kg | U | | 0.111 | | 0.74 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599211 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599212 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599189 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598988 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599196 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599185 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 86-73-7 | Fluorene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599210 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599169 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599172 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599158 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598982 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599207 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598789 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597590 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Fe | Iron | 10.2 | 1 | 9210 | mg/kg | NQ | | 8.85 | | 27.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599160 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 78-59-1 | Isophorone | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598993 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599004 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597591 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Pb | Lead | 10.2 | 1 | 15.5 | mg/kg | NQ | | 0.365 | | 1.11 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597592 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Mg | Magnesium | 10.2 | 1 | 483 | mg/kg | NQ | | 9.41 | | 33.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597593 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Mn | Manganese | 10.2 | 1 | 326 | mg/kg | NQ | | 0.221 | | 1.11 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597594 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Hg | Mercury | 10.2 | 1 | 0.0191 | mg/kg | NQ | | 0.00434 | | 0.0129 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11598809 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598791 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599171 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598980 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599157 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599167 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597595 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Ni | Nickel | 10.2 | 2 | 3.11 | mg/kg | NQ | | 0.106 | | 0.423 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598079 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | NO3 | Nitrate | 10.2 | 1 | 1.11 | mg/kg | U | | 0.367 | | 1.11 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11599176 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.122 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599177 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599188 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599159 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599161 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599184 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598981 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598970 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599213 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599192 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598156 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | ClO4 | Perchlorate | 10.2 | 1 | 0.0022 | mg/kg | U | | 0.000551 | | 0.0022 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11599193 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598973 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 108-95-2 | Phenol | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597596 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | K | Potassium | 10.2 | 1 | 627 | mg/kg | NQ | | 7.08 | | 27.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598997 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599197 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 129-00-0 | Pyrene | 10.2 | 1 | 0.037 | mg/kg | U | | 0.0111 | | 0.037 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598971 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 110-86-1 | Pyridine | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597597 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Se | Selenium | 10.2 | 2 | 1.06 | mg/kg | U | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597598 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Ag | Silver | 10.2 | 1 | 0.553 | mg/kg | U | | 0.111 | | 0.553 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597599 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Na | Sodium | 10.2 | 1 | 186 | mg/kg | NQ | | 7.75 | | 27.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598991 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 100-42-5 | Styrene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598987 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598994 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598983 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597600 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Tl | Thallium | 10.2 | 2 | 0.423 | mg/kg | U | | 0.0635 | | 0.423 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598810 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 108-88-3 | Toluene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598788 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 10.2 | 1 | 0.00557 | mg/kg | U | | 0.00186 | | 0.00557 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599166 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598799 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598812 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598804 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598785 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599174 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599173 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 10.2 | 1 | 0.37 | mg/kg | U | | 0.111 | | 0.37 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598995 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599000 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598999 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598182 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | U-234 | Uranium-234 | 10.2 | 1 | 1.34 | pCi/g | NQ | 0.13 | | 0.0857 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598183 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 10.2 | 1 | 0.115 | pCi/g | NQ | 0.0935 | | 0.0351 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598184 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | U-238 | Uranium-238 | 10.2 | 1 | 1.59 | pCi/g | NQ | 0.0816 | | 0.0919 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597601 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | V | Vanadium | 10.2 | 1 | 6.78 | mg/kg | NQ | | 0.111 | | 0.553 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598782 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598990 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 10.2 | 1 | 0.00111 | mg/kg | U | | 0.000371 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598989 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 10.2 | 1 | 0.00223 | mg/kg | U | | 0.000743 | | 0.00223 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597602 | 57-007 | 2014-3795 | RE57-14-84175 | N | HA | INV | NA | REG | 57-4019 | 4.5 | 5.5 | ft | R | QBT3 | Zn | Zinc | 10.2 | 1 | 59.2 | mg/kg | NQ | | 0.443 | | 1.11 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599249 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 83-32-9 | Acenaphthene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599248 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599017 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 67-64-1 | Acetone | 12.9 | 1 | 0.00574 | mg/kg | U | | 0.00191 | | 0.00574 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597603 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Al | Aluminum | 12.9 | 1 | 5880 | mg/kg | NQ | | 7.62 | | 22.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599216 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 62-53-3 | Aniline | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599263 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 120-12-7 | Anthracene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597604 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Sb | Antimony | 12.9 | 1 | 0.404 | mg/kg | J | | 0.37 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597605 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | As | Arsenic | 12.9 | 2 | 1.54 | mg/kg | NQ | | 0.217 | | 1.08 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599259 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 103-33-3 | Azobenzene | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597606 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Ba | Barium | 12.9 | 1 | 126 | mg/kg | NQ | | 0.112 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599033 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 71-43-2 | Benzene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599268 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599275 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599273 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599278 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599274 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599234 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 12.9 | 1 | 0.763 | mg/kg | U | | 0.191 | | 0.763 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599222 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597607 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Be | Beryllium | 12.9 | 2 | 0.519 | mg/kg | NQ | | 0.0217 | | 0.108 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599232 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599218 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599271 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599058 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 108-86-1 | Bromobenzene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599027 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599037 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599054 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-25-2 | Bromoform | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599013 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 74-83-9 | Bromomethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599260 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599024 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 12.9 | 1 | 0.00574 | mg/kg | U | | 0.00191 | | 0.00574 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599067 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599065 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599064 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599267 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597608 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Cd | Cadmium | 12.9 | 1 | 0.56 | mg/kg | U | | 0.112 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597609 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Ca | Calcium | 12.9 | 1 | 1270 | mg/kg | NQ | | 8.97 | | 28 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599020 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 12.9 | 1 | 0.00574 | mg/kg | U | | 0.00191 | | 0.00574 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599031 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599239 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.153 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599237 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599048 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599046 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599014 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-00-3 | Chloroethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599028 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 67-66-3 | Chloroform | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599011 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 74-87-3 | Chloromethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599244 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599219 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599255 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599060 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599063 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597610 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Cr | Chromium | 12.9 | 1 | 3.57 | mg/kg | NQ | | 0.168 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599270 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 218-01-9 | Chrysene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597611 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Co | Cobalt | 12.9 | 1 | 1.89 | mg/kg | NQ | | 0.168 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11597612 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Cu | Copper | 12.9 | 1 | 3.3 | mg/kg | NQ | | 0.336 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598080 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 12.9 | 1 | 0.281 | mg/kg | U | | 0.094 | | 0.281 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11599264 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599272 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599277 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599251 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599068 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000574 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599047 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599036 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 74-95-3 | Dibromomethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599071 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599223 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599069 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599220 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599070 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599221 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599269 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599010 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599023 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599032 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599016 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599025 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599022 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599233 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599035 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599043 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599026 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599030 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599038 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599041 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599252 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599247 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599231 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599256 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599250 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 12.9 | 1 | 0.763 | mg/kg | U | | 0.114 | | 0.763 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599280 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599281 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599258 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 122-39-4 | Diphenylamine | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599050 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599265 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 206-44-0 | Fluoranthene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599254 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 86-73-7 | Fluorene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599279 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599238 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599241 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599227 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599044 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 12.9 | 1 | 0.00574 | mg/kg | U | | 0.00191 | | 0.00574 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599276 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599019 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 74-88-4 | Iodomethane | 12.9 | 1 | 0.00574 | mg/kg | U | | 0.00191 | | 0.00574 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597613 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Fe | Iron | 12.9 | 1 | 9890 | mg/kg | NQ | | 8.97 | | 28 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599229 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 78-59-1 | Isophorone | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599055 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599066 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597614 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Pb | Lead | 12.9 | 1 | 12.2 | mg/kg | NQ | | 0.37 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597615 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Mg | Magnesium | 12.9 | 1 | 622 | mg/kg | NQ | | 9.53 | | 33.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597616 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Mn | Manganese | 12.9 | 1 | 443 | mg/kg | NQ | | 0.224 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597617 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Hg | Mercury | 12.9 | 1 | 0.0158 | mg/kg | NQ | | 0.00398 | | 0.0119 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11599039 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 12.9 | 1 | 0.00574 | mg/kg | U | | 0.00191 | | 0.00574 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599021 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 12.9 | 1 | 0.00574 | mg/kg | U | | 0.00191 | | 0.00574 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599240 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599224 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599226 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599236 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 91-20-3 | Naphthalene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597618 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Ni | Nickel | 12.9 | 2 | 3.69 | mg/kg | NQ | | 0.108 | | 0.433 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598081 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | NO3 | Nitrate | 12.9 | 1 | 1.15 | mg/kg | U | | 0.379 | | 1.15 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11599245 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.126 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599246 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599257 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599228 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599230 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599253 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599225 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599214 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599282 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599261 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11598157 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | ClO4 | Perchlorate | 12.9 | 1 | 0.000788 | mg/kg | J | | 0.000565 | | 0.00226 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11599262 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 85-01-8 | Phenanthrene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599217 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 108-95-2 | Phenol | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597619 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | K | Potassium | 12.9 | 1 | 867 | mg/kg | NQ | | 7.17 | | 28 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599059 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599266 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 129-00-0 | Pyrene | 12.9 | 1 | 0.0382 | mg/kg | U | | 0.0114 | | 0.0382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599215 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 110-86-1 | Pyridine | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11597620 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Se | Selenium | 12.9 | 2 | 1.08 | mg/kg | U | | 0.357 | | 1.08 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597621 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Ag | Silver | 12.9 | 1 | 0.56 | mg/kg | U | | 0.112 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597622 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Na | Sodium | 12.9 | 1 | 103 | mg/kg | NQ | | 7.85 | | 28 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599053 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 100-42-5 | Styrene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599049 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599056 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599045 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597623 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Tl | Thallium | 12.9 | 2 | 0.433 | mg/kg | U | | 0.065 | | 0.433 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599040 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 108-88-3 | Toluene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599018 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 12.9 | 1 | 0.00574 | mg/kg | U | | 0.00191 | | 0.00574 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599235 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599029 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599042 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599034 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 79-01-6 | Trichloroethene | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599015 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599243 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599242 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 12.9 | 1 | 0.382 | mg/kg | U | | 0.114 | | 0.382 | Y | SVOC | SW-846:8270D | GELC | 07/23/2014 | 07/11/2014 |
| 11599057 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599062 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599061 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598185 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | U-234 | Uranium-234 | 12.9 | 1 | 1.26 | pCi/g | NQ | 0.137 | | 0.0848 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598186 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 12.9 | 1 | 0.0608 | pCi/g | U | 0.0985 | | 0.0224 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598187 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | U-238 | Uranium-238 | 12.9 | 1 | 1.24 | pCi/g | NQ | 0.0859 | | 0.0834 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597624 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | V | Vanadium | 12.9 | 1 | 9.9 | mg/kg | NQ | | 0.112 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599012 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599052 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 12.9 | 1 | 0.00115 | mg/kg | U | | 0.000382 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599051 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 12.9 | 1 | 0.0023 | mg/kg | U | | 0.000766 | | 0.0023 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597625 | 57-007 | 2014-3795 | RE57-14-84154 | N | HA | INV | NA | REG | 57-4020 | 2.5 | 3.5 | ft | S | SOIL | Zn | Zinc | 12.9 | 1 | 47 | mg/kg | NQ | | 0.448 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599562 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599561 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599141 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 67-64-1 | Acetone | 9.94 | 1 | 0.00555 | mg/kg | U | | 0.00185 | | 0.00555 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597887 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Al | Aluminum | 9.94 | 1 | 5260 | mg/kg | NQ | | 7.46 | | 21.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599529 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 62-53-3 | Aniline | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599576 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 120-12-7 | Anthracene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597888 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Sb | Antimony | 9.94 | 1 | 0.465 | mg/kg | J | | 0.362 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597889 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | As | Arsenic | 9.94 | 2 | 2.52 | mg/kg | NQ | | 0.216 | | 1.08 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599572 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597890 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Ba | Barium | 9.94 | 1 | 58.3 | mg/kg | NQ | | 0.11 | | 0.549 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599334 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 71-43-2 | Benzene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599581 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599588 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599586 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599591 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599587 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599547 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 9.94 | 1 | 0.738 | mg/kg | U | | 0.184 | | 0.738 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599535 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597891 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Be | Beryllium | 9.94 | 2 | 0.834 | mg/kg | NQ | | 0.0216 | | 0.108 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599545 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599531 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599584 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599359 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599151 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599338 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599355 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-25-2 | Bromoform | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599137 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599573 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599148 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 9.94 | 1 | 0.00555 | mg/kg | U | | 0.00185 | | 0.00555 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599368 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599366 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599365 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599580 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597892 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Cd | Cadmium | 9.94 | 1 | 0.12 | mg/kg | J | | 0.11 | | 0.549 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597893 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Ca | Calcium | 9.94 | 1 | 620 | mg/kg | NQ | | 8.78 | | 27.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599144 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 9.94 | 1 | 0.00555 | mg/kg | U | | 0.00185 | | 0.00555 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599155 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599552 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.148 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599550 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599349 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599347 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599138 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599152 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 67-66-3 | Chloroform | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599135 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599557 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599532 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599568 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599361 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599364 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597894 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Cr | Chromium | 9.94 | 1 | 4.18 | mg/kg | NQ | | 0.165 | | 0.549 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599583 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 218-01-9 | Chrysene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597895 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Co | Cobalt | 9.94 | 1 | 1.94 | mg/kg | NQ | | 0.165 | | 0.549 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597896 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Cu | Copper | 9.94 | 1 | 3.14 | mg/kg | NQ | | 0.329 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598084 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 9.94 | 1 | 0.267 | mg/kg | U | | 0.0891 | | 0.267 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11599577 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599585 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599590 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599564 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599369 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.000555 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599348 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599337 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599372 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599536 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599370 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599533 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599371 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599534 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599582 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599134 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599147 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599156 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599140 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599149 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599146 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599546 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599336 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599344 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599150 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599154 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599339 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599342 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11599565 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599560 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599544 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599569 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599563 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 9.94 | 1 | 0.738 | mg/kg | U | | 0.111 | | 0.738 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599593 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599594 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599571 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599351 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599578 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599567 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 86-73-7 | Fluorene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599592 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599551 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599554 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599540 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599345 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 9.94 | 1 | 0.00555 | mg/kg | U | | 0.00185 | | 0.00555 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599589 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599143 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 9.94 | 1 | 0.00555 | mg/kg | U | | 0.00185 | | 0.00555 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597897 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Fe | Iron | 9.94 | 1 | 8900 | mg/kg | NQ | | 8.78 | | 27.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599542 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 78-59-1 | Isophorone | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599356 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599367 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597898 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Pb | Lead | 9.94 | 1 | 12.3 | mg/kg | NQ | | 0.362 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597899 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Mg | Magnesium | 9.94 | 1 | 432 | mg/kg | NQ | | 9.33 | | 32.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597900 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Mn | Manganese | 9.94 | 1 | 452 | mg/kg | NQ | | 0.219 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597901 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Hg | Mercury | 9.94 | 1 | 0.0149 | mg/kg | NQ | | 0.00414 | | 0.0124 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11599340 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 9.94 | 1 | 0.00555 | mg/kg | U | | 0.00185 | | 0.00555 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599145 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 9.94 | 1 | 0.00555 | mg/kg | U | | 0.00185 | | 0.00555 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599553 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599537 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599539 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599549 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597902 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Ni | Nickel | 9.94 | 2 | 4.51 | mg/kg | NQ | | 0.108 | | 0.432 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598085 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | NO3 | Nitrate | 9.94 | 1 | 1.11 | mg/kg | U | | 0.366 | | 1.11 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11599558 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.122 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599559 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599570 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599541 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599543 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599566 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599538 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599527 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599595 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599574 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11598159 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | ClO4 | Perchlorate | 9.94 | 1 | 0.00222 | mg/kg | U | | 0.000555 | | 0.00222 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11599575 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599530 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 108-95-2 | Phenol | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597903 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | K | Potassium | 9.94 | 1 | 581 | mg/kg | NQ | | 7.02 | | 27.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599360 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599579 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 129-00-0 | Pyrene | 9.94 | 1 | 0.0369 | mg/kg | U | | 0.0111 | | 0.0369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599528 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 110-86-1 | Pyridine | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597904 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Se | Selenium | 9.94 | 2 | 1.08 | mg/kg | U | | 0.356 | | 1.08 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597905 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Ag | Silver | 9.94 | 1 | 0.549 | mg/kg | U | | 0.11 | | 0.549 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597906 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Na | Sodium | 9.94 | 1 | 207 | mg/kg | NQ | | 7.68 | | 27.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599354 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 100-42-5 | Styrene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599350 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599357 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599346 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597907 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Tl | Thallium | 9.94 | 2 | 0.432 | mg/kg | U | | 0.0648 | | 0.432 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599341 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 108-88-3 | Toluene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599142 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 9.94 | 1 | 0.00555 | mg/kg | U | | 0.00185 | | 0.00555 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599548 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599153 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599343 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599335 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599139 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599556 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599555 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 9.94 | 1 | 0.369 | mg/kg | U | | 0.111 | | 0.369 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599358 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599363 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599362 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598191 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | U-234 | Uranium-234 | 9.94 | 1 | 1.48 | pCi/g | NQ | 0.114 | | 0.083 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598192 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 9.94 | 1 | 0.0896 | pCi/g | NQ | 0.0817 | | 0.0263 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598193 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | U-238 | Uranium-238 | 9.94 | 1 | 1.66 | pCi/g | NQ | 0.0712 | | 0.0884 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597908 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | V | Vanadium | 9.94 | 1 | 5.73 | mg/kg | NQ | | 0.11 | | 0.549 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599136 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599353 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 9.94 | 1 | 0.00111 | mg/kg | U | | 0.00037 | | 0.00111 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599352 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 9.94 | 1 | 0.00222 | mg/kg | U | | 0.000741 | | 0.00222 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597909 | 57-007 | 2014-3795 | RE57-14-84176 | N | HA | INV | NA | REG | 57-4020 | 5.5 | 6.5 | ft | R | QBT3 | Zn | Zinc | 9.94 | 1 | 53.8 | mg/kg | NQ | | 0.439 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597657 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 83-32-9 | Acenaphthene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597656 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599442 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 67-64-1 | Acetone | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597933 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Al | Aluminum | 10.9 | 1 | 5920 | mg/kg | NQ | | 7.31 | | 21.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599667 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 62-53-3 | Aniline | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597671 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 120-12-7 | Anthracene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597934 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Sb | Antimony | 10.9 | 1 | 0.361 | mg/kg | J | | 0.355 | | 1.08 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597935 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | As | Arsenic | 10.9 | 2 | 1.52 | mg/kg | NQ | | 0.221 | | 1.1 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597667 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 103-33-3 | Azobenzene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597936 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Ba | Barium | 10.9 | 1 | 126 | mg/kg | NQ | | 0.108 | | 0.538 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599458 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 71-43-2 | Benzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597676 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597683 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597681 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597686 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597682 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597642 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 10.9 | 1 | 0.745 | mg/kg | U | | 0.186 | | 0.745 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599673 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597937 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Be | Beryllium | 10.9 | 2 | 0.633 | mg/kg | NQ | | 0.0221 | | 0.11 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597640 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599669 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597679 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599483 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 108-86-1 | Bromobenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599452 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599462 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599479 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-25-2 | Bromoform | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599438 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 74-83-9 | Bromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597668 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599449 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599492 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599490 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599489 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597675 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597938 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Cd | Cadmium | 10.9 | 1 | 0.538 | mg/kg | U | | 0.108 | | 0.538 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597939 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Ca | Calcium | 10.9 | 1 | 2160 | mg/kg | NQ | | 8.6 | | 26.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599445 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599456 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597647 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.149 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597645 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599473 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599471 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599439 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-00-3 | Chloroethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599453 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 67-66-3 | Chloroform | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599436 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 74-87-3 | Chloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597652 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599670 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597663 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599485 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599488 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597940 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Cr | Chromium | 10.9 | 1 | 3.81 | mg/kg | NQ | | 0.161 | | 0.538 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597678 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 218-01-9 | Chrysene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597941 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Co | Cobalt | 10.9 | 1 | 2.47 | mg/kg | NQ | | 0.161 | | 0.538 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597942 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Cu | Copper | 10.9 | 1 | 4.61 | mg/kg | NQ | | 0.323 | | 1.08 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598088 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 10.9 | 1 | 0.27 | mg/kg | U | | 0.0901 | | 0.27 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11597672 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597680 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597685 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597659 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599493 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000561 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599472 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599461 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 74-95-3 | Dibromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599496 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599674 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599494 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599671 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599495 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599672 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597677 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599435 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599448 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599457 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599441 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599450 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599447 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597641 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599460 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599468 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599451 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599455 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599463 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599466 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597660 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597655 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597639 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597664 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597658 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 10.9 | 1 | 0.745 | mg/kg | U | | 0.112 | | 0.745 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597688 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597689 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597666 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 122-39-4 | Diphenylamine | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599475 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597673 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 206-44-0 | Fluoranthene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597662 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 86-73-7 | Fluorene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597687 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597646 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597649 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597635 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599469 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597684 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599444 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 74-88-4 | Iodomethane | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597943 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Fe | Iron | 10.9 | 1 | 8470 | mg/kg | NQ | | 8.6 | | 26.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597637 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 78-59-1 | Isophorone | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599480 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599491 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597944 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Pb | Lead | 10.9 | 1 | 13.3 | mg/kg | NQ | | 0.355 | | 1.08 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597945 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Mg | Magnesium | 10.9 | 1 | 903 | mg/kg | NQ | | 9.14 | | 32.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597946 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Mn | Manganese | 10.9 | 1 | 570 | mg/kg | NQ | | 0.215 | | 1.08 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597947 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Hg | Mercury | 10.9 | 1 | 0.0147 | mg/kg | NQ | | 0.00444 | | 0.0133 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11599464 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599446 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597648 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |

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| 11599675 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597634 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597644 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 91-20-3 | Naphthalene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597948 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Ni | Nickel | 10.9 | 2 | 4.67 | mg/kg | NQ | | 0.11 | | 0.442 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598089 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | NO3 | Nitrate | 10.9 | 1 | 1.12 | mg/kg | U | | 0.37 | | 1.12 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11597653 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.123 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597654 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597665 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597636 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597638 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597661 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599676 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599665 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597690 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597669 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11598161 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | ClO4 | Perchlorate | 10.9 | 1 | 0.00225 | mg/kg | U | | 0.000561 | | 0.00225 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11597670 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 85-01-8 | Phenanthrene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599668 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 108-95-2 | Phenol | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597949 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | K | Potassium | 10.9 | 1 | 1100 | mg/kg | NQ | | 6.88 | | 26.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599484 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597674 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 129-00-0 | Pyrene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599666 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 110-86-1 | Pyridine | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597950 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Se | Selenium | 10.9 | 2 | 1.1 | mg/kg | U | | 0.365 | | 1.1 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597951 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Ag | Silver | 10.9 | 1 | 0.123 | mg/kg | J | | 0.108 | | 0.538 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597952 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Na | Sodium | 10.9 | 1 | 104 | mg/kg | NQ | | 7.53 | | 26.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599478 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 100-42-5 | Styrene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599474 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599481 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599470 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597953 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Tl | Thallium | 10.9 | 2 | 0.105 | mg/kg | J | | 0.0663 | | 0.442 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599465 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 108-88-3 | Toluene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599443 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597643 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599454 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599467 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599459 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 79-01-6 | Trichloroethene | 10.9 | 1 | 0.00294 | mg/kg | J+ | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599440 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597651 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597650 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599482 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599487 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599486 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598197 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | U-234 | Uranium-234 | 10.9 | 1 | 1.28 | pCi/g | NQ | 0.141 | | 0.0858 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598198 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 10.9 | 1 | 0.083 | pCi/g | U | 0.101 | | 0.0259 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598199 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | U-238 | Uranium-238 | 10.9 | 1 | 1.21 | pCi/g | NQ | 0.088 | | 0.0834 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597954 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | V | Vanadium | 10.9 | 1 | 9.65 | mg/kg | NQ | | 0.108 | | 0.538 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599437 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599477 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599476 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 10.9 | 1 | 0.00225 | mg/kg | U | | 0.000749 | | 0.00225 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597955 | 57-007 | 2014-3795 | RE57-14-84155 | N | HA | INV | NA | REG | 57-4021 | 0 | 1 | ft | S | SOIL | Zn | Zinc | 10.9 | 1 | 50.4 | mg/kg | NQ | | 0.43 | | 1.08 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599631 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 83-32-9 | Acenaphthene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599630 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599380 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 67-64-1 | Acetone | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597910 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Al | Aluminum | 6.44 | 1 | 8920 | mg/kg | NQ | | 6.78 | | 19.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599598 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 62-53-3 | Aniline | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599645 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 120-12-7 | Anthracene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597911 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Sb | Antimony | 6.44 | 1 | 0.997 | mg/kg | U | | 0.329 | | 0.997 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597912 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | As | Arsenic | 6.44 | 2 | 1.78 | mg/kg | NQ | | 0.194 | | 0.97 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599641 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 103-33-3 | Azobenzene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597913 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Ba | Barium | 6.44 | 1 | 58.8 | mg/kg | NQ | | 0.0997 | | 0.499 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599396 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 71-43-2 | Benzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599650 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599657 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599655 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599660 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599656 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599616 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 6.44 | 1 | 0.712 | mg/kg | U | | 0.178 | | 0.712 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599604 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597914 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Be | Beryllium | 6.44 | 2 | 0.905 | mg/kg | NQ | | 0.0194 | | 0.097 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599614 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599600 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599653 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599421 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 108-86-1 | Bromobenzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599390 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599400 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599417 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-25-2 | Bromoform | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599376 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 74-83-9 | Bromomethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599642 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599387 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599430 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599428 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599427 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599649 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597915 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Cd | Cadmium | 6.44 | 1 | 0.499 | mg/kg | U | | 0.0997 | | 0.499 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597916 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Ca | Calcium | 6.44 | 1 | 1190 | mg/kg | NQ | | 7.98 | | 24.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599383 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599394 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599621 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.142 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599619 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599411 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599409 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599377 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-00-3 | Chloroethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599391 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 67-66-3 | Chloroform | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599374 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 74-87-3 | Chloromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599626 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599601 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599637 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599423 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599426 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597917 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Cr | Chromium | 6.44 | 1 | 6.26 | mg/kg | NQ | | 0.15 | | 0.499 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599652 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 218-01-9 | Chrysene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597918 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Co | Cobalt | 6.44 | 1 | 3.3 | mg/kg | NQ | | 0.15 | | 0.499 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597919 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Cu | Copper | 6.44 | 1 | 4.55 | mg/kg | NQ | | 0.299 | | 0.997 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598086 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 6.44 | 1 | 0.252 | mg/kg | U | | 0.0842 | | 0.252 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11599646 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599654 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599659 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599633 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599431 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000534 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599410 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599399 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 74-95-3 | Dibromomethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599434 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599605 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599432 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599602 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599433 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599603 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599651 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599373 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599386 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599395 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599379 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599388 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599385 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599615 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599398 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599406 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599389 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599393 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599401 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599404 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599634 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599629 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599613 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599638 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599632 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 6.44 | 1 | 0.712 | mg/kg | U | | 0.107 | | 0.712 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599662 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599663 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599640 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 122-39-4 | Diphenylamine | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599413 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599647 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 206-44-0 | Fluoranthene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599636 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 86-73-7 | Fluorene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599661 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599620 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599623 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599609 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599407 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599658 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599382 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 74-88-4 | Iodomethane | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597920 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Fe | Iron | 6.44 | 1 | 11500 | mg/kg | NQ | | 7.98 | | 24.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599611 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 78-59-1 | Isophorone | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599418 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599429 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597921 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Pb | Lead | 6.44 | 1 | 12.4 | mg/kg | NQ | | 0.329 | | 0.997 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597922 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Mg | Magnesium | 6.44 | 1 | 1330 | mg/kg | NQ | | 8.47 | | 29.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597923 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Mn | Manganese | 6.44 | 1 | 278 | mg/kg | NQ | | 0.199 | | 0.997 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597924 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Hg | Mercury | 6.44 | 1 | 0.0228 | mg/kg | NQ | | 0.00413 | | 0.0123 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11599402 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599384 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599622 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2- | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599606 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599608 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599618 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 91-20-3 | Naphthalene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597925 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Ni | Nickel | 6.44 | 2 | 4.89 | mg/kg | NQ | | 0.097 | | 0.388 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598087 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | NO3 | Nitrate | 6.44 | 1 | 1.07 | mg/kg | U | | 0.353 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11599627 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.117 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599628 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599639 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599610 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599612 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599635 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599607 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599596 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599664 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599643 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11598160 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | ClO4 | Perchlorate | 6.44 | 1 | 0.00214 | mg/kg | U | | 0.000534 | | 0.00214 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11599644 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 85-01-8 | Phenanthrene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599599 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 108-95-2 | Phenol | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597926 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | K | Potassium | 6.44 | 1 | 958 | mg/kg | NQ | | 6.38 | | 24.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599422 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599648 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 129-00-0 | Pyrene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599597 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 110-86-1 | Pyridine | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597927 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Se | Selenium | 6.44 | 2 | 0.97 | mg/kg | U | | 0.32 | | 0.97 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597928 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Ag | Silver | 6.44 | 1 | 0.499 | mg/kg | U | | 0.0997 | | 0.499 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597929 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Na | Sodium | 6.44 | 1 | 133 | mg/kg | NQ | | 6.98 | | 24.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599416 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 100-42-5 | Styrene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599412 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599419 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599408 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |

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| 11597930 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Tl | Thallium | 6.44 | 2 | 0.283 | mg/kg | J | | 0.0582 | | 0.388 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599403 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 108-88-3 | Toluene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599381 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599617 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599392 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599405 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599397 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 79-01-6 | Trichloroethene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599378 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599625 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599624 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599420 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599425 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599424 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598194 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | U-234 | Uranium-234 | 6.44 | 1 | 1.46 | pCi/g | NQ | 0.116 | | 0.0832 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598195 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 6.44 | 1 | 0.0799 | pCi/g | U | 0.0832 | | 0.0242 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11598196 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | U-238 | Uranium-238 | 6.44 | 1 | 1.27 | pCi/g | NQ | 0.0726 | | 0.0779 | | Y | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 |
| 11597931 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | V | Vanadium | 6.44 | 1 | 13.8 | mg/kg | NQ | | 0.0997 | | 0.499 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599375 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599415 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599414 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.44 | 1 | 0.00214 | mg/kg | U | | 0.000713 | | 0.00214 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597932 | 57-007 | 2014-3795 | RE57-14-84144 | N | HA | INV | NA | REG | 57-4021 | 4.5 | 5.5 | ft | S | SOIL | Zn | Zinc | 6.44 | 1 | 46.6 | mg/kg | NQ | | 0.399 | | 0.997 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597726 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597725 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599504 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 67-64-1 | Acetone | 6.23 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597956 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Al | Aluminum | 6.23 | 1 | 7440 | mg/kg | NQ | | 7.14 | | 21 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597693 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 62-53-3 | Aniline | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597740 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 120-12-7 | Anthracene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597957 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Sb | Antimony | 6.23 | 1 | 1.05 | mg/kg | U | | 0.346 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597958 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | As | Arsenic | 6.23 | 2 | 1.49 | mg/kg | NQ | | 0.202 | | 1.01 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597736 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 103-33-3 | Azobenzene | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597959 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Ba | Barium | 6.23 | 1 | 60.1 | mg/kg | NQ | | 0.105 | | 0.525 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599688 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 71-43-2 | Benzene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597745 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597752 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597750 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597755 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597751 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597711 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 6.23 | 1 | 0.71 | mg/kg | U | | 0.178 | | 0.71 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597699 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597960 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Be | Beryllium | 6.23 | 2 | 0.791 | mg/kg | NQ | | 0.0202 | | 0.101 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597709 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597695 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597748 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599713 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599682 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599692 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599709 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-25-2 | Bromoform | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599500 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 74-83-9 | Bromomethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597737 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599679 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 6.23 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599722 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599720 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599719 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597744 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597961 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Cd | Cadmium | 6.23 | 1 | 0.525 | mg/kg | U | | 0.105 | | 0.525 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597962 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Ca | Calcium | 6.23 | 1 | 1090 | mg/kg | NQ | | 8.4 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599507 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 6.23 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599686 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597716 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.142 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597714 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599703 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599701 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599501 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-00-3 | Chloroethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599683 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 67-66-3 | Chloroform | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599498 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 74-87-3 | Chloromethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597721 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597696 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597732 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599715 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599718 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597963 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Cr | Chromium | 6.23 | 1 | 5.82 | mg/kg | NQ | | 0.157 | | 0.525 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597747 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 218-01-9 | Chrysene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597964 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Co | Cobalt | 6.23 | 1 | 2.36 | mg/kg | NQ | | 0.157 | | 0.525 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597965 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Cu | Copper | 6.23 | 1 | 3.42 | mg/kg | NQ | | 0.315 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11598090 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 6.23 | 1 | 0.226 | mg/kg | U | | 0.0755 | | 0.226 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 |
| 11597741 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597749 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597754 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597728 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599723 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000533 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599702 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599691 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599726 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597700 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599724 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597697 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599725 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597698 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597746 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599497 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599678 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599687 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599503 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599680 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599677 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597710 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599690 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599698 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599681 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599685 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599693 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599696 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597729 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597724 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597708 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597733 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597727 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 6.23 | 1 | 0.71 | mg/kg | U | | 0.107 | | 0.71 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597757 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597758 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597735 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599705 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597742 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597731 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 86-73-7 | Fluorene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597756 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597715 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597718 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597704 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599699 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 6.23 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597753 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599506 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 74-88-4 | Iodomethane | 6.23 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597966 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Fe | Iron | 6.23 | 1 | 9810 | mg/kg | NQ | | 8.4 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597706 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 78-59-1 | Isophorone | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599710 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599721 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597967 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Pb | Lead | 6.23 | 1 | 12.6 | mg/kg | NQ | | 0.346 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597968 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Mg | Magnesium | 6.23 | 1 | 774 | mg/kg | NQ | | 8.92 | | 31.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597969 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Mn | Manganese | 6.23 | 1 | 408 | mg/kg | NQ | | 0.21 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597970 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Hg | Mercury | 6.23 | 1 | 0.0144 | mg/kg | NQ | | 0.00424 | | 0.0126 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 |
| 11599694 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 6.23 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599508 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 6.23 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597717 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597701 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597703 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597713 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 91-20-3 | Naphthalene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597971 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Ni | Nickel | 6.23 | 2 | 4.17 | mg/kg | NQ | | 0.101 | | 0.403 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598091 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | NO3 | Nitrate | 6.23 | 1 | 1.07 | mg/kg | U | | 0.352 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 |
| 11597722 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.117 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597723 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597734 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597705 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597707 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597730 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597702 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597691 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597759 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597738 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11598162 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | ClO4 | Perchlorate | 6.23 | 1 | 0.00212 | mg/kg | U | | 0.000531 | | 0.00212 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 |
| 11597739 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597694 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 108-95-2 | Phenol | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597972 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | K | Potassium | 6.23 | 1 | 802 | mg/kg | NQ | | 6.72 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599714 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597743 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 129-00-0 | Pyrene | 6.23 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597692 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 110-86-1 | Pyridine | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597973 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Se | Selenium | 6.23 | 2 | 1.01 | mg/kg | U | | 0.333 | | 1.01 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11597974 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Ag | Silver | 6.23 | 1 | 0.525 | mg/kg | U | | 0.105 | | 0.525 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11597975 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Na | Sodium | 6.23 | 1 | 207 | mg/kg | NQ | | 7.35 | | 26.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599708 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 100-42-5 | Styrene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599704 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599711 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599700 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597976 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Tl | Thallium | 6.23 | 2 | 0.072 | mg/kg | J | | 0.0605 | | 0.403 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599695 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 108-88-3 | Toluene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599505 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.23 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597712 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599684 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599697 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599689 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599502 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597720 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11597719 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 6.23 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 |
| 11599712 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599717 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599716 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11598200 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | U-234 | Uranium-234 | 6.23 | 1 | 1.32 | pCi/g | NQ | 0.0966 | | 0.0725 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 |
| 11598201 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 6.23 | 1 | 0.076 | pCi/g | NQ | 0.0693 | | 0.0202 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 |
| 11598202 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | U-238 | Uranium-238 | 6.23 | 1 | 1.3 | pCi/g | NQ | 0.0605 | | 0.0711 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 |
| 11597977 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | V | Vanadium | 6.23 | 1 | 8.97 | mg/kg | NQ | | 0.105 | | 0.525 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11599499 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599707 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 6.23 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11599706 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.23 | 1 | 0.00213 | mg/kg | U | | 0.000711 | | 0.00213 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 |
| 11597978 | 57-007 | 2014-3795 | RE57-14-84177 | N | HA | INV | NA | REG | 57-4021 | 6.5 | 7.5 | ft | R | QBT3 | Zn | Zinc | 6.23 | 1 | 50.6 | mg/kg | NQ | | 0.42 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 |
| 11586605 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 83-32-9 | Acenaphthene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586604 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 208-96-8 | Acenaphthylene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586236 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 67-64-1 | Acetone | 10.7 | 1 | 0.0056 | mg/kg | U | | 0.00187 | | 0.0056 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585930 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Al | Aluminum | 10.7 | 1 | 5370 | mg/kg | NQ | | 7.19 | | 21.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586572 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 62-53-3 | Aniline | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586619 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 120-12-7 | Anthracene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585931 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Sb | Antimony | 10.7 | 1 | 1.06 | mg/kg | U | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585932 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | As | Arsenic | 10.7 | 2 | 1.36 | mg/kg | NQ | | 0.213 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11586615 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 103-33-3 | Azobenzene | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585933 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Ba | Barium | 10.7 | 1 | 55.1 | mg/kg | NQ | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586252 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 71-43-2 | Benzene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586624 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586631 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586629 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586634 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586630 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586590 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 65-85-0 | Benzoic Acid | 10.7 | 1 | 0.746 | mg/kg | U | | 0.186 | | 0.746 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586578 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585934 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Be | Beryllium | 10.7 | 2 | 0.47 | mg/kg | NQ | | 0.0213 | | 0.106 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586588 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586574 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586627 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586277 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 108-86-1 | Bromobenzene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586246 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 74-97-5 | Bromochloromethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586256 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586273 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-25-2 | Bromoform | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586232 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 74-83-9 | Bromomethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586616 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586243 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 78-93-3 | Butanone[2-] | 10.7 | 1 | 0.0056 | mg/kg | U | | 0.00187 | | 0.0056 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586286 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586284 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586283 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586623 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585935 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Cd | Cadmium | 10.7 | 1 | 0.528 | mg/kg | U | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585936 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Ca | Calcium | 10.7 | 1 | 874 | mg/kg | NQ | | 8.45 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586239 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 10.7 | 1 | 0.0056 | mg/kg | U | | 0.00187 | | 0.0056 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586250 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586595 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.149 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586593 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586267 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 108-90-7 | Chlorobenzene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586265 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586233 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-00-3 | Chloroethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586247 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 67-66-3 | Chloroform | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586230 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 74-87-3 | Chloromethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586600 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586575 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586611 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586279 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586282 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585937 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Cr | Chromium | 10.7 | 1 | 8.29 | mg/kg | J | | 0.159 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586626 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 218-01-9 | Chrysene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585938 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Co | Cobalt | 10.7 | 1 | 1.26 | mg/kg | J | | 0.159 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585939 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Cu | Copper | 10.7 | 1 | 2.74 | mg/kg | NQ | | 0.317 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586323 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 10.7 | 1 | 0.255 | mg/kg | U | | 0.085 | | 0.255 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11586620 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586628 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586633 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586607 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 132-64-9 | Dibenzofuran | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586287 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.00056 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586266 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586255 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 74-95-3 | Dibromomethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586290 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586579 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586288 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586576 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586289 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586577 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586625 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586229 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586242 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586251 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586235 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586244 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586241 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586589 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586254 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586262 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586245 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586249 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586257 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586260 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586608 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 84-66-2 | Diethylphthalate | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586603 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586587 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586612 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586606 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 10.7 | 1 | 0.746 | mg/kg | UJ | | 0.112 | | 0.746 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586636 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586637 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586614 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 122-39-4 | Diphenylamine | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586269 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 100-41-4 | Ethylbenzene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586621 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 206-44-0 | Fluoranthene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586610 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 86-73-7 | Fluorene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586635 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586594 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586597 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586583 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 67-72-1 | Hexachloroethane | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586263 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 10.7 | 1 | 0.0056 | mg/kg | U | | 0.00187 | | 0.0056 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586632 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586238 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 74-88-4 | Iodomethane | 10.7 | 1 | 0.0056 | mg/kg | U | | 0.00187 | | 0.0056 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585940 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Fe | Iron | 10.7 | 1 | 8440 | mg/kg | NQ | | 8.45 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586585 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 78-59-1 | Isophorone | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586274 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586285 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585941 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Pb | Lead | 10.7 | 1 | 10.1 | mg/kg | NQ | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585942 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Mg | Magnesium | 10.7 | 1 | 421 | mg/kg | NQ | | 8.98 | | 31.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11585943 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Mn | Manganese | 10.7 | 1 | 326 | mg/kg | J | | 0.211 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585944 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Hg | Mercury | 10.7 | 1 | 0.0178 | mg/kg | NQ | | 0.0044 | | 0.0131 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11586258 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 10.7 | 1 | 0.0056 | mg/kg | U | | 0.00187 | | 0.0056 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586240 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-09-2 | Methylene Chloride | 10.7 | 1 | 0.00248 | mg/kg | J | | 0.00187 | | 0.0056 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586596 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586580 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586582 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586592 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 91-20-3 | Naphthalene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585945 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Ni | Nickel | 10.7 | 2 | 2.75 | mg/kg | NQ | | 0.108 | | 0.433 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586324 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | NO3 | Nitrate | 10.7 | 1 | 1.39 | mg/kg | NQ | | 0.37 | | 1.12 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/14/2014 | 07/08/2014 |
| 11586601 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.123 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586602 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586613 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586584 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 98-95-3 | Nitrobenzene | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586586 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586609 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586581 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586570 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586638 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586617 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586347 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | ClO4 | Perchlorate | 10.7 | 1 | 0.00224 | mg/kg | U | | 0.00056 | | 0.00224 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11586618 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 85-01-8 | Phenanthrene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586573 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 108-95-2 | Phenol | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585946 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | K | Potassium | 10.7 | 1 | 750 | mg/kg | NQ | | 6.76 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586278 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586622 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 129-00-0 | Pyrene | 10.7 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586571 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 110-86-1 | Pyridine | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585947 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Se | Selenium | 10.7 | 2 | 1.06 | mg/kg | U | | 0.351 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585948 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Ag | Silver | 10.7 | 1 | 0.528 | mg/kg | U | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585949 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Na | Sodium | 10.7 | 1 | 279 | mg/kg | NQ | | 7.4 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586272 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 100-42-5 | Styrene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586268 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586275 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586264 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585950 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Tl | Thallium | 10.7 | 2 | 0.0702 | mg/kg | J | | 0.0638 | | 0.425 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586259 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 108-88-3 | Toluene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586237 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 10.7 | 1 | 0.0056 | mg/kg | U | | 0.00187 | | 0.0056 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586591 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586248 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586261 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586253 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 79-01-6 | Trichloroethene | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586234 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586599 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586598 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 10.7 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586276 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586281 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586280 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586359 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | U-234 | Uranium-234 | 10.7 | 1 | 1.21 | pCi/g | NQ | 0.104 | | 0.0724 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586360 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | U-235/236 | Uranium-235/236 | 10.7 | 1 | 0.0717 | pCi/g | U | 0.0747 | | 0.0205 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586361 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | U-238 | Uranium-238 | 10.7 | 1 | 1.32 | pCi/g | NQ | 0.0652 | | 0.0748 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11585951 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | V | Vanadium | 10.7 | 1 | 5.63 | mg/kg | J | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586231 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586271 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 10.7 | 1 | 0.00112 | mg/kg | U | | 0.000373 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586270 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 10.7 | 1 | 0.00224 | mg/kg | U | | 0.000747 | | 0.00224 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585952 | 57-006 | 2014-3701 | RE57-14-84178 | N | HA | INV | NA | REG | 57-4022 | 3 | 4 | ft | S | FILL | Zn | Zinc | 10.7 | 1 | 50.4 | mg/kg | NQ | | 0.423 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586918 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 83-32-9 | Acenaphthene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586917 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 208-96-8 | Acenaphthylene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586428 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 67-64-1 | Acetone | 13.2 | 1 | 0.00576 | mg/kg | U | | 0.00192 | | 0.00576 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585976 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Al | Aluminum | 13.2 | 1 | 5040 | mg/kg | NQ | | 7.62 | | 22.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586710 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 62-53-3 | Aniline | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586932 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 120-12-7 | Anthracene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585977 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Sb | Antimony | 13.2 | 1 | 1.12 | mg/kg | U | | 0.37 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585978 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | As | Arsenic | 13.2 | 2 | 3.11 | mg/kg | NQ | | 0.201 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586928 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 103-33-3 | Azobenzene | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585979 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Ba | Barium | 13.2 | 1 | 75.2 | mg/kg | NQ | | 0.112 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586444 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 71-43-2 | Benzene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586937 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586944 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586942 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586947 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586943 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586903 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 65-85-0 | Benzoic Acid | 13.2 | 1 | 0.767 | mg/kg | U | | 0.192 | | 0.767 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586716 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585980 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Be | Beryllium | 13.2 | 2 | 0.646 | mg/kg | NQ | | 0.0201 | | 0.1 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586901 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586712 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586940 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586469 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 108-86-1 | Bromobenzene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586438 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 74-97-5 | Bromochloromethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586448 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586465 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-25-2 | Bromoform | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586424 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 74-83-9 | Bromomethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586929 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586435 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 78-93-3 | Butanone[2-] | 13.2 | 1 | 0.00576 | mg/kg | U | | 0.00192 | | 0.00576 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586478 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586476 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586475 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586936 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585981 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Cd | Cadmium | 13.2 | 1 | 0.56 | mg/kg | U | | 0.112 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585982 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Ca | Calcium | 13.2 | 1 | 1830 | mg/kg | NQ | | 8.97 | | 28 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586431 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 13.2 | 1 | 0.00576 | mg/kg | U | | 0.00192 | | 0.00576 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586442 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |

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| 11586908 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.153 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586906 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586459 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 108-90-7 | Chlorobenzene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586457 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586425 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-00-3 | Chloroethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586439 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 67-66-3 | Chloroform | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586422 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 74-87-3 | Chloromethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586913 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586713 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586924 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586471 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586474 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585983 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Cr | Chromium | 13.2 | 1 | 5.92 | mg/kg | NQ | | 0.168 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586939 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 218-01-9 | Chrysene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585984 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Co | Cobalt | 13.2 | 1 | 1.81 | mg/kg | NQ | | 0.168 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585985 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Cu | Copper | 13.2 | 1 | 3.62 | mg/kg | NQ | | 0.336 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586327 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 13.2 | 1 | 0.282 | mg/kg | U | | 0.0943 | | 0.282 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11586933 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586941 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586946 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586920 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 132-64-9 | Dibenzofuran | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586479 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000576 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586458 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586447 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 74-95-3 | Dibromomethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586482 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586717 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586480 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586714 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586481 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586715 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586938 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586421 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586434 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586443 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586427 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586436 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586433 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586902 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586446 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586454 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586437 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586441 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586449 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586452 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586921 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 84-66-2 | Diethylphthalate | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586916 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586725 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586925 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586919 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 13.2 | 1 | 0.767 | mg/kg | UJ | | 0.115 | | 0.767 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586949 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586950 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586927 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 122-39-4 | Diphenylamine | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586461 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 100-41-4 | Ethylbenzene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586934 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 206-44-0 | Fluoranthene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586923 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 86-73-7 | Fluorene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586948 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586907 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586910 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586721 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 67-72-1 | Hexachloroethane | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586455 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 13.2 | 1 | 0.00576 | mg/kg | U | | 0.00192 | | 0.00576 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586945 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586430 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 74-88-4 | Iodomethane | 13.2 | 1 | 0.00576 | mg/kg | U | | 0.00192 | | 0.00576 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585986 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Fe | Iron | 13.2 | 1 | 8400 | mg/kg | NQ | | 8.97 | | 28 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586723 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 78-59-1 | Isophorone | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586466 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586477 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585987 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Pb | Lead | 13.2 | 1 | 10.4 | mg/kg | NQ | | 0.37 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585988 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Mg | Magnesium | 13.2 | 1 | 634 | mg/kg | NQ | | 9.53 | | 33.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11585989 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Mn | Manganese | 13.2 | 1 | 351 | mg/kg | NQ | | 0.224 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585990 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Hg | Mercury | 13.2 | 1 | 0.0132 | mg/kg | NQ | | 0.00408 | | 0.0122 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11586450 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 13.2 | 1 | 0.00576 | mg/kg | U | | 0.00192 | | 0.00576 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586432 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-09-2 | Methylene Chloride | 13.2 | 1 | 0.00576 | mg/kg | U | | 0.00192 | | 0.00576 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586909 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586718 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586720 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586905 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 91-20-3 | Naphthalene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585991 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Ni | Nickel | 13.2 | 2 | 3.59 | mg/kg | NQ | | 0.104 | | 0.418 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586328 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | NO3 | Nitrate | 13.2 | 1 | 8.03 | mg/kg | NQ | | 0.38 | | 1.15 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/14/2014 | 07/08/2014 |
| 11586914 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.127 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586915 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586926 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586722 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 98-95-3 | Nitrobenzene | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586724 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586922 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586719 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586708 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586951 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586930 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586349 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | ClO4 | Perchlorate | 13.2 | 1 | 0.00229 | mg/kg | U | | 0.000573 | | 0.00229 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11586931 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 85-01-8 | Phenanthrene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586711 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 108-95-2 | Phenol | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585992 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | K | Potassium | 13.2 | 1 | 716 | mg/kg | NQ | | 7.17 | | 28 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586470 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586935 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 129-00-0 | Pyrene | 13.2 | 1 | 0.0384 | mg/kg | U | | 0.0115 | | 0.0384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586709 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 110-86-1 | Pyridine | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585993 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Se | Selenium | 13.2 | 2 | 1 | mg/kg | U | | 0.331 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585994 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Ag | Silver | 13.2 | 1 | 0.56 | mg/kg | U | | 0.112 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585995 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Na | Sodium | 13.2 | 1 | 140 | mg/kg | NQ | | 7.85 | | 28 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586464 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 100-42-5 | Styrene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586460 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586467 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586456 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585996 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Tl | Thallium | 13.2 | 2 | 0.0669 | mg/kg | J | | 0.0602 | | 0.402 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586451 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 108-88-3 | Toluene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586429 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 13.2 | 1 | 0.00576 | mg/kg | U | | 0.00192 | | 0.00576 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586904 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586440 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586453 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586445 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 79-01-6 | Trichloroethene | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586426 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586912 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586911 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 13.2 | 1 | 0.384 | mg/kg | U | | 0.115 | | 0.384 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586468 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586473 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586472 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586365 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | U-234 | Uranium-234 | 13.2 | 1 | 1.25 | pCi/g | NQ | 0.116 | | 0.0769 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586366 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | U-235/236 | Uranium-235/236 | 13.2 | 1 | 0.0857 | pCi/g | NQ | 0.0833 | | 0.0249 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586367 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | U-238 | Uranium-238 | 13.2 | 1 | 1.19 | pCi/g | NQ | 0.0727 | | 0.0743 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11585997 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | V | Vanadium | 13.2 | 1 | 7.77 | mg/kg | NQ | | 0.112 | | 0.56 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586423 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586463 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 13.2 | 1 | 0.00115 | mg/kg | U | | 0.000384 | | 0.00115 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586462 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 13.2 | 1 | 0.0023 | mg/kg | U | | 0.000769 | | 0.0023 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585998 | 57-006 | 2014-3701 | RE57-14-84186 | N | HA | INV | NA | REG | 57-4022 | 5 | 6 | ft | S | FILL | Zn | Zinc | 13.2 | 1 | 44.5 | mg/kg | NQ | | 0.448 | | 1.12 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586674 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586673 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586298 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 67-64-1 | Acetone | 8.64 | 1 | 0.00547 | mg/kg | U | | 0.00182 | | 0.00547 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585953 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Al | Aluminum | 8.64 | 1 | 4660 | mg/kg | NQ | | 7.2 | | 21.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586641 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 62-53-3 | Aniline | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586688 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 120-12-7 | Anthracene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585954 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Sb | Antimony | 8.64 | 1 | 1.06 | mg/kg | U | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585955 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | As | Arsenic | 8.64 | 2 | 2 | mg/kg | NQ | | 0.206 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586684 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 103-33-3 | Azobenzene | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585956 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Ba | Barium | 8.64 | 1 | 96.2 | mg/kg | NQ | | 0.106 | | 0.529 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586314 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 71-43-2 | Benzene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586693 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586700 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586698 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586703 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586699 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586659 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 8.64 | 1 | 0.729 | mg/kg | U | | 0.182 | | 0.729 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586647 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585957 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Be | Beryllium | 8.64 | 2 | 1.06 | mg/kg | NQ | | 0.0206 | | 0.103 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586657 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586643 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586696 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 8.64 | 1 | 0.269 | mg/kg | J | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586407 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586308 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586318 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586403 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-25-2 | Bromoform | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586294 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 74-83-9 | Bromomethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586685 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586305 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 8.64 | 1 | 0.00547 | mg/kg | U | | 0.00182 | | 0.00547 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586416 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586414 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586413 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586692 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585958 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Cd | Cadmium | 8.64 | 1 | 0.529 | mg/kg | U | | 0.106 | | 0.529 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585959 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Ca | Calcium | 8.64 | 1 | 753 | mg/kg | NQ | | 8.47 | | 26.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586301 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 8.64 | 1 | 0.00547 | mg/kg | U | | 0.00182 | | 0.00547 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586312 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586664 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.146 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586662 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586397 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586395 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586295 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-00-3 | Chloroethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586309 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 67-66-3 | Chloroform | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586292 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 74-87-3 | Chloromethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586669 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586644 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586680 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586409 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586412 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585960 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Cr | Chromium | 8.64 | 1 | 41.8 | mg/kg | NQ | | 0.159 | | 0.529 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586695 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 218-01-9 | Chrysene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585961 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Co | Cobalt | 8.64 | 1 | 1.16 | mg/kg | NQ | | 0.159 | | 0.529 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585962 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Cu | Copper | 8.64 | 1 | 4.94 | mg/kg | NQ | | 0.318 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586325 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 8.64 | 1 | 0.236 | mg/kg | U | | 0.0788 | | 0.236 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11586689 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586697 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586702 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586676 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586417 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000547 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586396 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586317 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586420 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586648 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586418 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586645 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586419 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |

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| 11586646 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586694 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586291 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586304 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586313 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586297 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586306 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586303 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586658 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586316 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586392 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586307 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586311 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586319 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586322 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586677 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586672 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586656 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586681 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586675 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 8.64 | 1 | 0.729 | mg/kg | UJ | | 0.109 | | 0.729 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586705 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586706 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586683 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586399 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586690 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586679 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 86-73-7 | Fluorene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586704 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586663 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586666 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586652 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586393 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 8.64 | 1 | 0.00547 | mg/kg | U | | 0.00182 | | 0.00547 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586701 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586300 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 74-88-4 | Iodomethane | 8.64 | 1 | 0.00547 | mg/kg | U | | 0.00182 | | 0.00547 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585963 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Fe | Iron | 8.64 | 1 | 10300 | mg/kg | NQ | | 8.47 | | 26.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586654 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 78-59-1 | Isophorone | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586404 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586415 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585964 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Pb | Lead | 8.64 | 1 | 14.5 | mg/kg | NQ | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585965 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Mg | Magnesium | 8.64 | 1 | 338 | mg/kg | NQ | | 9 | | 31.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11585966 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Mn | Manganese | 8.64 | 1 | 385 | mg/kg | NQ | | 0.212 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585967 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Hg | Mercury | 8.64 | 1 | 0.00695 | mg/kg | J | | 0.00401 | | 0.012 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11586320 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 8.64 | 1 | 0.00547 | mg/kg | U | | 0.00182 | | 0.00547 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586302 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 8.64 | 1 | 0.00547 | mg/kg | U | | 0.00182 | | 0.00547 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586665 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586649 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586651 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586661 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 91-20-3 | Naphthalene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585968 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Ni | Nickel | 8.64 | 2 | 3.47 | mg/kg | NQ | | 0.105 | | 0.421 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586326 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | NO3 | Nitrate | 8.64 | 1 | 3.24 | mg/kg | NQ | | 0.361 | | 1.09 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/14/2014 | 07/08/2014 |
| 11586670 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.12 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586671 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586682 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586653 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586655 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586678 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586650 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586639 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586707 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586686 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586348 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | ClO4 | Perchlorate | 8.64 | 1 | 0.00218 | mg/kg | U | | 0.000545 | | 0.00218 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11586687 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586642 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 108-95-2 | Phenol | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585969 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | K | Potassium | 8.64 | 1 | 674 | mg/kg | NQ | | 6.77 | | 26.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586408 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586691 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 129-00-0 | Pyrene | 8.64 | 1 | 0.0364 | mg/kg | U | | 0.0109 | | 0.0364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586640 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 110-86-1 | Pyridine | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585970 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Se | Selenium | 8.64 | 2 | 0.358 | mg/kg | J | | 0.339 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585971 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Ag | Silver | 8.64 | 1 | 0.529 | mg/kg | U | | 0.106 | | 0.529 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585972 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Na | Sodium | 8.64 | 1 | 307 | mg/kg | NQ | | 7.41 | | 26.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586402 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 100-42-5 | Styrene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586398 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586405 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586394 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585973 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Tl | Thallium | 8.64 | 2 | 0.411 | mg/kg | U | | 0.0617 | | 0.411 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586321 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 108-88-3 | Toluene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586299 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 8.64 | 1 | 0.00547 | mg/kg | U | | 0.00182 | | 0.00547 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586660 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586310 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586391 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586315 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586296 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586668 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586667 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 8.64 | 1 | 0.364 | mg/kg | U | | 0.109 | | 0.364 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586406 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586411 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586410 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586362 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | U-234 | Uranium-234 | 8.64 | 1 | 1.28 | pCi/g | NQ | 0.125 | | 0.0805 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586363 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 8.64 | 1 | 0.0555 | pCi/g | U | 0.09 | | 0.0205 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586364 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | U-238 | Uranium-238 | 8.64 | 1 | 1.25 | pCi/g | NQ | 0.0785 | | 0.0802 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11585974 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | V | Vanadium | 8.64 | 1 | 3.89 | mg/kg | NQ | | 0.106 | | 0.529 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586293 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586401 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 8.64 | 1 | 0.00109 | mg/kg | U | | 0.000364 | | 0.00109 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586400 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 8.64 | 1 | 0.00219 | mg/kg | U | | 0.00073 | | 0.00219 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585975 | 57-006 | 2014-3701 | RE57-14-84182 | N | HA | INV | NA | REG | 57-4022 | 8 | 9 | ft | R | QBT3 | Zn | Zinc | 8.64 | 1 | 62.8 | mg/kg | NQ | | 0.423 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586987 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 83-32-9 | Acenaphthene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586986 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 208-96-8 | Acenaphthylene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586490 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 67-64-1 | Acetone | 11.6 | 1 | 0.00565 | mg/kg | U | | 0.00188 | | 0.00565 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585999 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Al | Aluminum | 11.6 | 1 | 6000 | mg/kg | NQ | | 7.42 | | 21.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586954 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 62-53-3 | Aniline | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587001 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 120-12-7 | Anthracene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586000 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Sb | Antimony | 11.6 | 1 | 1.09 | mg/kg | U | | 0.36 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586001 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | As | Arsenic | 11.6 | 2 | 1.52 | mg/kg | NQ | | 0.208 | | 1.04 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586997 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 103-33-3 | Azobenzene | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586002 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Ba | Barium | 11.6 | 1 | 73.4 | mg/kg | NQ | | 0.109 | | 0.546 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586506 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 71-43-2 | Benzene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587006 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587013 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587011 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587016 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587012 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586972 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 65-85-0 | Benzoic Acid | 11.6 | 1 | 0.753 | mg/kg | U | | 0.188 | | 0.753 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586960 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586003 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Be | Beryllium | 11.6 | 2 | 0.611 | mg/kg | NQ | | 0.0208 | | 0.104 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586970 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586956 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587009 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586531 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 108-86-1 | Bromobenzene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586500 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 74-97-5 | Bromochloromethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586510 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586527 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-25-2 | Bromoform | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586486 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 74-83-9 | Bromomethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586998 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586497 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 78-93-3 | Butanone[2-] | 11.6 | 1 | 0.00565 | mg/kg | U | | 0.00188 | | 0.00565 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586540 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586538 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586537 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587005 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586004 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Cd | Cadmium | 11.6 | 1 | 0.546 | mg/kg | U | | 0.109 | | 0.546 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586005 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Ca | Calcium | 11.6 | 1 | 1180 | mg/kg | NQ | | 8.73 | | 27.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586493 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 11.6 | 1 | 0.00565 | mg/kg | U | | 0.00188 | | 0.00565 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586504 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586977 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.151 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586975 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586521 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 108-90-7 | Chlorobenzene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586519 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586487 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-00-3 | Chloroethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586501 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 67-66-3 | Chloroform | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586484 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 74-87-3 | Chloromethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586982 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586957 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586993 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586533 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586536 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586006 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Cr | Chromium | 11.6 | 1 | 4.04 | mg/kg | NQ | | 0.164 | | 0.546 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587008 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 218-01-9 | Chrysene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586007 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Co | Cobalt | 11.6 | 1 | 1.68 | mg/kg | NQ | | 0.164 | | 0.546 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586008 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Cu | Copper | 11.6 | 1 | 3.17 | mg/kg | NQ | | 0.327 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586329 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 11.6 | 1 | 0.24 | mg/kg | U | | 0.08 | | 0.24 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11587002 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587010 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587015 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586989 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 132-64-9 | Dibenzofuran | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586541 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000565 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586520 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586509 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 74-95-3 | Dibromomethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586544 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586961 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586542 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586958 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586543 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586959 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587007 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586483 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586496 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586505 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586489 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586498 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586495 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586971 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586508 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586516 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586499 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586503 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586511 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586514 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586990 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 84-66-2 | Diethylphthalate | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586985 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586969 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586994 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586988 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 11.6 | 1 | 0.753 | mg/kg | UJ | | 0.113 | | 0.753 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587018 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587019 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586996 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 122-39-4 | Diphenylamine | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586523 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 100-41-4 | Ethylbenzene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587003 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 206-44-0 | Fluoranthene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586992 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 86-73-7 | Fluorene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587017 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586976 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586979 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11586965 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 67-72-1 | Hexachloroethane | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586517 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 11.6 | 1 | 0.00565 | mg/kg | U | | 0.00188 | | 0.00565 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587014 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586492 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 74-88-4 | Iodomethane | 11.6 | 1 | 0.00565 | mg/kg | U | | 0.00188 | | 0.00565 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586009 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Fe | Iron | 11.6 | 1 | 9350 | mg/kg | NQ | | 8.73 | | 27.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586967 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 78-59-1 | Isophorone | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586528 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586539 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586010 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Pb | Lead | 11.6 | 1 | 11.3 | mg/kg | NQ | | 0.36 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586011 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Mg | Magnesium | 11.6 | 1 | 578 | mg/kg | NQ | | 9.28 | | 32.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586012 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Mn | Manganese | 11.6 | 1 | 366 | mg/kg | NQ | | 0.218 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586013 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Hg | Mercury | 11.6 | 1 | 0.0111 | mg/kg | J | | 0.00434 | | 0.0129 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11586512 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 11.6 | 1 | 0.00565 | mg/kg | U | | 0.00188 | | 0.00565 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586494 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-09-2 | Methylene Chloride | 11.6 | 1 | 0.00565 | mg/kg | U | | 0.00188 | | 0.00565 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586978 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586962 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586964 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586974 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 91-20-3 | Naphthalene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586014 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Ni | Nickel | 11.6 | 2 | 3.22 | mg/kg | NQ | | 0.103 | | 0.411 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586330 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | NO3 | Nitrate | 11.6 | 1 | 0.563 | mg/kg | J | | 0.373 | | 1.13 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/14/2014 | 07/08/2014 |
| 11586983 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.124 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586984 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586995 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586966 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 98-95-3 | Nitrobenzene | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586968 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586991 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586963 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586952 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587020 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586999 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586350 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | ClO4 | Perchlorate | 11.6 | 1 | 0.00224 | mg/kg | U | | 0.00056 | | 0.00224 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11587000 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 85-01-8 | Phenanthrene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586955 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 108-95-2 | Phenol | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586015 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | K | Potassium | 11.6 | 1 | 746 | mg/kg | NQ | | 6.98 | | 27.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586532 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587004 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 129-00-0 | Pyrene | 11.6 | 1 | 0.0377 | mg/kg | U | | 0.0113 | | 0.0377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586953 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 110-86-1 | Pyridine | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586016 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Se | Selenium | 11.6 | 2 | 1.04 | mg/kg | U | | 0.344 | | 1.04 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586017 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Ag | Silver | 11.6 | 1 | 0.546 | mg/kg | U | | 0.109 | | 0.546 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586018 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Na | Sodium | 11.6 | 1 | 223 | mg/kg | NQ | | 7.64 | | 27.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586526 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 100-42-5 | Styrene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586522 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586529 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586518 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586019 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Tl | Thallium | 11.6 | 2 | 0.0839 | mg/kg | J | | 0.0625 | | 0.416 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586513 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 108-88-3 | Toluene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586491 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 11.6 | 1 | 0.00565 | mg/kg | U | | 0.00188 | | 0.00565 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586973 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586502 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586515 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586507 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 79-01-6 | Trichloroethene | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586488 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586981 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586980 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 11.6 | 1 | 0.377 | mg/kg | U | | 0.113 | | 0.377 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586530 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586535 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586534 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586368 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | U-234 | Uranium-234 | 11.6 | 1 | 1.31 | pCi/g | NQ | 0.156 | | 0.0931 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586369 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | U-235/236 | Uranium-235/236 | 11.6 | 1 | 0.0461 | pCi/g | U | 0.112 | | 0.0217 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586370 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | U-238 | Uranium-238 | 11.6 | 1 | 1.33 | pCi/g | NQ | 0.0979 | | 0.0918 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586020 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | V | Vanadium | 11.6 | 1 | 7.22 | mg/kg | NQ | | 0.109 | | 0.546 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586485 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586525 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 11.6 | 1 | 0.00113 | mg/kg | U | | 0.000377 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586524 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 11.6 | 1 | 0.00226 | mg/kg | U | | 0.000754 | | 0.00226 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586021 | 57-006 | 2014-3701 | RE57-14-84179 | N | HA | INV | NA | REG | 57-4023 | 3 | 4 | ft | S | FILL | Zn | Zinc | 11.6 | 1 | 53.6 | mg/kg | NQ | | 0.437 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587056 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587055 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586552 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 67-64-1 | Acetone | 9.34 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586022 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Al | Aluminum | 9.34 | 1 | 4390 | mg/kg | NQ | | 7.17 | | 21.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587023 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 62-53-3 | Aniline | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587070 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 120-12-7 | Anthracene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586023 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Sb | Antimony | 9.34 | 1 | 1.05 | mg/kg | U | | 0.348 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586024 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | As | Arsenic | 9.34 | 2 | 2.52 | mg/kg | NQ | | 0.193 | | 0.966 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587066 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 103-33-3 | Azobenzene | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586025 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Ba | Barium | 9.34 | 1 | 114 | mg/kg | NQ | | 0.105 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586728 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 71-43-2 | Benzene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587075 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587258 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587256 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587261 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587257 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587041 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 9.34 | 1 | 0.734 | mg/kg | U | | 0.184 | | 0.734 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587029 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586026 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Be | Beryllium | 9.34 | 2 | 0.41 | mg/kg | NQ | | 0.0193 | | 0.0966 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587039 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587025 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587254 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586753 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586562 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586732 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586749 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-25-2 | Bromoform | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586548 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-83-9 | Bromomethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587067 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586559 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 9.34 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586762 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586760 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586759 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587074 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586027 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Cd | Cadmium | 9.34 | 1 | 0.527 | mg/kg | U | | 0.105 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586028 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Ca | Calcium | 9.34 | 1 | 907 | mg/kg | NQ | | 8.44 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586555 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 9.34 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586726 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587046 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.147 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587044 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586743 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586741 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586549 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-00-3 | Chloroethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586563 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 67-66-3 | Chloroform | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586546 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-87-3 | Chloromethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587051 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587026 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587062 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586755 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586758 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586029 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Cr | Chromium | 9.34 | 1 | 3.37 | mg/kg | NQ | | 0.158 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587253 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 218-01-9 | Chrysene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586030 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Co | Cobalt | 9.34 | 1 | 1.3 | mg/kg | NQ | | 0.158 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586031 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Cu | Copper | 9.34 | 1 | 2.99 | mg/kg | NQ | | 0.316 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586331 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 9.34 | 1 | 0.255 | mg/kg | U | | 0.0853 | | 0.255 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11587071 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587255 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587260 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587058 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586763 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000552 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586742 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586731 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586766 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587030 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586764 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587027 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586765 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587028 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587252 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586545 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586558 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586727 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586551 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586560 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586557 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587040 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586730 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586738 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586561 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586565 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586733 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586736 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587059 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587054 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587038 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587063 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587057 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 9.34 | 1 | 0.734 | mg/kg | UJ | | 0.11 | | 0.734 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587263 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587264 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587065 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586745 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587072 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587061 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 86-73-7 | Fluorene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587262 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587045 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587048 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587034 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586739 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 9.34 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587259 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586554 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-88-4 | Iodomethane | 9.34 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586032 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Fe | Iron | 9.34 | 1 | 9170 | mg/kg | NQ | | 8.44 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587036 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 78-59-1 | Isophorone | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586750 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586761 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586033 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Pb | Lead | 9.34 | 1 | 12.4 | mg/kg | NQ | | 0.348 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586034 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Mg | Magnesium | 9.34 | 1 | 312 | mg/kg | NQ | | 8.96 | | 31.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586035 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Mn | Manganese | 9.34 | 1 | 536 | mg/kg | NQ | | 0.211 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586036 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Hg | Mercury | 9.34 | 1 | 0.00956 | mg/kg | J | | 0.004 | | 0.0119 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11586734 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 9.34 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586556 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 9.34 | 1 | 0.0028 | mg/kg | J+ | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587047 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587031 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587033 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587043 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 91-20-3 | Naphthalene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586037 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Ni | Nickel | 9.34 | 2 | 3.34 | mg/kg | NQ | | 0.109 | | 0.437 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586332 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | NO3 | Nitrate | 9.34 | 1 | 1.7 | mg/kg | NQ | | 0.364 | | 1.1 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/08/2014 |
| 11587052 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.121 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587053 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587064 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587035 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587037 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587060 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587032 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587021 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587265 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11587068 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586351 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | ClO4 | Perchlorate | 9.34 | 1 | 0.0022 | mg/kg | U | | 0.000549 | | 0.0022 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11587069 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587024 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-95-2 | Phenol | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586038 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | K | Potassium | 9.34 | 1 | 695 | mg/kg | NQ | | 6.75 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586754 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587073 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 129-00-0 | Pyrene | 9.34 | 1 | 0.0367 | mg/kg | U | | 0.011 | | 0.0367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587022 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 110-86-1 | Pyridine | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586039 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Se | Selenium | 9.34 | 2 | 0.966 | mg/kg | U | | 0.319 | | 0.966 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586040 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Ag | Silver | 9.34 | 1 | 0.527 | mg/kg | U | | 0.105 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586041 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Na | Sodium | 9.34 | 1 | 310 | mg/kg | NQ | | 7.38 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586748 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-42-5 | Styrene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586744 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586751 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586740 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586042 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Tl | Thallium | 9.34 | 2 | 0.386 | mg/kg | U | | 0.058 | | 0.386 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586735 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-88-3 | Toluene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586553 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 9.34 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587042 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586564 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586737 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586729 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586550 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587050 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587049 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 9.34 | 1 | 0.367 | mg/kg | U | | 0.11 | | 0.367 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586752 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586757 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586756 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586371 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | U-234 | Uranium-234 | 9.34 | 1 | 1.11 | pCi/g | NQ | 0.12 | | 0.0739 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586372 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 9.34 | 1 | 0.0708 | pCi/g | U | 0.086 | | 0.0221 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586373 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | U-238 | Uranium-238 | 9.34 | 1 | 1.25 | pCi/g | NQ | 0.075 | | 0.0779 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586043 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | V | Vanadium | 9.34 | 1 | 6.4 | mg/kg | NQ | | 0.105 | | 0.527 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586547 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586747 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 9.34 | 1 | 0.0011 | mg/kg | U | | 0.000367 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586746 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 9.34 | 1 | 0.00221 | mg/kg | U | | 0.000736 | | 0.00221 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586044 | 57-006 | 2014-3701 | RE57-14-84183 | N | HA | INV | NA | REG | 57-4023 | 5 | 6 | ft | R | QBT3 | Zn | Zinc | 9.34 | 1 | 60.9 | mg/kg | NQ | | 0.422 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11583910 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583909 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584020 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 67-64-1 | Acetone | 6.26 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583794 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Al | Aluminum | 6.26 | 1 | 3200 | mg/kg | NQ | | 6.94 | | 20.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583877 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 62-53-3 | Aniline | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583924 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 120-12-7 | Anthracene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583795 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Sb | Antimony | 6.26 | 1 | 1.02 | mg/kg | U | | 0.337 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583796 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | As | Arsenic | 6.26 | 2 | 0.989 | mg/kg | J | | 0.213 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583920 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 103-33-3 | Azobenzene | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583797 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Ba | Barium | 6.26 | 1 | 42.6 | mg/kg | NQ | | 0.102 | | 0.51 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584036 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 71-43-2 | Benzene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583929 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583936 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583934 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583939 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583935 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583895 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 6.26 | 1 | 0.711 | mg/kg | U | | 0.178 | | 0.711 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583883 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583798 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Be | Beryllium | 6.26 | 2 | 0.535 | mg/kg | NQ | | 0.0213 | | 0.106 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583893 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583879 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583932 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584061 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584030 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584040 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584057 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-25-2 | Bromoform | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584016 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-83-9 | Bromomethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583921 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584027 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 6.26 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584070 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584068 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584067 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583928 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583799 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Cd | Cadmium | 6.26 | 1 | 0.14 | mg/kg | J | | 0.102 | | 0.51 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583800 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Ca | Calcium | 6.26 | 1 | 362 | mg/kg | J | | 8.16 | | 25.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584023 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 6.26 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584034 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583900 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.142 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583898 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584051 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584049 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584017 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-00-3 | Chloroethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584031 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 67-66-3 | Chloroform | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584014 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-87-3 | Chloromethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583905 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583880 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583916 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584063 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584066 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583801 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Cr | Chromium | 6.26 | 1 | 113 | mg/kg | NQ | | 0.153 | | 0.51 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583931 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 218-01-9 | Chrysene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583802 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Co | Cobalt | 6.26 | 1 | 1.27 | mg/kg | NQ | | 0.153 | | 0.51 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583803 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Cu | Copper | 6.26 | 1 | 4.55 | mg/kg | NQ | | 0.306 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583863 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 6.26 | 1 | 0.247 | mg/kg | U | | 0.0825 | | 0.247 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/09/2014 |
| 11583925 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583933 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583938 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583912 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584071 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000533 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584050 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584039 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584074 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583884 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584072 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583881 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584073 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583882 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583930 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584013 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584026 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584035 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584019 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584028 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584025 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583894 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584038 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584046 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584029 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584033 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584041 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584044 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583913 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583908 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583892 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583917 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583911 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 6.26 | 1 | 0.711 | mg/kg | U | | 0.107 | | 0.711 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583941 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583942 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583919 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584053 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583926 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583915 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 86-73-7 | Fluorene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583940 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583899 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583902 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583888 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584047 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 6.26 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583937 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584022 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-88-4 | Iodomethane | 6.26 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583804 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Fe | Iron | 6.26 | 1 | 7930 | mg/kg | NQ | | 8.16 | | 25.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583890 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 78-59-1 | Isophorone | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584058 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584069 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583805 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Pb | Lead | 6.26 | 1 | 9.05 | mg/kg | NQ | | 0.337 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583806 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Mg | Magnesium | 6.26 | 1 | 112 | mg/kg | NQ | | 8.67 | | 30.6 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583807 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Mn | Manganese | 6.26 | 1 | 415 | mg/kg | NQ | | 0.204 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583808 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Hg | Mercury | 6.26 | 1 | 0.0112 | mg/kg | J | | 0.00427 | | 0.0128 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11584042 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 6.26 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584024 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 6.26 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583901 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583885 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583887 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583897 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 91-20-3 | Naphthalene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583809 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Ni | Nickel | 6.26 | 2 | 6.25 | mg/kg | NQ | | 0.106 | | 0.425 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583864 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | NO3 | Nitrate | 6.26 | 1 | 2.21 | mg/kg | NQ | | 0.352 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11583906 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.117 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583907 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583918 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583889 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583891 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583914 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583886 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583875 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583943 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583922 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583867 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | ClO4 | Perchlorate | 6.26 | 1 | 0.00211 | mg/kg | U | | 0.000528 | | 0.00211 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11583923 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583878 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-95-2 | Phenol | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583810 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | K | Potassium | 6.26 | 1 | 712 | mg/kg | NQ | | 6.53 | | 25.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584062 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583927 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 129-00-0 | Pyrene | 6.26 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583876 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 110-86-1 | Pyridine | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583811 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Se | Selenium | 6.26 | 2 | 1.06 | mg/kg | U | | 0.351 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583812 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Ag | Silver | 6.26 | 1 | 0.51 | mg/kg | U | | 0.102 | | 0.51 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583813 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Na | Sodium | 6.26 | 1 | 418 | mg/kg | NQ | | 7.14 | | 25.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584056 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-42-5 | Styrene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584052 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584059 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584048 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583814 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Tl | Thallium | 6.26 | 2 | 0.425 | mg/kg | U | | 0.0638 | | 0.425 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11584043 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-88-3 | Toluene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584021 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.26 | 1 | 0.00533 | mg/kg | U | | 0.00178 | | 0.00533 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583896 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584032 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584045 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584037 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584018 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583904 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583903 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 6.26 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584060 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584065 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584064 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583869 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | U-234 | Uranium-234 | 6.26 | 1 | 1.43 | pCi/g | NQ | 0.0925 | | 0.0733 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11583870 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 6.26 | 1 | 0.0956 | pCi/g | NQ | 0.0664 | | 0.0228 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11583871 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | U-238 | Uranium-238 | 6.26 | 1 | 1.3 | pCi/g | NQ | 0.0579 | | 0.0694 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11583815 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | V | Vanadium | 6.26 | 1 | 1.73 | mg/kg | NQ | | 0.102 | | 0.51 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584015 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584055 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 6.26 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584054 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.26 | 1 | 0.00213 | mg/kg | U | | 0.000712 | | 0.00213 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583816 | 57-006 | 2014-3719 | RE57-14-84187 | N | HA | INV | NA | REG | 57-4023 | 8 | 9 | ft | R | QBT3 | Zn | Zinc | 6.26 | 1 | 66.5 | mg/kg | NQ | | 0.408 | | 1.02 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11587301 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 83-32-9 | Acenaphthene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587300 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 208-96-8 | Acenaphthylene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586836 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 67-64-1 | Acetone | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586045 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Al | Aluminum | 10.9 | 1 | 5390 | mg/kg | NQ | | 7.41 | | 21.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587268 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 62-53-3 | Aniline | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587315 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 120-12-7 | Anthracene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586046 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Sb | Antimony | 10.9 | 1 | 1.09 | mg/kg | U | | 0.36 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586047 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | As | Arsenic | 10.9 | 2 | 1.24 | mg/kg | NQ | | 0.197 | | 0.983 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587311 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 103-33-3 | Azobenzene | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586048 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Ba | Barium | 10.9 | 1 | 79.5 | mg/kg | NQ | | 0.109 | | 0.545 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586852 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 71-43-2 | Benzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587320 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587327 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587325 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587330 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587326 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587286 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 65-85-0 | Benzoic Acid | 10.9 | 1 | 0.747 | mg/kg | U | | 0.187 | | 0.747 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587274 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586049 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Be | Beryllium | 10.9 | 2 | 0.421 | mg/kg | NQ | | 0.0197 | | 0.0983 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587284 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587270 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587323 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586877 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 108-86-1 | Bromobenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586846 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 74-97-5 | Bromochloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586856 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586873 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-25-2 | Bromoform | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586832 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 74-83-9 | Bromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587312 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586843 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 78-93-3 | Butanone[2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586886 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586884 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586883 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587319 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586050 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Cd | Cadmium | 10.9 | 1 | 0.545 | mg/kg | U | | 0.109 | | 0.545 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586051 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Ca | Calcium | 10.9 | 1 | 1150 | mg/kg | NQ | | 8.72 | | 27.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586839 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586850 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587291 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.149 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587289 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586867 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 108-90-7 | Chlorobenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586865 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586833 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-00-3 | Chloroethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586847 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 67-66-3 | Chloroform | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586830 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 74-87-3 | Chloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587296 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587271 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587307 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586879 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586882 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586052 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Cr | Chromium | 10.9 | 1 | 4.41 | mg/kg | NQ | | 0.163 | | 0.545 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587322 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 218-01-9 | Chrysene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586053 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Co | Cobalt | 10.9 | 1 | 2.15 | mg/kg | NQ | | 0.163 | | 0.545 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586054 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Cu | Copper | 10.9 | 1 | 2.69 | mg/kg | NQ | | 0.327 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586333 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 10.9 | 1 | 0.265 | mg/kg | U | | 0.0884 | | 0.265 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11587316 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587324 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587329 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587303 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 132-64-9 | Dibenzofuran | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586887 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000561 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586866 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586855 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 74-95-3 | Dibromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586890 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587275 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586888 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587272 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586889 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587273 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587321 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586829 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586842 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586851 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586835 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586844 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586841 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587285 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586854 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586862 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586845 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586849 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586857 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586860 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587304 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 84-66-2 | Diethylphthalate | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587299 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587283 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587308 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587302 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 10.9 | 1 | 0.747 | mg/kg | UJ | | 0.112 | | 0.747 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587332 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587333 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587310 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 122-39-4 | Diphenylamine | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586869 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 100-41-4 | Ethylbenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587317 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 206-44-0 | Fluoranthene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587306 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 86-73-7 | Fluorene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587331 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587290 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587293 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587279 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 67-72-1 | Hexachloroethane | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586863 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587328 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586838 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 74-88-4 | Iodomethane | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586055 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Fe | Iron | 10.9 | 1 | 10600 | mg/kg | NQ | | 8.72 | | 27.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587281 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 78-59-1 | Isophorone | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586874 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586885 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586056 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Pb | Lead | 10.9 | 1 | 10.4 | mg/kg | NQ | | 0.36 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586057 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Mg | Magnesium | 10.9 | 1 | 582 | mg/kg | NQ | | 9.26 | | 32.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586058 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Mn | Manganese | 10.9 | 1 | 552 | mg/kg | NQ | | 0.218 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586059 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Hg | Mercury | 10.9 | 1 | 0.0112 | mg/kg | J | | 0.00394 | | 0.0118 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11586858 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586840 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-09-2 | Methylene Chloride | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587292 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587276 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587278 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587288 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 91-20-3 | Naphthalene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586060 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Ni | Nickel | 10.9 | 2 | 3.03 | mg/kg | NQ | | 0.104 | | 0.416 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586334 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | NO3 | Nitrate | 10.9 | 1 | 1.88 | mg/kg | NQ | | 0.37 | | 1.12 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/08/2014 |
| 11587297 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.123 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587298 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587309 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587280 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 98-95-3 | Nitrobenzene | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587282 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587305 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587277 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587266 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587334 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587313 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586352 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | ClO4 | Perchlorate | 10.9 | 1 | 0.00223 | mg/kg | U | | 0.000558 | | 0.00223 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11587314 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 85-01-8 | Phenanthrene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587269 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 108-95-2 | Phenol | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586061 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | K | Potassium | 10.9 | 1 | 796 | mg/kg | NQ | | 6.97 | | 27.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586878 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587318 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 129-00-0 | Pyrene | 10.9 | 1 | 0.0374 | mg/kg | U | | 0.0112 | | 0.0374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587267 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 110-86-1 | Pyridine | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586062 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Se | Selenium | 10.9 | 2 | 0.983 | mg/kg | U | | 0.324 | | 0.983 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586063 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Ag | Silver | 10.9 | 1 | 0.545 | mg/kg | U | | 0.109 | | 0.545 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586064 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Na | Sodium | 10.9 | 1 | 196 | mg/kg | NQ | | 7.63 | | 27.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586872 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 100-42-5 | Styrene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586868 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586875 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586864 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586065 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Tl | Thallium | 10.9 | 2 | 0.393 | mg/kg | U | | 0.059 | | 0.393 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586859 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 108-88-3 | Toluene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586837 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587287 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586848 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586861 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586853 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 79-01-6 | Trichloroethene | 10.9 | 1 | 0.000539 | mg/kg | J | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586834 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587295 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587294 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 10.9 | 1 | 0.374 | mg/kg | U | | 0.112 | | 0.374 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586876 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586881 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586880 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586374 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | U-234 | Uranium-234 | 10.9 | 1 | 1.24 | pCi/g | NQ | 0.104 | | 0.0725 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586375 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | U-235/236 | Uranium-235/236 | 10.9 | 1 | 0.0665 | pCi/g | U | 0.0746 | | 0.0245 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586376 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | U-238 | Uranium-238 | 10.9 | 1 | 1.14 | pCi/g | NQ | 0.0651 | | 0.0693 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586066 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | V | Vanadium | 10.9 | 1 | 10.6 | mg/kg | NQ | | 0.109 | | 0.545 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586831 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586871 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586870 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 10.9 | 1 | 0.00224 | mg/kg | U | | 0.000748 | | 0.00224 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586067 | 57-006 | 2014-3701 | RE57-14-84180 | N | HA | INV | NA | REG | 57-4024 | 3 | 4 | ft | S | FILL | Zn | Zinc | 10.9 | 1 | 45.5 | mg/kg | NQ | | 0.436 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587370 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 83-32-9 | Acenaphthene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587369 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 208-96-8 | Acenaphthylene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586898 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 67-64-1 | Acetone | 6.31 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586068 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Al | Aluminum | 6.31 | 1 | 3790 | mg/kg | NQ | | 6.48 | | 19.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587337 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 62-53-3 | Aniline | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587384 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 120-12-7 | Anthracene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586069 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Sb | Antimony | 6.31 | 1 | 0.953 | mg/kg | U | | 0.315 | | 0.953 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586070 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | As | Arsenic | 6.31 | 2 | 1.11 | mg/kg | NQ | | 0.209 | | 1.04 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587380 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 103-33-3 | Azobenzene | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586071 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Ba | Barium | 6.31 | 1 | 79.3 | mg/kg | NQ | | 0.0953 | | 0.477 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587089 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 71-43-2 | Benzene | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587389 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587396 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587394 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587399 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587395 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587355 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 65-85-0 | Benzoic Acid | 6.31 | 1 | 0.71 | mg/kg | U | | 0.178 | | 0.71 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587343 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586072 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Be | Beryllium | 6.31 | 2 | 0.347 | mg/kg | NQ | | 0.0209 | | 0.104 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587353 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587339 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587392 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |

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| 11587114 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 108-86-1 | Bromobenzene | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587083 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 74-97-5 | Bromochloromethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587093 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587110 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-25-2 | Bromoform | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586894 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 74-83-9 | Bromomethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587381 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587080 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 78-93-3 | Butanone[2-] | 6.31 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587123 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587121 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587120 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587388 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586073 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Cd | Cadmium | 6.31 | 1 | 0.477 | mg/kg | U | | 0.0953 | | 0.477 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586074 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Ca | Calcium | 6.31 | 1 | 536 | mg/kg | NQ | | 7.62 | | 23.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587076 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 6.31 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587087 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587360 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.142 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587358 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587104 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 108-90-7 | Chlorobenzene | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587102 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586895 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-00-3 | Chloroethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587084 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 67-66-3 | Chloroform | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586892 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 74-87-3 | Chloromethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587365 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587340 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587376 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587116 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587119 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586075 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Cr | Chromium | 6.31 | 1 | 23.9 | mg/kg | NQ | | 0.143 | | 0.477 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587391 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 218-01-9 | Chrysene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586076 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Co | Cobalt | 6.31 | 1 | 0.703 | mg/kg | NQ | | 0.143 | | 0.477 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586077 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Cu | Copper | 6.31 | 1 | 2.22 | mg/kg | NQ | | 0.286 | | 0.953 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586335 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 6.31 | 1 | 0.238 | mg/kg | U | | 0.0796 | | 0.238 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11587385 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587393 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587398 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587372 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 132-64-9 | Dibenzofuran | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587124 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000534 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587103 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587092 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 74-95-3 | Dibromomethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587127 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587344 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587125 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587341 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587126 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587342 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587390 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586891 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587079 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587088 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586897 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587081 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587078 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587354 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587091 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587099 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587082 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587086 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587094 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587097 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587373 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 84-66-2 | Diethylphthalate | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587368 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587352 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587377 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587371 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 6.31 | 1 | 0.71 | mg/kg | UJ | | 0.107 | | 0.71 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587401 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587402 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587379 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 122-39-4 | Diphenylamine | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587106 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 100-41-4 | Ethylbenzene | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587386 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 206-44-0 | Fluoranthene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587375 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 86-73-7 | Fluorene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587400 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587359 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587362 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587348 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 67-72-1 | Hexachloroethane | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587100 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 6.31 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587397 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586900 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 74-88-4 | Iodomethane | 6.31 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586078 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Fe | Iron | 6.31 | 1 | 8680 | mg/kg | NQ | | 7.62 | | 23.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587350 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 78-59-1 | Isophorone | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587111 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587122 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586079 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Pb | Lead | 6.31 | 1 | 10.5 | mg/kg | NQ | | 0.315 | | 0.953 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586080 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Mg | Magnesium | 6.31 | 1 | 179 | mg/kg | NQ | | 8.1 | | 28.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586081 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Mn | Manganese | 6.31 | 1 | 451 | mg/kg | NQ | | 0.191 | | 0.953 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586082 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Hg | Mercury | 6.31 | 1 | 0.0126 | mg/kg | U | | 0.00422 | | 0.0126 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11587095 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 6.31 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587077 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-09-2 | Methylene Chloride | 6.31 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587361 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587345 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587347 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587357 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 91-20-3 | Naphthalene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586083 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Ni | Nickel | 6.31 | 2 | 1.47 | mg/kg | NQ | | 0.101 | | 0.403 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586336 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | NO3 | Nitrate | 6.31 | 1 | 3.56 | mg/kg | NQ | | 0.352 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/08/2014 |
| 11587366 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.117 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587367 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587378 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587349 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 98-95-3 | Nitrobenzene | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587351 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587374 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587346 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587335 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587403 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587382 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586353 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | ClO4 | Perchlorate | 6.31 | 1 | 0.00211 | mg/kg | U | | 0.000528 | | 0.00211 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11587383 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 85-01-8 | Phenanthrene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587338 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 108-95-2 | Phenol | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586084 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | K | Potassium | 6.31 | 1 | 718 | mg/kg | NQ | | 6.1 | | 23.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587115 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587387 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 129-00-0 | Pyrene | 6.31 | 1 | 0.0355 | mg/kg | U | | 0.0107 | | 0.0355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587336 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 110-86-1 | Pyridine | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586085 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Se | Selenium | 6.31 | 2 | 1.04 | mg/kg | U | | 0.345 | | 1.04 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586086 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Ag | Silver | 6.31 | 1 | 0.477 | mg/kg | U | | 0.0953 | | 0.477 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586087 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Na | Sodium | 6.31 | 1 | 418 | mg/kg | NQ | | 6.67 | | 23.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11587109 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 100-42-5 | Styrene | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587105 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587112 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587101 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586088 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Tl | Thallium | 6.31 | 2 | 0.418 | mg/kg | U | | 0.0627 | | 0.418 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587096 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 108-88-3 | Toluene | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586899 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.31 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587356 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587085 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587098 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587090 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 79-01-6 | Trichloroethene | 6.31 | 1 | 0.000726 | mg/kg | J | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586896 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587364 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587363 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 6.31 | 1 | 0.355 | mg/kg | U | | 0.107 | | 0.355 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587113 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587118 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587117 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586377 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | U-234 | Uranium-234 | 6.31 | 1 | 1.32 | pCi/g | NQ | 0.0955 | | 0.0715 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586378 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | U-235/236 | Uranium-235/236 | 6.31 | 1 | 0.0752 | pCi/g | NQ | 0.0685 | | 0.021 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586379 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | U-238 | Uranium-238 | 6.31 | 1 | 1.27 | pCi/g | NQ | 0.0598 | | 0.07 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586089 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | V | Vanadium | 6.31 | 1 | 2.89 | mg/kg | NQ | | 0.0953 | | 0.477 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586893 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587108 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 6.31 | 1 | 0.00107 | mg/kg | U | | 0.000355 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587107 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.31 | 1 | 0.00213 | mg/kg | U | | 0.000712 | | 0.00213 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586090 | 57-006 | 2014-3701 | RE57-14-84184 | N | HA | INV | NA | REG | 57-4024 | 5 | 6 | ft | S | FILL | Zn | Zinc | 6.31 | 1 | 72.6 | mg/kg | NQ | | 0.381 | | 0.953 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585701 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585700 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587135 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 67-64-1 | Acetone | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586091 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Al | Aluminum | 6.44 | 1 | 3440 | mg/kg | NQ | | 7.15 | | 21 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587406 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 62-53-3 | Aniline | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585715 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 120-12-7 | Anthracene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586092 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Sb | Antimony | 6.44 | 1 | 1.05 | mg/kg | U | | 0.347 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586093 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | As | Arsenic | 6.44 | 2 | 1.93 | mg/kg | NQ | | 0.189 | | 0.944 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585711 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 103-33-3 | Azobenzene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586094 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Ba | Barium | 6.44 | 1 | 126 | mg/kg | NQ | | 0.105 | | 0.526 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587151 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 71-43-2 | Benzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585720 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585727 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585725 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585730 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585726 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585686 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 6.44 | 1 | 0.712 | mg/kg | U | | 0.178 | | 0.712 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587412 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586095 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Be | Beryllium | 6.44 | 2 | 0.505 | mg/kg | NQ | | 0.0189 | | 0.0944 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585684 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587408 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585723 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587176 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587145 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587155 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587172 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-25-2 | Bromoform | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587131 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 74-83-9 | Bromomethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585712 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587142 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587185 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587183 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587182 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585719 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586096 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Cd | Cadmium | 6.44 | 1 | 0.526 | mg/kg | U | | 0.105 | | 0.526 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586097 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Ca | Calcium | 6.44 | 1 | 856 | mg/kg | NQ | | 8.42 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587138 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587149 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585691 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.142 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585689 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587166 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587164 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587132 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-00-3 | Chloroethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587146 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 67-66-3 | Chloroform | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587129 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 74-87-3 | Chloromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585696 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587409 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585707 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587178 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587181 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586098 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Cr | Chromium | 6.44 | 1 | 4.54 | mg/kg | NQ | | 0.158 | | 0.526 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585722 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 218-01-9 | Chrysene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |

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| 11586099 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Co | Cobalt | 6.44 | 1 | 0.593 | mg/kg | NQ | | 0.158 | | 0.526 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586100 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Cu | Copper | 6.44 | 1 | 2.62 | mg/kg | NQ | | 0.316 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586337 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 6.44 | 1 | 0.239 | mg/kg | U | | 0.0797 | | 0.239 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11585716 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585724 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585729 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585703 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587186 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000534 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587165 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587154 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587189 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587413 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587187 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587410 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587188 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587411 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585721 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587128 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587141 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587150 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587134 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587143 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587140 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585685 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587153 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587161 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587144 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587148 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587156 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587159 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585704 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585699 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587421 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585708 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585702 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 6.44 | 1 | 0.712 | mg/kg | UJ | | 0.107 | | 0.712 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585732 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585733 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585710 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587168 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585717 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585706 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 86-73-7 | Fluorene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585731 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585690 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585693 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587417 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587162 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585728 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587137 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 74-88-4 | Iodomethane | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586101 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Fe | Iron | 6.44 | 1 | 7380 | mg/kg | NQ | | 8.42 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587419 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 78-59-1 | Isophorone | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587173 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587184 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586102 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Pb | Lead | 6.44 | 1 | 11.8 | mg/kg | NQ | | 0.347 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586103 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Mg | Magnesium | 6.44 | 1 | 253 | mg/kg | NQ | | 8.94 | | 31.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586104 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Mn | Manganese | 6.44 | 1 | 358 | mg/kg | NQ | | 0.21 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586105 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Hg | Mercury | 6.44 | 1 | 0.00442 | mg/kg | J | | 0.00395 | | 0.0118 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11587157 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587139 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585692 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587414 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587416 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585688 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 91-20-3 | Naphthalene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586106 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Ni | Nickel | 6.44 | 2 | 1.66 | mg/kg | NQ | | 0.0992 | | 0.397 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586338 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | NO3 | Nitrate | 6.44 | 1 | 2.86 | mg/kg | NQ | | 0.353 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/08/2014 |
| 11585697 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.117 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585698 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585709 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587418 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587420 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585705 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587415 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587404 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585734 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585713 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586354 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | ClO4 | Perchlorate | 6.44 | 1 | 0.00212 | mg/kg | U | | 0.000529 | | 0.00212 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11585714 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587407 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 108-95-2 | Phenol | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586107 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | K | Potassium | 6.44 | 1 | 827 | mg/kg | NQ | | 6.73 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587177 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585718 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 129-00-0 | Pyrene | 6.44 | 1 | 0.0356 | mg/kg | U | | 0.0107 | | 0.0356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587405 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 110-86-1 | Pyridine | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586108 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Se | Selenium | 6.44 | 2 | 0.944 | mg/kg | U | | 0.312 | | 0.944 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586109 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Ag | Silver | 6.44 | 1 | 0.526 | mg/kg | U | | 0.105 | | 0.526 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586110 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Na | Sodium | 6.44 | 1 | 497 | mg/kg | NQ | | 7.36 | | 26.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11587171 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 100-42-5 | Styrene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587167 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587174 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587163 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586111 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Tl | Thallium | 6.44 | 2 | 0.378 | mg/kg | U | | 0.0567 | | 0.378 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587158 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 108-88-3 | Toluene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587136 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.44 | 1 | 0.00534 | mg/kg | U | | 0.00178 | | 0.00534 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585687 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587147 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587160 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587152 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587133 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585695 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585694 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 6.44 | 1 | 0.356 | mg/kg | U | | 0.107 | | 0.356 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587175 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587180 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587179 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586380 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | U-234 | Uranium-234 | 6.44 | 1 | 1.27 | pCi/g | NQ | 0.0971 | | 0.0718 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586381 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 6.44 | 1 | 0.0717 | pCi/g | NQ | 0.0697 | | 0.0219 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586382 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | U-238 | Uranium-238 | 6.44 | 1 | 1.32 | pCi/g | NQ | 0.0608 | | 0.0722 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586112 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | V | Vanadium | 6.44 | 1 | 2.68 | mg/kg | NQ | | 0.105 | | 0.526 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587130 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587170 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 6.44 | 1 | 0.00107 | mg/kg | U | | 0.000356 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587169 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.44 | 1 | 0.00214 | mg/kg | U | | 0.000713 | | 0.00214 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586113 | 57-006 | 2014-3701 | RE57-14-84188 | N | HA | INV | NA | REG | 57-4024 | 8 | 9 | ft | R | QBT3 | Zn | Zinc | 6.44 | 1 | 58.4 | mg/kg | NQ | | 0.421 | | 1.05 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585770 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 83-32-9 | Acenaphthene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585769 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 208-96-8 | Acenaphthylene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587197 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 67-64-1 | Acetone | 11.4 | 1 | 0.00564 | mg/kg | U | | 0.00188 | | 0.00564 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586114 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Al | Aluminum | 11.4 | 1 | 5330 | mg/kg | NQ | | 7.49 | | 22 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585737 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 62-53-3 | Aniline | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585784 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 120-12-7 | Anthracene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586115 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Sb | Antimony | 11.4 | 1 | 1.1 | mg/kg | U | | 0.364 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586116 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | As | Arsenic | 11.4 | 2 | 1.19 | mg/kg | NQ | | 0.223 | | 1.11 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585780 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 103-33-3 | Azobenzene | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586117 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Ba | Barium | 11.4 | 1 | 73.5 | mg/kg | NQ | | 0.11 | | 0.551 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587213 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 71-43-2 | Benzene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585789 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585796 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585794 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585799 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585795 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585755 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 65-85-0 | Benzoic Acid | 11.4 | 1 | 0.751 | mg/kg | U | | 0.188 | | 0.751 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585743 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586118 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Be | Beryllium | 11.4 | 2 | 0.409 | mg/kg | NQ | | 0.0223 | | 0.111 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585753 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585739 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585792 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587238 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 108-86-1 | Bromobenzene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587207 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 74-97-5 | Bromochloromethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587217 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587234 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-25-2 | Bromoform | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587193 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 74-83-9 | Bromomethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585781 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587204 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 78-93-3 | Butanone[2-] | 11.4 | 1 | 0.00564 | mg/kg | U | | 0.00188 | | 0.00564 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587247 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587245 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587244 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585788 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586119 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Cd | Cadmium | 11.4 | 1 | 0.551 | mg/kg | U | | 0.11 | | 0.551 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586120 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Ca | Calcium | 11.4 | 1 | 1920 | mg/kg | NQ | | 8.81 | | 27.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587200 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 11.4 | 1 | 0.00564 | mg/kg | U | | 0.00188 | | 0.00564 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587211 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585760 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.15 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585758 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587228 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 108-90-7 | Chlorobenzene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587226 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587194 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-00-3 | Chloroethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587208 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 67-66-3 | Chloroform | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587191 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 74-87-3 | Chloromethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585765 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585740 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585776 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587240 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587243 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586121 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Cr | Chromium | 11.4 | 1 | 4.22 | mg/kg | NQ | | 0.165 | | 0.551 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585791 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 218-01-9 | Chrysene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586122 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Co | Cobalt | 11.4 | 1 | 1.7 | mg/kg | NQ | | 0.165 | | 0.551 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586123 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Cu | Copper | 11.4 | 1 | 3.31 | mg/kg | NQ | | 0.331 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586339 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 11.4 | 1 | 0.252 | mg/kg | U | | 0.0841 | | 0.252 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11585785 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585793 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585798 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585772 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 132-64-9 | Dibenzofuran | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587248 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000564 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587227 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587216 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 74-95-3 | Dibromomethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587251 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585744 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587249 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585741 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587250 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585742 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585790 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587190 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587203 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587212 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587196 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587205 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587202 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585754 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587215 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587223 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587206 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587210 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587218 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11587221 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585773 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 84-66-2 | Diethylphthalate | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585768 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585752 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585777 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585771 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 11.4 | 1 | 0.751 | mg/kg | UJ | | 0.113 | | 0.751 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585801 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585802 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585779 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 122-39-4 | Diphenylamine | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587230 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 100-41-4 | Ethylbenzene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585786 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 206-44-0 | Fluoranthene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585775 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 86-73-7 | Fluorene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585800 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585759 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585762 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585748 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 67-72-1 | Hexachloroethane | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587224 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 11.4 | 1 | 0.00564 | mg/kg | U | | 0.00188 | | 0.00564 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585797 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587199 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 74-88-4 | Iodomethane | 11.4 | 1 | 0.00564 | mg/kg | U | | 0.00188 | | 0.00564 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586124 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Fe | Iron | 11.4 | 1 | 9800 | mg/kg | NQ | | 8.81 | | 27.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585750 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 78-59-1 | Isophorone | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587235 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587246 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586125 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Pb | Lead | 11.4 | 1 | 11.3 | mg/kg | NQ | | 0.364 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586126 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Mg | Magnesium | 11.4 | 1 | 817 | mg/kg | NQ | | 9.37 | | 33.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586127 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Mn | Manganese | 11.4 | 1 | 404 | mg/kg | NQ | | 0.22 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586128 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Hg | Mercury | 11.4 | 1 | 0.00516 | mg/kg | J | | 0.00438 | | 0.0131 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11587219 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 11.4 | 1 | 0.00564 | mg/kg | U | | 0.00188 | | 0.00564 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587201 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-09-2 | Methylene Chloride | 11.4 | 1 | 0.00564 | mg/kg | U | | 0.00188 | | 0.00564 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585761 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585745 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585747 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585757 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 91-20-3 | Naphthalene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586129 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Ni | Nickel | 11.4 | 2 | 3.31 | mg/kg | NQ | | 0.106 | | 0.423 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586340 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | NO3 | Nitrate | 11.4 | 1 | 2.53 | mg/kg | NQ | | 0.372 | | 1.13 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/08/2014 |
| 11585766 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.124 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585767 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585778 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585749 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 98-95-3 | Nitrobenzene | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585751 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585774 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585746 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585735 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585803 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585782 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586355 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | ClO4 | Perchlorate | 11.4 | 1 | 0.00223 | mg/kg | U | | 0.000559 | | 0.00223 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11585783 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 85-01-8 | Phenanthrene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585738 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 108-95-2 | Phenol | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586130 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | K | Potassium | 11.4 | 1 | 798 | mg/kg | NQ | | 7.05 | | 27.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587239 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585787 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 129-00-0 | Pyrene | 11.4 | 1 | 0.0376 | mg/kg | U | | 0.0113 | | 0.0376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585736 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 110-86-1 | Pyridine | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586131 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Se | Selenium | 11.4 | 2 | 1.11 | mg/kg | U | | 0.368 | | 1.11 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586132 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Ag | Silver | 11.4 | 1 | 0.551 | mg/kg | U | | 0.11 | | 0.551 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586133 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Na | Sodium | 11.4 | 1 | 224 | mg/kg | NQ | | 7.71 | | 27.5 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11587233 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 100-42-5 | Styrene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587229 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587236 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587225 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586134 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Tl | Thallium | 11.4 | 2 | 0.446 | mg/kg | U | | 0.0669 | | 0.446 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587220 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 108-88-3 | Toluene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587198 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 11.4 | 1 | 0.00564 | mg/kg | U | | 0.00188 | | 0.00564 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585756 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587209 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587222 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587214 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 79-01-6 | Trichloroethene | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587195 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585764 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11585763 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 11.4 | 1 | 0.376 | mg/kg | U | | 0.113 | | 0.376 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587237 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587242 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587241 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586383 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | U-234 | Uranium-234 | 11.4 | 1 | 1.12 | pCi/g | NQ | 0.0951 | | 0.0656 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586384 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | U-235/236 | Uranium-235/236 | 11.4 | 1 | 0.0795 | pCi/g | NQ | 0.0682 | | 0.0204 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586385 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | U-238 | Uranium-238 | 11.4 | 1 | 1.11 | pCi/g | NQ | 0.0595 | | 0.0658 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586135 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | V | Vanadium | 11.4 | 1 | 7.83 | mg/kg | NQ | | 0.11 | | 0.551 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587192 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587232 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 11.4 | 1 | 0.00113 | mg/kg | U | | 0.000376 | | 0.00113 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587231 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 11.4 | 1 | 0.00226 | mg/kg | U | | 0.000753 | | 0.00226 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586136 | 57-006 | 2014-3701 | RE57-14-84181 | N | HA | INV | NA | REG | 57-4025 | 3 | 4 | ft | S | FILL | Zn | Zinc | 11.4 | 1 | 50.4 | mg/kg | NQ | | 0.441 | | 1.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585839 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 83-32-9 | Acenaphthene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585838 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 208-96-8 | Acenaphthylene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587429 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 67-64-1 | Acetone | 9.03 | 1 | 0.0055 | mg/kg | U | | 0.00183 | | 0.0055 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586137 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Al | Aluminum | 9.03 | 1 | 4310 | mg/kg | NQ | | 6.53 | | 19.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585806 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 62-53-3 | Aniline | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585853 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 120-12-7 | Anthracene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586138 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Sb | Antimony | 9.03 | 1 | 0.961 | mg/kg | U | | 0.317 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586139 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | As | Arsenic | 9.03 | 2 | 1.85 | mg/kg | NQ | | 0.213 | | 1.07 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585849 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 103-33-3 | Azobenzene | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586140 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Ba | Barium | 9.03 | 1 | 75.7 | mg/kg | NQ | | 0.0961 | | 0.48 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587445 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 71-43-2 | Benzene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585858 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587605 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587603 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587608 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587604 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585824 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 65-85-0 | Benzoic Acid | 9.03 | 1 | 0.732 | mg/kg | U | | 0.183 | | 0.732 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585812 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586141 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Be | Beryllium | 9.03 | 2 | 0.359 | mg/kg | NQ | | 0.0213 | | 0.107 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585822 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585808 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587601 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587470 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 108-86-1 | Bromobenzene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587439 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 74-97-5 | Bromochloromethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587449 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587466 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-25-2 | Bromoform | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587425 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 74-83-9 | Bromomethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585850 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587436 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 78-93-3 | Butanone[2-] | 9.03 | 1 | 0.0055 | mg/kg | U | | 0.00183 | | 0.0055 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587479 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587477 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587476 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585857 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586142 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Cd | Cadmium | 9.03 | 1 | 0.48 | mg/kg | U | | 0.0961 | | 0.48 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586143 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Ca | Calcium | 9.03 | 1 | 914 | mg/kg | NQ | | 7.69 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587432 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 9.03 | 1 | 0.0055 | mg/kg | U | | 0.00183 | | 0.0055 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587443 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585829 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.146 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585827 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587460 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 108-90-7 | Chlorobenzene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587458 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587426 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-00-3 | Chloroethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587440 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 67-66-3 | Chloroform | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587423 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 74-87-3 | Chloromethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585834 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585809 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585845 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587472 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587475 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586144 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Cr | Chromium | 9.03 | 1 | 13.1 | mg/kg | NQ | | 0.144 | | 0.48 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587600 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 218-01-9 | Chrysene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586145 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Co | Cobalt | 9.03 | 1 | 1.19 | mg/kg | NQ | | 0.144 | | 0.48 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586146 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Cu | Copper | 9.03 | 1 | 4.12 | mg/kg | NQ | | 0.288 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586341 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 9.03 | 1 | 0.254 | mg/kg | U | | 0.085 | | 0.254 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11585854 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587602 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587607 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585841 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 132-64-9 | Dibenzofuran | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587480 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.00055 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587459 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587448 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 74-95-3 | Dibromomethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587483 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585813 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587481 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585810 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587482 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585811 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587599 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587422 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587435 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587444 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587428 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587437 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587434 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585823 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587447 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587455 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587438 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587442 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587450 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587453 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585842 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 84-66-2 | Diethylphthalate | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585837 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585821 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585846 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585840 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 9.03 | 1 | 0.732 | mg/kg | UJ | | 0.11 | | 0.732 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587610 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587611 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585848 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 122-39-4 | Diphenylamine | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587462 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 100-41-4 | Ethylbenzene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585855 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 206-44-0 | Fluoranthene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585844 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 86-73-7 | Fluorene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587609 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585828 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585831 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585817 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 67-72-1 | Hexachloroethane | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587456 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 9.03 | 1 | 0.0055 | mg/kg | U | | 0.00183 | | 0.0055 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587606 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587431 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 74-88-4 | Iodomethane | 9.03 | 1 | 0.0055 | mg/kg | U | | 0.00183 | | 0.0055 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586147 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Fe | Iron | 9.03 | 1 | 9410 | mg/kg | NQ | | 7.69 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585819 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 78-59-1 | Isophorone | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587467 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587478 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586148 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Pb | Lead | 9.03 | 1 | 12 | mg/kg | NQ | | 0.317 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586149 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Mg | Magnesium | 9.03 | 1 | 300 | mg/kg | NQ | | 8.17 | | 28.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586150 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Mn | Manganese | 9.03 | 1 | 435 | mg/kg | NQ | | 0.192 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586151 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Hg | Mercury | 9.03 | 1 | 0.00989 | mg/kg | J | | 0.00436 | | 0.013 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11587451 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4- | 9.03 | 1 | 0.0055 | mg/kg | U | | 0.00183 | | 0.0055 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587433 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-09-2 | Methylene Chloride | 9.03 | 1 | 0.0055 | mg/kg | U | | 0.00183 | | 0.0055 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11585830 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2- | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585814 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585816 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585826 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 91-20-3 | Naphthalene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586152 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Ni | Nickel | 9.03 | 2 | 2.79 | mg/kg | NQ | | 0.108 | | 0.431 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586342 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | NO3 | Nitrate | 9.03 | 1 | 5.42 | mg/kg | NQ | | 0.363 | | 1.1 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/08/2014 |
| 11585835 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.121 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585836 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585847 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585818 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 98-95-3 | Nitrobenzene | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585820 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585843 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585815 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585804 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587612 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585851 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586356 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | ClO4 | Perchlorate | 9.03 | 1 | 0.00218 | mg/kg | U | | 0.000544 | | 0.00218 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11585852 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 85-01-8 | Phenanthrene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585807 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 108-95-2 | Phenol | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586153 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | K | Potassium | 9.03 | 1 | 655 | mg/kg | NQ | | 6.15 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587471 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585856 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 129-00-0 | Pyrene | 9.03 | 1 | 0.0366 | mg/kg | U | | 0.011 | | 0.0366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585805 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 110-86-1 | Pyridine | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586154 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Se | Selenium | 9.03 | 2 | 1.07 | mg/kg | U | | 0.352 | | 1.07 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586155 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Ag | Silver | 9.03 | 1 | 0.48 | mg/kg | U | | 0.0961 | | 0.48 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586156 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Na | Sodium | 9.03 | 1 | 274 | mg/kg | NQ | | 6.73 | | 24 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11587465 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 100-42-5 | Styrene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587461 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587468 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587457 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586157 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Tl | Thallium | 9.03 | 2 | 0.426 | mg/kg | U | | 0.0639 | | 0.426 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587452 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 108-88-3 | Toluene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587430 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 9.03 | 1 | 0.0055 | mg/kg | U | | 0.00183 | | 0.0055 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585825 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587441 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587454 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587446 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 79-01-6 | Trichloroethene | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587427 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585833 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585832 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 9.03 | 1 | 0.366 | mg/kg | U | | 0.11 | | 0.366 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587469 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587474 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587473 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586386 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | U-234 | Uranium-234 | 9.03 | 1 | 1.26 | pCi/g | NQ | 0.11 | | 0.0788 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586387 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | U-235/236 | Uranium-235/236 | 9.03 | 1 | -0.0163 | pCi/g | U | 0.0792 | | 0.0249 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586388 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | U-238 | Uranium-238 | 9.03 | 1 | 1.32 | pCi/g | NQ | 0.0691 | | 0.0808 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586158 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | V | Vanadium | 9.03 | 1 | 4.76 | mg/kg | NQ | | 0.0961 | | 0.48 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587424 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587464 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 9.03 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587463 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 9.03 | 1 | 0.0022 | mg/kg | U | | 0.000733 | | 0.0022 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586159 | 57-006 | 2014-3701 | RE57-14-84185 | N | HA | INV | NA | REG | 57-4025 | 5 | 6 | ft | S | FILL | Zn | Zinc | 9.03 | 1 | 64.6 | mg/kg | NQ | | 0.384 | | 0.961 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587648 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587647 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587491 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 67-64-1 | Acetone | 7.11 | 1 | 0.00538 | mg/kg | U | | 0.00179 | | 0.00538 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586160 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Al | Aluminum | 7.11 | 1 | 4300 | mg/kg | NQ | | 6.43 | | 18.9 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587615 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 62-53-3 | Aniline | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587662 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 120-12-7 | Anthracene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586161 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Sb | Antimony | 7.11 | 1 | 0.946 | mg/kg | U | | 0.312 | | 0.946 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586162 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | As | Arsenic | 7.11 | 2 | 2.21 | mg/kg | NQ | | 0.206 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587658 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 103-33-3 | Azobenzene | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586163 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Ba | Barium | 7.11 | 1 | 136 | mg/kg | NQ | | 0.0946 | | 0.473 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587507 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 71-43-2 | Benzene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587667 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587674 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587672 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587677 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587673 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587633 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 7.11 | 1 | 0.717 | mg/kg | U | | 0.179 | | 0.717 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587621 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586164 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Be | Beryllium | 7.11 | 2 | 0.477 | mg/kg | NQ | | 0.0206 | | 0.103 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587631 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587617 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587670 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587532 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587501 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587511 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587528 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 75-25-2 | Bromoform | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587487 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 74-83-9 | Bromomethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587659 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587498 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 7.11 | 1 | 0.00538 | mg/kg | U | | 0.00179 | | 0.00538 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587541 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587539 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587538 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587666 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586165 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Cd | Cadmium | 7.11 | 1 | 0.473 | mg/kg | U | | 0.0946 | | 0.473 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586166 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Ca | Calcium | 7.11 | 1 | 767 | mg/kg | NQ | | 7.57 | | 23.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587494 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 7.11 | 1 | 0.00538 | mg/kg | U | | 0.00179 | | 0.00538 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587505 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587638 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.143 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587636 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587522 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587520 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587488 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 75-00-3 | Chloroethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587502 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 67-66-3 | Chloroform | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587485 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 74-87-3 | Chloromethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587643 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587618 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587654 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587534 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587537 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586167 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Cr | Chromium | 7.11 | 1 | 78.1 | mg/kg | NQ | | 0.142 | | 0.473 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587669 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 218-01-9 | Chrysene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586168 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Co | Cobalt | 7.11 | 1 | 1.43 | mg/kg | NQ | | 0.142 | | 0.473 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586169 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Cu | Copper | 7.11 | 1 | 26 | mg/kg | NQ | | 0.284 | | 0.946 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586343 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 7.11 | 1 | 0.249 | mg/kg | U | | 0.0832 | | 0.249 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11587663 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587671 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587676 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587650 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587542 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000538 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587521 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587510 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587545 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587622 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587543 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587619 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587544 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587620 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587668 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587484 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587497 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587506 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587490 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587499 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587496 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587632 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587509 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587517 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587500 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587504 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587512 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587515 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587651 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587646 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587630 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587655 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587649 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 7.11 | 1 | 0.717 | mg/kg | UJ | | 0.108 | | 0.717 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587679 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587680 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587657 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587524 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587664 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587653 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 86-73-7 | Fluorene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587678 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587637 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587640 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587626 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587518 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 7.11 | 1 | 0.00538 | mg/kg | U | | 0.00179 | | 0.00538 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587675 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587493 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 74-88-4 | Iodomethane | 7.11 | 1 | 0.00538 | mg/kg | U | | 0.00179 | | 0.00538 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586170 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Fe | Iron | 7.11 | 1 | 8750 | mg/kg | NQ | | 7.57 | | 23.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587628 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 78-59-1 | Isophorone | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587529 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587540 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586171 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Pb | Lead | 7.11 | 1 | 13.7 | mg/kg | NQ | | 0.312 | | 0.946 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586172 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Mg | Magnesium | 7.11 | 1 | 264 | mg/kg | NQ | | 8.04 | | 28.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586173 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Mn | Manganese | 7.11 | 1 | 454 | mg/kg | NQ | | 0.189 | | 0.946 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586174 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Hg | Mercury | 7.11 | 1 | 0.0116 | mg/kg | U | | 0.0039 | | 0.0116 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11587513 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 7.11 | 1 | 0.00538 | mg/kg | U | | 0.00179 | | 0.00538 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587495 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 7.11 | 1 | 0.00538 | mg/kg | U | | 0.00179 | | 0.00538 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587639 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2- | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587623 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587625 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587635 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 91-20-3 | Naphthalene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586175 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Ni | Nickel | 7.11 | 2 | 3.93 | mg/kg | NQ | | 0.0979 | | 0.391 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586344 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | NO3 | Nitrate | 7.11 | 1 | 2.78 | mg/kg | NQ | | 0.355 | | 1.08 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/08/2014 |
| 11587644 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.118 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587645 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587656 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587627 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587629 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587652 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587624 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587613 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587681 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587660 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586357 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | ClO4 | Perchlorate | 7.11 | 1 | 0.00212 | mg/kg | U | | 0.00053 | | 0.00212 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11587661 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587616 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 108-95-2 | Phenol | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586176 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | K | Potassium | 7.11 | 1 | 810 | mg/kg | NQ | | 6.05 | | 23.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587533 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587665 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 129-00-0 | Pyrene | 7.11 | 1 | 0.0358 | mg/kg | U | | 0.0108 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587614 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 110-86-1 | Pyridine | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11586177 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Se | Selenium | 7.11 | 2 | 0.347 | mg/kg | J | | 0.34 | | 1.03 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586178 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Ag | Silver | 7.11 | 1 | 0.473 | mg/kg | U | | 0.0946 | | 0.473 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586179 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | Na | Sodium | 7.11 | 1 | 446 | mg/kg | NQ | | 6.62 | | 23.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11587527 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 100-42-5 | Styrene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587523 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587530 | 57-006 | 2014-3701 | RE57-14-84189 | N | HA | INV | NA | REG | 57-4025 | 8 | 9 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11587519 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 127-18-4 | Tetrachloroethene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586180 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 7 | Thallium | 7.11 | 2 | 0.412 | mg/kg | U | | 0.0618 | | 0.412 | Y | INORGANIC | SW-846 6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587514 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 108-88-3 | Toluene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587492 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 7.11 | 1 | 0.00538 | mg/kg | U | | 0.00179 | | 0.00538 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587534 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846 8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587503 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587516 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587508 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 79-01-6 | Trichloroethene | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587489 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587642 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846 8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587641 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 7.11 | 1 | 0.358 | mg/kg | U | | 0.108 | | 0.358 | Y | SVOC | SW-846 8270D | GELC | 07/14/2014 | 07/08/2014 |
| 11587531 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587536 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587535 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586369 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | U-234 | Uranium-234 | 7.11 | 1 | 1.22 | pCi/g | NQ | 0.109 | | 0.0746 | | Y | RAD | HASL-300 ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586390 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | U-235/236 | Uranium-235/236 | 7.11 | 1 | 0.0376 | pCi/g | U | 0.0783 | | 0.0194 | | Y | RAD | HASL-300 ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586566 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | U-238 | Uranium-238 | 7.11 | 1 | 1.29 | pCi/g | NQ | 0.0683 | | 0.0753 | | Y | RAD | HASL-300 ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586181 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | V | Vanadium | 7.11 | 1 | 3.67 | mg/kg | NQ | | 0.0946 | | 0.473 | Y | INORGANIC | SW-846 6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587486 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 75-01-4 | Vinyl Chloride | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587526 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | 95-47-6 | Xylene[1,2-] | 7.11 | 1 | 0.00108 | mg/kg | U | | 0.000358 | | 0.00108 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587525 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | Xylene(m+p) | Xylene[1,3-]+Xylene[1,4-] | 7.11 | 1 | 0.00215 | mg/kg | U | | 0.000718 | | 0.00215 | Y | VOC | SW-846 8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586182 | 57-006 | 2014-3701 | RES7-14-84189 | N | HIA | INV | NA | REG | 57-4025 | 8 | 9 | R | R | QBT3 | Zn | Zinc | 7.11 | 1 | 75.1 | mg/kg | NQ | | 0.378 | | 8.94 | Y | INORGANIC | SW-846 6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11720710 | 57-007 | 2015-82 | RES7-15-88102 | N | HIA | INV | NA | REG | 57-4026 | 3.5 | 4.5 | R | S | SOIL | As | Arsenic | 9.83 | 2 | 1.87 | mg/kg | NQ | | 0.218 | | 1.09 | Y | INORGANIC | SW-846 6020 | GELC | 10/23/2014 | 10/14/2014 |
| 11720709 | 57-007 | 2015-82 | RES7-15-88100 | N | HIA | INV | NA | REG | 57-4026 | 6.5 | 7.5 | R | R | QBT3 | As | Arsenic | 5.96 | 2 | 5.12 | mg/kg | NQ | | 0.212 | | 1.06 | Y | INORGANIC | SW-846 6020 | GELC | 10/23/2014 | 10/14/2014 |
| 11720707 | 57-007 | 2015-88 | RES7-15-88101 | N | HIA | INV | NA | REG | 57-4027 | 2 | 3 | R | S | SOIL | As | Arsenic | 4.79 | 2 | 1.75 | mg/kg | U | | 0.2 | | 1 | Y | INORGANIC | SW-846 6020 | GELC | 10/24/2014 | 10/15/2014 |
| 11720708 | 57-007 | 2015-88 | RES7-15-88103 | N | HIA | INV | NA | REG | 57-4027 | 5 | 6 | R | R | QBT3 | As | Arsenic | 3.85 | 2 | 1.76 | mg/kg | NQ | | 0.195 | | 0.976 | Y | INORGANIC | SW-846 6020 | GELC | 10/24/2014 | 10/15/2014 |

| FS Result Recno | AOC | Chain Of Custody No. | Field Sample ID | Excavated Flag | Sampling Method | Sample Usage Code | Field Prep Code | Sample Purpose | Location ID | Start Depth | End Depth | Depth Units | Sample Type | Background Comparison Class Code | Parameter Code | Parameter Name | Percent Moisture | Dilution Factor | Report Result | Report Units | Validation Qualifier | Report Min Detectable Activity | Report Method Detection Limit | Report Uncertainty | Report Detection Limit | Best Value Flag | Method Category | Analytical Method | Lab ID | Analysis Date | Date Sampled |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11595661 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595161 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Al | Aluminum | 100 | 1 | 246 | ug/L | NQ | | 68 | | 200 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595162 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Sb | Antimony | 100 | 1 | 3 | ug/L | U | | 1 | | 3 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/09/2014 |
| 11595163 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | As | Arsenic | 100 | 1 | 1.9 | ug/L | J | | 1.7 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595164 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Ba | Barium | 100 | 1 | 34.4 | ug/L | NQ | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595677 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595165 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Be | Beryllium | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595702 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595671 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595681 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595698 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595657 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595668 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595711 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595709 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595708 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595166 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Cd | Cadmium | 100 | 1 | 1 | ug/L | U | | 0.11 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595167 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Ca | Calcium | 100 | 1 | 11.3 | mg/L | NQ | | 0.05 | | 0.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595664 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595675 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595692 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595690 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595658 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595672 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595655 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595704 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595707 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595168 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Cr | Chromium | 100 | 1 | 6.23 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595169 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Co | Cobalt | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595170 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Cu | Copper | 100 | 1 | 49.4 | ug/L | NQ | | 3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595712 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595691 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595680 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595715 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595713 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595714 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595654 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595667 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595676 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595660 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595669 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595666 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595679 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595687 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595670 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595674 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595682 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595685 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595694 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595688 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595663 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595171 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Fe | Iron | 100 | 1 | 166 | ug/L | NQ | | 30 | | 100 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595699 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595710 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595172 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Pb | Lead | 100 | 1 | 2 | ug/L | U | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/09/2014 |
| 11595173 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Mg | Magnesium | 100 | 1 | 3.52 | mg/L | NQ | | 0.11 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595174 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Mn | Manganese | 100 | 1 | 9.35 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595175 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Hg | Mercury | 100 | 1 | 0.2 | ug/L | U | | 0.067 | | 0.2 | Y | INORGANIC | EPA:245.2 | GELC | 07/21/2014 | 07/09/2014 |
| 11595683 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595665 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595176 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Ni | Nickel | 100 | 1 | 1.63 | ug/L | J | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595177 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | K | Potassium | 100 | 1 | 2.15 | mg/L | NQ | | 0.05 | | 0.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595703 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595178 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Se | Selenium | 100 | 1 | 5 | ug/L | U | | 1.5 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595179 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Ag | Silver | 100 | 1 | 1 | ug/L | U | | 0.2 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595180 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Na | Sodium | 100 | 1 | 12.7 | mg/L | NQ | | 0.1 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595697 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595693 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595700 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595689 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595181 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Tl | Thallium | 100 | 1 | 2 | ug/L | U | | 0.45 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/09/2014 |
| 11595684 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595662 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595673 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595686 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595678 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595659 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595701 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595706 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595705 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595182 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | V | Vanadium | 100 | 1 | 8.26 | ug/L | NQ | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11595656 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595696 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595695 | 57-007 | 2014-3718 | RE57-14-84129 | N | DC | QC | NA | FTB | 57-4013 | 1 | 2 | ft | S | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595183 | 57-007 | 2014-3718 | RE57-14-84124 | N | DC | QC | UF | FR | 57-4013 | 1 | 2 | ft | W | | Zn | Zinc | 100 | 1 | 10 | ug/L | U | | 3.3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583434 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583450 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583475 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583444 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583454 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583471 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583430 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583441 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583484 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583482 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583481 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583437 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583448 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583465 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583463 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583431 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583445 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583428 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583477 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583480 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583485 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583464 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583453 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583488 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583486 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583487 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583427 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583440 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583449 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583433 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583442 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583439 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583452 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583460 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583443 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583447 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583455 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583458 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583467 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583461 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583436 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583472 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583483 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583456 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583438 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583476 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583470 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583466 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583473 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583462 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583457 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583435 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583446 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583459 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583451 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583432 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583474 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583479 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583478 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583429 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583469 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583468 | 57-007 | 2014-3751 | RE57-14-84131 | N | DC | QC | NA | FTB | 57-4014 | 4 | 5 | ft | S | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583760 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 83-32-9 | Acenaphthene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583759 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 208-96-8 | Acenaphthylene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582241 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 67-64-1 | Acetone | 7.25 | 1 | 0.00539 | mg/kg | U | | 0.0018 | | 0.00539 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582599 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Al | Aluminum | 7.25 | 1 | 5080 | mg/kg | NQ | | 6.98 | | 20.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583727 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 62-53-3 | Aniline | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583774 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 120-12-7 | Anthracene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582600 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Sb | Antimony | 7.25 | 1 | 1.03 | mg/kg | U | | 0.339 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582601 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | As | Arsenic | 7.25 | 2 | 2.75 | mg/kg | NQ | | 0.195 | | 0.973 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583770 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 103-33-3 | Azobenzene | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582602 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Ba | Barium | 7.25 | 1 | 236 | mg/kg | NQ | | 0.103 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583326 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 71-43-2 | Benzene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583779 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 56-55-3 | Benzo(a)anthracene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583786 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 50-32-8 | Benzo(a)pyrene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583784 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 205-99-2 | Benzo(b)fluoranthene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583789 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 191-24-2 | Benzo(g,h,i)perylene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583785 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 207-08-9 | Benzo(k)fluoranthene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583745 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 65-85-0 | Benzoic Acid | 7.25 | 1 | 0.718 | mg/kg | U | | 0.18 | | 0.718 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583733 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 100-51-6 | Benzyl Alcohol | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582603 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Be | Beryllium | 7.25 | 2 | 0.705 | mg/kg | NQ | | 0.0195 | | 0.0973 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583743 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 111-91-1 | Bis(2-chloroethoxy)methane | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11583729 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 111-44-4 | Bis(2-chloroethyl)ether | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583782 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 7.25 | 1 | 0.145 | mg/kg | J+ | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583351 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 108-86-1 | Bromobenzene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582251 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 74-97-5 | Bromochloromethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583330 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-27-4 | Bromodichloromethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583347 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-25-2 | Bromoform | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582237 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 74-83-9 | Bromomethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583771 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 101-55-3 | Bromophenyl-phenylether[4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582248 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 78-93-3 | Butanone[2-] | 7.25 | 1 | 0.00539 | mg/kg | U | | 0.0018 | | 0.00539 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583360 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 104-51-8 | Butylbenzene[n-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583358 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 135-98-8 | Butylbenzene[sec-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583357 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 98-06-6 | Butylbenzene[tert-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583778 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 85-68-7 | Butylbenzylphthalate | 7.25 | 1 | 0.384 | mg/kg | J+ | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582604 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Cd | Cadmium | 7.25 | 1 | 0.222 | mg/kg | J | | 0.103 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582605 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Ca | Calcium | 7.25 | 1 | 2880 | mg/kg | NQ | | 8.21 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582244 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-15-0 | Carbon Disulfide | 7.25 | 1 | 0.00539 | mg/kg | U | | 0.0018 | | 0.00539 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583324 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 56-23-5 | Carbon Tetrachloride | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583750 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 59-50-7 | Chloro-3-methylphenol[4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.144 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583748 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 106-47-8 | Chloroaniline[4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583341 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 108-90-7 | Chlorobenzene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583339 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 124-48-1 | Chlorodibromomethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582238 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-00-3 | Chloroethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582252 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 67-66-3 | Chloroform | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582235 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 74-87-3 | Chloromethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583755 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 91-58-7 | Chloronaphthalene[2-] | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583730 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 95-57-8 | Chlorophenol[2-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583766 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583353 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 95-49-8 | Chlorotoluene[2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583356 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 106-43-4 | Chlorotoluene[4-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582606 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Cr | Chromium | 7.25 | 1 | 11.2 | mg/kg | NQ | | 0.154 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583781 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 218-01-9 | Chrysene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582607 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Co | Cobalt | 7.25 | 1 | 3 | mg/kg | NQ | | 0.154 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582608 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Cu | Copper | 7.25 | 1 | 47.7 | mg/kg | NQ | | 0.308 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582642 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | CN(TOTAL) | Cyanide (Total) | 7.25 | 1 | 0.264 | mg/kg | U | | 0.0883 | | 0.264 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/10/2014 |
| 11583775 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 84-74-2 | Di-n-butylphthalate | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583783 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 117-84-0 | Di-n-octylphthalate | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583788 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 53-70-3 | Dibenz(a,h)anthracene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583762 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 132-64-9 | Dibenzofuran | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583361 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000539 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583340 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 106-93-4 | Dibromoethane[1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583329 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 74-95-3 | Dibromomethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583364 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583734 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 95-50-1 | Dichlorobenzene[1,2-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583362 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583731 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 541-73-1 | Dichlorobenzene[1,3-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583363 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583732 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 106-46-7 | Dichlorobenzene[1,4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583780 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 91-94-1 | Dichlorobenzidine[3,3'-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582234 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-71-8 | Dichlorodifluoromethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582247 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-34-3 | Dichloroethane[1,1-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583325 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 107-06-2 | Dichloroethane[1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582240 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-35-4 | Dichloroethene[1,1-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582249 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 156-59-2 | Dichloroethene[cis-1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582246 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 156-60-5 | Dichloroethene[trans-1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583744 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 120-83-2 | Dichlorophenol[2,4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583328 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 78-87-5 | Dichloropropane[1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583336 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 142-28-9 | Dichloropropane[1,3-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582250 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 594-20-7 | Dichloropropane[2,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583323 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 563-58-6 | Dichloropropene[1,1-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583331 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 10061-01-5 | Dichloropropene[cis-1,3-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583334 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 10061-02-6 | Dichloropropene[trans-1,3-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583763 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 84-66-2 | Diethylphthalate | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583758 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 131-11-3 | Dimethyl Phthalate | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583742 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 105-67-9 | Dimethylphenol[2,4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583767 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583761 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 51-28-5 | Dinitrophenol[2,4-] | 7.25 | 1 | 0.718 | mg/kg | U | | 0.108 | | 0.718 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583791 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 121-14-2 | Dinitrotoluene[2,4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583792 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 606-20-2 | Dinitrotoluene[2,6-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583769 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 122-39-4 | Diphenylamine | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583343 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 100-41-4 | Ethylbenzene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583776 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 206-44-0 | Fluoranthene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583765 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 86-73-7 | Fluorene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583790 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 118-74-1 | Hexachlorobenzene | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583749 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 87-68-3 | Hexachlorobutadiene | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583752 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 77-47-4 | Hexachlorocyclopentadiene | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583738 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 67-72-1 | Hexachloroethane | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583337 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 591-78-6 | Hexanone[2-] | 7.25 | 1 | 0.00539 | mg/kg | U | | 0.0018 | | 0.00539 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583787 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582243 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 74-88-4 | Iodomethane | 7.25 | 1 | 0.00539 | mg/kg | U | | 0.0018 | | 0.00539 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582609 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Fe | Iron | 7.25 | 1 | 11200 | mg/kg | NQ | | 8.21 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583740 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 78-59-1 | Isophorone | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583348 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 98-82-8 | Isopropylbenzene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583359 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 99-87-6 | Isopropyltoluene[4-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582610 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Pb | Lead | 7.25 | 1 | 28.6 | mg/kg | NQ | | 0.339 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582611 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Mg | Magnesium | 7.25 | 1 | 1690 | mg/kg | NQ | | 8.73 | | 30.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582612 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Mn | Manganese | 7.25 | 1 | 272 | mg/kg | NQ | | 0.205 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582613 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Hg | Mercury | 7.25 | 100 | 23.5 | mg/kg | NQ | | 0.433 | | 1.29 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/10/2014 |
| 11583332 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 108-10-1 | Methyl-2-pentanone[4-] | 7.25 | 1 | 0.00539 | mg/kg | U | | 0.0018 | | 0.00539 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582245 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-09-2 | Methylene Chloride | 7.25 | 1 | 0.00539 | mg/kg | U | | 0.0018 | | 0.00539 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583751 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 91-57-6 | Methylnaphthalene[2-] | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583735 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 95-48-7 | Methylphenol[2-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583737 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 106-44-5 | Methylphenol[4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583747 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 91-20-3 | Naphthalene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582614 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Ni | Nickel | 7.25 | 2 | 8.05 | mg/kg | NQ | | 0.0973 | | 0.389 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582643 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | NO3 | Nitrate | 7.25 | 1 | 1.08 | mg/kg | U | | 0.356 | | 1.08 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/10/2014 |
| 11583756 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 88-74-4 | Nitroaniline[2-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.119 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583757 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 99-09-2 | Nitroaniline[3-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583768 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 100-01-6 | Nitroaniline[4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583739 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 98-95-3 | Nitrobenzene | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583741 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 88-75-5 | Nitrophenol[2-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583764 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 100-02-7 | Nitrophenol[4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583736 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583725 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 62-75-9 | Nitrosodimethylamine[N-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583793 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583772 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 87-86-5 | Pentachlorophenol | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582829 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | ClO4 | Perchlorate | 7.25 | 1 | 0.000957 | mg/kg | J | | 0.000534 | | 0.00213 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/16/2014 | 07/10/2014 |
| 11583773 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 85-01-8 | Phenanthrene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583728 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 108-95-2 | Phenol | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582615 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | K | Potassium | 7.25 | 1 | 944 | mg/kg | NQ | | 6.57 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583352 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 103-65-1 | Propylbenzene[1-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583777 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 129-00-0 | Pyrene | 7.25 | 1 | 0.0359 | mg/kg | U | | 0.0108 | | 0.0359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583726 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 110-86-1 | Pyridine | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582616 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Se | Selenium | 7.25 | 2 | 0.427 | mg/kg | J | | 0.321 | | 0.973 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11582617 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Ag | Silver | 7.25 | 1 | 10.8 | mg/kg | NQ | | 0.103 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582618 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Na | Sodium | 7.25 | 1 | 151 | mg/kg | NQ | | 7.19 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11583346 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 100-42-5 | Styrene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583342 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583349 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583338 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 127-18-4 | Tetrachloroethene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582619 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Tl | Thallium | 7.25 | 2 | 0.389 | mg/kg | U | | 0.0584 | | 0.389 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/10/2014 |
| 11583333 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 108-88-3 | Toluene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582242 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 7.25 | 1 | 0.00539 | mg/kg | U | | 0.0018 | | 0.00539 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583746 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 120-82-1 | Trichlorobenzene[1,2,4-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11582253 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 71-55-6 | Trichloroethane[1,1,1-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583335 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 79-00-5 | Trichloroethane[1,1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583327 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 79-01-6 | Trichloroethene | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582239 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-69-4 | Trichlorofluoromethane | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583754 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 95-95-4 | Trichlorophenol[2,4,5-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583753 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 88-06-2 | Trichlorophenol[2,4,6-] | 7.25 | 1 | 0.359 | mg/kg | U | | 0.108 | | 0.359 | Y | SVOC | SW-846:8270D | GELC | 07/21/2014 | 07/10/2014 |
| 11583350 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 96-18-4 | Trichloropropane[1,2,3-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583355 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 95-63-6 | Trimethylbenzene[1,2,4-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583354 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 108-67-8 | Trimethylbenzene[1,3,5-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582860 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | U-234 | Uranium-234 | 7.25 | 1 | 1.9 | pCi/g | NQ | 0.098 | | 0.0873 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582861 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | U-235/236 | Uranium-235/236 | 7.25 | 1 | 0.0627 | pCi/g | U | 0.0703 | | 0.0241 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582862 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | U-238 | Uranium-238 | 7.25 | 1 | 1.38 | pCi/g | NQ | 0.0614 | | 0.0743 | | Y | RAD | HASL-300:ISOU | GELC | 07/22/2014 | 07/10/2014 |
| 11582620 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | V | Vanadium | 7.25 | 1 | 17 | mg/kg | NQ | | 0.103 | | 0.513 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11582236 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 75-01-4 | Vinyl Chloride | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583345 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | 95-47-6 | Xylene[1,2-] | 7.25 | 1 | 0.00108 | mg/kg | U | | 0.000359 | | 0.00108 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583344 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 7.25 | 1 | 0.00216 | mg/kg | U | | 0.000719 | | 0.00216 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11582621 | 57-007 | 2014-3751 | RE57-14-84120 | N | HA | QC | NA | FD | 57-4015 | 1.5 | 2 | ft | S | FILL | Zn | Zinc | 7.25 | 1 | 89.6 | mg/kg | NQ | | 0.411 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/10/2014 |
| 11599796 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598002 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Al | Aluminum | 100 | 1 | 87.6 | ug/L | J | | 68 | | 200 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598003 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Sb | Antimony | 100 | 1 | 3 | ug/L | U | | 1 | | 3 | Y | INORGANIC | SW-846:6020 | GELC | 08/14/2014 | 07/11/2014 |
| 11598004 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | As | Arsenic | 100 | 1 | 5 | ug/L | U | | 1.7 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598005 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Ba | Barium | 100 | 1 | 30.7 | ug/L | NQ | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11599812 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598006 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Be | Beryllium | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11599837 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599806 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599816 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599833 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599792 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599803 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599846 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599844 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599843 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598007 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Cd | Cadmium | 100 | 1 | 1 | ug/L | U | | 0.11 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/14/2014 | 07/11/2014 |
| 11598008 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Ca | Calcium | 100 | 1 | 11.3 | mg/L | NQ | | 0.05 | | 0.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11599799 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599810 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599827 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599825 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599793 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599807 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599790 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599839 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599842 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598009 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Cr | Chromium | 100 | 1 | 5.52 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598010 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Co | Cobalt | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598011 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Cu | Copper | 100 | 1 | 50 | ug/L | NQ | | 3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11599847 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599826 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599815 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599850 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599848 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599849 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599789 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599802 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599811 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599795 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599804 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599801 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599814 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599822 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599805 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599809 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599817 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599820 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599829 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599823 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599798 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598012 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Fe | Iron | 100 | 1 | 87.9 | ug/L | J | | 30 | | 100 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11599834 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599845 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598013 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Pb | Lead | 100 | 1 | 2 | ug/L | U | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/14/2014 | 07/11/2014 |
| 11598014 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Mg | Magnesium | 100 | 1 | 3.41 | mg/L | NQ | | 0.11 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598015 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Mn | Manganese | 100 | 1 | 4.26 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598016 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Hg | Mercury | 100 | 1 | 0.2 | ug/L | U | | 0.067 | | 0.2 | Y | INORGANIC | EPA:245.2 | GELC | 07/23/2014 | 07/11/2014 |
| 11599818 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599800 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598017 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Ni | Nickel | 100 | 1 | 1.23 | ug/L | J | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598018 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | K | Potassium | 100 | 1 | 2.1 | mg/L | NQ | | 0.05 | | 0.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11599838 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598019 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Se | Selenium | 100 | 1 | 5 | ug/L | U | | 1.5 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598020 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Ag | Silver | 100 | 1 | 1 | ug/L | U | | 0.2 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/14/2014 | 07/11/2014 |
| 11598021 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Na | Sodium | 100 | 1 | 12.9 | mg/L | NQ | | 0.1 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11599832 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599828 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599835 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599824 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598022 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Tl | Thallium | 100 | 1 | 2 | ug/L | U | | 0.45 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11599819 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599797 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599808 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599821 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599813 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599794 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599836 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599841 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599840 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598023 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | V | Vanadium | 100 | 1 | 8 | ug/L | NQ | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11599791 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599831 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599830 | 57-007 | 2014-3795 | RE57-14-84132 | N | DC | QC | NA | FTB | 57-4017 | | | | S | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598024 | 57-007 | 2014-3795 | RE57-14-84125 | N | DC | QC | UF | FR | 57-4017 | | | | W | | Zn | Zinc | 100 | 1 | 10 | ug/L | U | | 3.3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11583372 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583388 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583413 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583382 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583392 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583409 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583368 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583379 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583422 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583420 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583419 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583375 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583386 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583403 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583401 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583369 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583383 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583366 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583415 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583418 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583423 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583402 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583391 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583426 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583424 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583425 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583365 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583378 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583387 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583371 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583380 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583377 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583390 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583398 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583381 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583385 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583393 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583396 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583405 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583399 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583374 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583410 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583421 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583394 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583376 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583414 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583408 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583404 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583411 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583400 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583395 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583373 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583384 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583397 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583389 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583370 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583412 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583417 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583416 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583367 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583407 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11583406 | 57-007 | 2014-3751 | RE57-14-84130 | N | DC | QC | NA | FTB | 57-4018 | 0 | 1 | ft | S | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/10/2014 |
| 11597066 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597403 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597428 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597397 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597407 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597424 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597062 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597073 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597437 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597435 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597434 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597069 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597401 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597418 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597416 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597063 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597398 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597060 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597430 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597433 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597438 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597417 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597406 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597441 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597439 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597440 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597059 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597072 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597402 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597065 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597074 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597071 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597405 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597413 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597396 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597400 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597408 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597411 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597420 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597414 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597068 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597425 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597436 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597409 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597070 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597429 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597423 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597419 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597426 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597415 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597410 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597067 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597399 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11597412 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597404 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597064 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597427 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597432 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597431 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597061 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597422 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597421 | 57-007 | 2014-3910 | RE57-14-84992 | N | DC | QC | NA | FTB | 57-4018 | 2.5 | 3.5 | ft | S | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/17/2014 |
| 11597817 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597833 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597858 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597827 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597837 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597854 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597813 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597824 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597867 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597865 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597864 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597820 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597831 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597848 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597846 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597814 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597828 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597811 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597860 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597863 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597868 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597847 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597836 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597871 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597869 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597870 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11599851 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597823 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597832 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597816 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597825 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597822 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597835 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597843 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597826 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597830 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597838 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597841 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597850 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597844 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597819 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597855 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597866 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597839 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597821 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597859 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597853 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597849 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597856 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597845 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597840 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597818 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597829 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597842 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597834 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597815 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597857 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597862 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597861 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597812 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597852 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11597851 | 57-007 | 2014-3795 | RE57-14-84133 | N | DC | QC | NA | FTB | 57-4020 | | | | S | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 08/01/2014 | 07/11/2014 |
| 11598025 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Al | Aluminum | 100 | 1 | 210 | ug/L | NQ | | 68 | | 200 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598026 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Sb | Antimony | 100 | 1 | 3 | ug/L | U | | 1 | | 3 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598027 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | As | Arsenic | 100 | 1 | 5 | ug/L | U | | 1.7 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598028 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Ba | Barium | 100 | 1 | 1.89 | ug/L | J | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598029 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Be | Beryllium | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598030 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Cd | Cadmium | 100 | 1 | 1 | ug/L | U | | 0.11 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598031 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Ca | Calcium | 100 | 1 | 0.0721 | mg/L | J | | 0.05 | | 0.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598032 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Cr | Chromium | 100 | 1 | 10 | ug/L | U | | 2 | | 10 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598033 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Co | Cobalt | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598034 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Cu | Copper | 100 | 1 | 10 | ug/L | U | | 3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598035 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Fe | Iron | 100 | 1 | 134 | ug/L | NQ | | 30 | | 100 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598036 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Pb | Lead | 100 | 1 | 2 | ug/L | U | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598037 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Mg | Magnesium | 100 | 1 | 0.3 | mg/L | U | | 0.11 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598038 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Mn | Manganese | 100 | 1 | 5.81 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598039 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Hg | Mercury | 100 | 1 | 0.2 | ug/L | U | | 0.067 | | 0.2 | Y | INORGANIC | EPA:245.2 | GELC | 07/23/2014 | 07/11/2014 |
| 11598040 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Ni | Nickel | 100 | 1 | 0.858 | ug/L | J | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598041 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | K | Potassium | 100 | 1 | 0.189 | mg/L | NQ | | 0.05 | | 0.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598042 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Se | Selenium | 100 | 1 | 5 | ug/L | U | | 1.5 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598043 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Ag | Silver | 100 | 1 | 1 | ug/L | U | | 0.2 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598044 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Na | Sodium | 100 | 1 | 0.422 | mg/L | NQ | | 0.1 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598045 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Tl | Thallium | 100 | 1 | 2 | ug/L | U | | 0.45 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 |
| 11598046 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | V | Vanadium | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11598047 | 57-007 | 2014-3795 | RE57-14-84126 | N | DC | QC | UF | FR | 57-4021 | | | | W | | Zn | Zinc | 100 | 1 | 5.54 | ug/L | J | | 3.3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/21/2014 | 07/11/2014 |
| 11586774 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586790 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586815 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586784 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586794 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586811 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586770 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586781 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586824 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586822 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586821 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586777 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586788 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586805 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586803 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586771 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586785 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586768 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586817 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586820 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586825 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586804 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586793 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586828 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586826 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586827 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586767 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586780 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586789 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586773 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586782 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586779 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586792 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586800 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586783 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586787 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586795 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586798 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586807 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586801 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586776 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586812 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586823 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586796 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586778 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586816 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586810 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586806 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586813 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586802 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586797 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586775 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586786 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586799 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586791 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586772 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586814 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586819 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586818 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586769 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586809 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586808 | 57-006 | 2014-3701 | RE57-14-84199 | N | DC | QC | NA | FTB | 57-4023 | 3 | 4 | ft | S | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587717 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587716 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585875 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 67-64-1 | Acetone | 9.45 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586206 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Al | Aluminum | 9.45 | 1 | 4610 | mg/kg | NQ | | 7.08 | | 20.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587684 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 62-53-3 | Aniline | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587731 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 120-12-7 | Anthracene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586207 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Sb | Antimony | 9.45 | 1 | 1.04 | mg/kg | U | | 0.344 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586208 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | As | Arsenic | 9.45 | 2 | 1.8 | mg/kg | NQ | | 0.204 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587727 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 103-33-3 | Azobenzene | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586209 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Ba | Barium | 9.45 | 1 | 131 | mg/kg | NQ | | 0.104 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585891 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 71-43-2 | Benzene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587736 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587743 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587741 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11587746 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587742 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587702 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 9.45 | 1 | 0.735 | mg/kg | U | | 0.184 | | 0.735 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587690 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586210 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Be | Beryllium | 9.45 | 2 | 0.43 | mg/kg | NQ | | 0.0204 | | 0.102 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11587700 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587686 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587739 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585916 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585885 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585895 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585912 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-25-2 | Bromoform | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585871 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-83-9 | Bromomethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587728 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585882 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 9.45 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585925 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585923 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585922 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587735 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586211 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Cd | Cadmium | 9.45 | 1 | 0.521 | mg/kg | U | | 0.104 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586212 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Ca | Calcium | 9.45 | 1 | 1880 | mg/kg | NQ | | 8.33 | | 26 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585878 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 9.45 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585889 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587707 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.147 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587705 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585906 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585904 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585872 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-00-3 | Chloroethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585886 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 67-66-3 | Chloroform | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585869 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-87-3 | Chloromethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587712 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587687 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587723 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585918 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585921 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586213 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Cr | Chromium | 9.45 | 1 | 4.37 | mg/kg | NQ | | 0.156 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587738 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 218-01-9 | Chrysene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586214 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Co | Cobalt | 9.45 | 1 | 0.948 | mg/kg | NQ | | 0.156 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586215 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Cu | Copper | 9.45 | 1 | 3.19 | mg/kg | NQ | | 0.313 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586345 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 9.45 | 1 | 0.234 | mg/kg | U | | 0.0781 | | 0.234 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/08/2014 |
| 11587732 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587740 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587745 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587719 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585926 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000552 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585905 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585894 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585929 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587691 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585927 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587688 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585928 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587689 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587737 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585868 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585881 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585890 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585874 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585883 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585880 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587701 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585893 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585901 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585884 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585888 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585896 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585899 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587720 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587715 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587699 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587724 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587718 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 9.45 | 1 | 0.735 | mg/kg | UJ | | 0.11 | | 0.735 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587748 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587749 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587726 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585908 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587733 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587722 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 86-73-7 | Fluorene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587747 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587706 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587709 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587695 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585902 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 9.45 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587744 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585877 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 74-88-4 | Iodomethane | 9.45 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586216 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Fe | Iron | 9.45 | 1 | 8480 | mg/kg | NQ | | 8.33 | | 26 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11587697 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 78-59-1 | Isophorone | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585913 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585924 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586217 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Pb | Lead | 9.45 | 1 | 12.3 | mg/kg | NQ | | 0.344 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586218 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Mg | Magnesium | 9.45 | 1 | 340 | mg/kg | NQ | | 8.86 | | 31.3 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11586219 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Mn | Manganese | 9.45 | 1 | 459 | mg/kg | NQ | | 0.208 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586220 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Hg | Mercury | 9.45 | 1 | 0.0118 | mg/kg | J | | 0.00428 | | 0.0128 | Y | INORGANIC | SW-846:7471A | GELC | 07/22/2014 | 07/08/2014 |
| 11585897 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 9.45 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585879 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 9.45 | 1 | 0.00272 | mg/kg | J+ | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587708 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2-] | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587692 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587694 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587704 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 91-20-3 | Naphthalene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586221 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Ni | Nickel | 9.45 | 2 | 3.26 | mg/kg | NQ | | 0.103 | | 0.412 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586346 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | NO3 | Nitrate | 9.45 | 1 | 1.85 | mg/kg | NQ | | 0.364 | | 1.1 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/08/2014 |
| 11587713 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.121 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587714 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587725 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587696 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587698 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587721 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587693 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587682 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587750 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587729 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586358 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | ClO4 | Perchlorate | 9.45 | 1 | 0.00218 | mg/kg | U | | 0.000544 | | 0.00218 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/08/2014 |
| 11587730 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587685 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-95-2 | Phenol | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586222 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | K | Potassium | 9.45 | 1 | 730 | mg/kg | NQ | | 6.67 | | 26 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585917 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587734 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 129-00-0 | Pyrene | 9.45 | 1 | 0.0368 | mg/kg | U | | 0.011 | | 0.0368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587683 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 110-86-1 | Pyridine | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11586223 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Se | Selenium | 9.45 | 2 | 1.02 | mg/kg | U | | 0.336 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11586224 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Ag | Silver | 9.45 | 1 | 0.521 | mg/kg | U | | 0.104 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11586225 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Na | Sodium | 9.45 | 1 | 334 | mg/kg | NQ | | 7.29 | | 26 | Y | INORGANIC | SW-846:6010C | GELC | 08/06/2014 | 07/08/2014 |
| 11585911 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 100-42-5 | Styrene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585907 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585914 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585903 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586226 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Tl | Thallium | 9.45 | 2 | 0.408 | mg/kg | U | | 0.0611 | | 0.408 | Y | INORGANIC | SW-846:6020 | GELC | 08/07/2014 | 07/08/2014 |
| 11585898 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-88-3 | Toluene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585876 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 9.45 | 1 | 0.00552 | mg/kg | U | | 0.00184 | | 0.00552 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587703 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585887 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585900 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585892 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585873 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587711 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11587710 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 9.45 | 1 | 0.368 | mg/kg | U | | 0.11 | | 0.368 | Y | SVOC | SW-846:8270D | GELC | 07/15/2014 | 07/08/2014 |
| 11585915 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585920 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585919 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586567 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | U-234 | Uranium-234 | 9.45 | 1 | 1.15 | pCi/g | NQ | 0.118 | | 0.0749 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586568 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 9.45 | 1 | 0.0696 | pCi/g | U | 0.0846 | | 0.0217 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586569 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | U-238 | Uranium-238 | 9.45 | 1 | 1.24 | pCi/g | NQ | 0.0738 | | 0.0771 | | Y | RAD | HASL-300:ISOU | GELC | 07/15/2014 | 07/08/2014 |
| 11586227 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | V | Vanadium | 9.45 | 1 | 4.14 | mg/kg | NQ | | 0.104 | | 0.521 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11585870 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585910 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 9.45 | 1 | 0.0011 | mg/kg | U | | 0.000368 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585909 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 9.45 | 1 | 0.00221 | mg/kg | U | | 0.000737 | | 0.00221 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586228 | 57-006 | 2014-3701 | RE57-14-84194 | N | HA | QC | NA | FD | 57-4023 | 5 | 6 | ft | R | QBT3 | Zn | Zinc | 9.45 | 1 | 64.8 | mg/kg | NQ | | 0.417 | | 1.04 | Y | INORGANIC | SW-846:6010C | GELC | 08/04/2014 | 07/08/2014 |
| 11583979 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583978 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584144 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584082 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 67-64-1 | Acetone | 6.07 | 1 | 0.00532 | mg/kg | U | | 0.00177 | | 0.00532 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583840 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Al | Aluminum | 100 | 1 | 200 | ug/L | U | | 68 | | 200 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583817 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Al | Aluminum | 6.07 | 1 | 3090 | mg/kg | NQ | | 6.99 | | 20.6 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583946 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 62-53-3 | Aniline | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583993 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 120-12-7 | Anthracene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583841 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Sb | Antimony | 100 | 1 | 3 | ug/L | U | | 1 | | 3 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/09/2014 |
| 11583818 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Sb | Antimony | 6.07 | 1 | 1.03 | mg/kg | U | | 0.339 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583842 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | As | Arsenic | 100 | 1 | 5 | ug/L | U | | 1.7 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583819 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | As | Arsenic | 6.07 | 2 | 1.48 | mg/kg | NQ | | 0.193 | | 0.964 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583989 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 103-33-3 | Azobenzene | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583843 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Ba | Barium | 100 | 1 | 1.49 | ug/L | J | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583820 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Ba | Barium | 6.07 | 1 | 47.7 | mg/kg | NQ | | 0.103 | | 0.514 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584160 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584098 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 71-43-2 | Benzene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583998 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584005 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584003 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584008 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584004 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583964 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 6.07 | 1 | 0.707 | mg/kg | U | | 0.177 | | 0.707 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583952 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11583844 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Be | Beryllium | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583821 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Be | Beryllium | 6.07 | 2 | 0.513 | mg/kg | NQ | | 0.0193 | | 0.0964 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583962 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583948 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584001 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584185 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584123 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584154 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584092 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584164 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584102 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584181 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584119 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-25-2 | Bromoform | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584140 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584078 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-83-9 | Bromomethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583990 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584151 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584089 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 6.07 | 1 | 0.00532 | mg/kg | U | | 0.00177 | | 0.00532 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584194 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584132 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584192 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584130 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584191 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584129 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583997 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583845 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Cd | Cadmium | 100 | 1 | 1 | ug/L | U | | 0.11 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583822 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Cd | Cadmium | 6.07 | 1 | 0.514 | mg/kg | U | | 0.103 | | 0.514 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583846 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Ca | Calcium | 100 | 1 | 0.124 | mg/L | J | | 0.05 | | 0.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583823 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Ca | Calcium | 6.07 | 1 | 294 | mg/kg | NQ | | 8.22 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584147 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584085 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 6.07 | 1 | 0.00532 | mg/kg | U | | 0.00177 | | 0.00532 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584158 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584096 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583969 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.141 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583967 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584175 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584113 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584173 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584111 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584141 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584079 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-00-3 | Chloroethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584155 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584093 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 67-66-3 | Chloroform | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584138 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584076 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-87-3 | Chloromethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583974 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583949 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583985 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584187 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584125 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584190 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584128 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583847 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Cr | Chromium | 100 | 1 | 3.99 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583824 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Cr | Chromium | 6.07 | 1 | 87.8 | mg/kg | NQ | | 0.154 | | 0.514 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584000 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 218-01-9 | Chrysene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583848 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Co | Cobalt | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583825 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Co | Cobalt | 6.07 | 1 | 1.26 | mg/kg | NQ | | 0.154 | | 0.514 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583849 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Cu | Copper | 100 | 1 | 10 | ug/L | U | | 3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583826 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Cu | Copper | 6.07 | 1 | 3.96 | mg/kg | NQ | | 0.308 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583865 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 6.07 | 1 | 0.242 | mg/kg | U | | 0.0808 | | 0.242 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/14/2014 | 07/09/2014 |
| 11583994 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584002 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584007 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583981 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584195 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584133 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000532 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584174 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584112 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584163 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584101 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584198 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584136 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583953 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584196 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584134 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583950 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584197 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584135 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583951 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583999 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584137 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584075 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584150 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584088 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584159 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584097 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584143 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584081 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584152 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584090 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584149 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584087 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583963 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584162 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584100 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584170 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584108 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584153 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584091 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584157 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584095 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584165 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584103 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584168 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584106 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583982 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583977 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583961 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583986 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583980 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 6.07 | 1 | 0.707 | mg/kg | U | | 0.106 | | 0.707 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584010 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584011 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583988 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584177 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584115 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583995 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583984 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 86-73-7 | Fluorene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584009 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583968 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583971 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583957 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584171 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584109 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 6.07 | 1 | 0.00532 | mg/kg | U | | 0.00177 | | 0.00532 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584006 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584146 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584084 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 74-88-4 | Iodomethane | 6.07 | 1 | 0.00532 | mg/kg | U | | 0.00177 | | 0.00532 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583850 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Fe | Iron | 100 | 1 | 100 | ug/L | U | | 30 | | 100 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583827 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Fe | Iron | 6.07 | 1 | 8210 | mg/kg | NQ | | 8.22 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583959 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 78-59-1 | Isophorone | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584182 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584120 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584193 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584131 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583851 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Pb | Lead | 100 | 1 | 2 | ug/L | U | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/09/2014 |
| 11583828 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Pb | Lead | 6.07 | 1 | 9.29 | mg/kg | NQ | | 0.339 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583852 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Mg | Magnesium | 100 | 1 | 0.3 | mg/L | U | | 0.11 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583829 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Mg | Magnesium | 6.07 | 1 | 132 | mg/kg | NQ | | 8.73 | | 30.8 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583853 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Mn | Manganese | 100 | 1 | 4.08 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583830 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Mn | Manganese | 6.07 | 1 | 452 | mg/kg | NQ | | 0.206 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583854 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Hg | Mercury | 100 | 1 | 0.2 | ug/L | U | | 0.067 | | 0.2 | Y | INORGANIC | EPA:245.2 | GELC | 07/21/2014 | 07/09/2014 |
| 11583831 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Hg | Mercury | 6.07 | 1 | 0.0102 | mg/kg | J | | 0.00376 | | 0.0112 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11584166 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584104 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 6.07 | 1 | 0.00532 | mg/kg | U | | 0.00177 | | 0.00532 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584148 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584086 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 6.07 | 1 | 0.00532 | mg/kg | U | | 0.00177 | | 0.00532 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583970 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2-] | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583954 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583956 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583966 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 91-20-3 | Naphthalene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583855 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Ni | Nickel | 100 | 1 | 1.64 | ug/L | J | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583832 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Ni | Nickel | 6.07 | 2 | 6.55 | mg/kg | NQ | | 0.0964 | | 0.386 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583866 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | NO3 | Nitrate | 6.07 | 1 | 2.38 | mg/kg | NQ | | 0.351 | | 1.06 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11583975 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.117 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583976 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583987 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583958 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583960 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583983 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583955 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583944 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584012 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583991 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583868 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | ClO4 | Perchlorate | 6.07 | 1 | 0.0021 | mg/kg | U | | 0.000524 | | 0.0021 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11583992 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583947 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-95-2 | Phenol | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583856 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | K | Potassium | 100 | 1 | 0.0605 | mg/L | J | | 0.05 | | 0.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583833 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | K | Potassium | 6.07 | 1 | 706 | mg/kg | NQ | | 6.58 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584186 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584124 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583996 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 129-00-0 | Pyrene | 6.07 | 1 | 0.0354 | mg/kg | U | | 0.0106 | | 0.0354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11583945 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 110-86-1 | Pyridine | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583857 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Se | Selenium | 100 | 1 | 5 | ug/L | U | | 1.5 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583834 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Se | Selenium | 6.07 | 2 | 0.964 | mg/kg | U | | 0.318 | | 0.964 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583858 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Ag | Silver | 100 | 1 | 1 | ug/L | U | | 0.2 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11583835 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Ag | Silver | 6.07 | 1 | 0.514 | mg/kg | U | | 0.103 | | 0.514 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11583859 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Na | Sodium | 100 | 1 | 0.649 | mg/L | NQ | | 0.1 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583836 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Na | Sodium | 6.07 | 1 | 437 | mg/kg | NQ | | 7.19 | | 25.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584180 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584118 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 100-42-5 | Styrene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584176 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584114 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584183 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584121 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584172 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584110 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583860 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Tl | Thallium | 100 | 1 | 2 | ug/L | U | | 0.45 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/09/2014 |
| 11583837 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Tl | Thallium | 6.07 | 2 | 0.386 | mg/kg | U | | 0.0579 | | 0.386 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11584167 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584105 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-88-3 | Toluene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584145 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584083 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.07 | 1 | 0.00532 | mg/kg | U | | 0.00177 | | 0.00532 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583965 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584156 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584094 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584169 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584107 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584161 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584099 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584142 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584080 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583973 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11583972 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 6.07 | 1 | 0.354 | mg/kg | U | | 0.106 | | 0.354 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11584184 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584122 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584189 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584127 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584188 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584126 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583872 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | U-234 | Uranium-234 | 6.07 | 1 | 1.33 | pCi/g | NQ | 0.114 | | 0.0787 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11583873 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 6.07 | 1 | 0.0787 | pCi/g | U | 0.082 | | 0.0239 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11583874 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | U-238 | Uranium-238 | 6.07 | 1 | 1.36 | pCi/g | NQ | 0.0716 | | 0.0795 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11583861 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | V | Vanadium | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583838 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | V | Vanadium | 6.07 | 1 | 1.77 | mg/kg | NQ | | 0.103 | | 0.514 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11584139 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584077 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584179 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584117 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 6.07 | 1 | 0.00106 | mg/kg | U | | 0.000355 | | 0.00106 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584178 | 57-006 | 2014-3719 | RE57-14-84200 | N | DC | QC | NA | FTB | 57-4023 | 8 | 9 | ft | R | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11584116 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.07 | 1 | 0.00213 | mg/kg | U | | 0.00071 | | 0.00213 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11583862 | 57-006 | 2014-3719 | RE57-14-84197 | N | DC | QC | UF | FR | 57-4023 | 8 | 9 | ft | W | | Zn | Zinc | 100 | 1 | 10 | ug/L | U | | 3.3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/22/2014 | 07/09/2014 |
| 11583839 | 57-006 | 2014-3719 | RE57-14-84195 | N | HA | QC | NA | FD | 57-4023 | 8 | 9 | ft | R | QBT3 | Zn | Zinc | 6.07 | 1 | 68.8 | mg/kg | NQ | | 0.411 | | 1.03 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11587553 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 67-64-1 | Acetone | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587569 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 71-43-2 | Benzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587594 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 108-86-1 | Bromobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587563 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 74-97-5 | Bromochloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587573 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-27-4 | Bromodichloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587590 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-25-2 | Bromoform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587549 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 74-83-9 | Bromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587560 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 78-93-3 | Butanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585863 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 104-51-8 | Butylbenzene[n-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585861 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 135-98-8 | Butylbenzene[sec-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585860 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 98-06-6 | Butylbenzene[tert-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587556 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-15-0 | Carbon Disulfide | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587567 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 56-23-5 | Carbon Tetrachloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587584 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 108-90-7 | Chlorobenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587582 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 124-48-1 | Chlorodibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587550 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-00-3 | Chloroethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587564 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 67-66-3 | Chloroform | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587547 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 74-87-3 | Chloromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587596 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 95-49-8 | Chlorotoluene[2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585859 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 106-43-4 | Chlorotoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585864 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.0005 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587583 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 106-93-4 | Dibromoethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587572 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 74-95-3 | Dibromomethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585867 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 95-50-1 | Dichlorobenzene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585865 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 541-73-1 | Dichlorobenzene[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585866 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 106-46-7 | Dichlorobenzene[1,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587546 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-71-8 | Dichlorodifluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587559 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-34-3 | Dichloroethane[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587568 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 107-06-2 | Dichloroethane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587552 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-35-4 | Dichloroethene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587561 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 156-59-2 | Dichloroethene[cis-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587558 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 156-60-5 | Dichloroethene[trans-1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587571 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 78-87-5 | Dichloropropane[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587579 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 142-28-9 | Dichloropropane[1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587562 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 594-20-7 | Dichloropropane[2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587566 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 563-58-6 | Dichloropropene[1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587574 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 10061-01-5 | Dichloropropene[cis-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587577 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 10061-02-6 | Dichloropropene[trans-1,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587586 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 100-41-4 | Ethylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587580 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 591-78-6 | Hexanone[2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587555 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 74-88-4 | Iodomethane | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587591 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 98-82-8 | Isopropylbenzene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11585862 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 99-87-6 | Isopropyltoluene[4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587575 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 108-10-1 | Methyl-2-pentanone[4-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587557 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-09-2 | Methylene Chloride | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587595 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 103-65-1 | Propylbenzene[1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587589 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 100-42-5 | Styrene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587585 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587592 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587581 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 127-18-4 | Tetrachloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587576 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 108-88-3 | Toluene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587554 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 100 | 1 | 0.005 | mg/kg | U | | 0.00167 | | 0.005 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587565 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 71-55-6 | Trichloroethane[1,1,1-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587578 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 79-00-5 | Trichloroethane[1,1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587570 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 79-01-6 | Trichloroethene | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587551 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-69-4 | Trichlorofluoromethane | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587593 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 96-18-4 | Trichloropropane[1,2,3-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587598 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 95-63-6 | Trimethylbenzene[1,2,4-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587597 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 108-67-8 | Trimethylbenzene[1,3,5-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587548 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 75-01-4 | Vinyl Chloride | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587588 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | 95-47-6 | Xylene[1,2-] | 100 | 1 | 0.001 | mg/kg | U | | 0.000333 | | 0.001 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11587587 | 57-006 | 2014-3701 | RE57-14-84198 | N | DC | QC | NA | FTB | 57-4025 | 3 | 4 | ft | S | | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 100 | 1 | 0.002 | mg/kg | U | | 0.000667 | | 0.002 | Y | VOC | SW-846:8260B | GELC | 07/30/2014 | 07/08/2014 |
| 11586183 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Al | Aluminum | 100 | 1 | 145 | ug/L | J | | 68 | | 200 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586184 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Sb | Antimony | 100 | 1 | 3 | ug/L | U | | 1 | | 3 | Y | INORGANIC | SW-846:6020 | GELC | 08/08/2014 | 07/08/2014 |
| 11586185 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | As | Arsenic | 100 | 1 | 1.78 | ug/L | J | | 1.7 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586186 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Ba | Barium | 100 | 1 | 31.6 | ug/L | NQ | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586187 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Be | Beryllium | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586188 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Cd | Cadmium | 100 | 1 | 1 | ug/L | U | | 0.11 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/08/2014 | 07/08/2014 |
| 11586189 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Ca | Calcium | 100 | 1 | 11.3 | mg/L | NQ | | 0.05 | | 0.2 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586190 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Cr | Chromium | 100 | 1 | 9.08 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586191 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Co | Cobalt | 100 | 1 | 5 | ug/L | U | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586192 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Cu | Copper | 100 | 1 | 50 | ug/L | NQ | | 3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586193 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Fe | Iron | 100 | 1 | 124 | ug/L | NQ | | 30 | | 100 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586194 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Pb | Lead | 100 | 1 | 2 | ug/L | U | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/08/2014 | 07/08/2014 |
| 11586195 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Mg | Magnesium | 100 | 1 | 3.49 | mg/L | NQ | | 0.11 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586196 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Mn | Manganese | 100 | 1 | 5.35 | ug/L | J | | 2 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586197 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Hg | Mercury | 100 | 1 | 0.2 | ug/L | U | | 0.067 | | 0.2 | Y | INORGANIC | EPA:245.2 | GELC | 07/21/2014 | 07/08/2014 |
| 11586198 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Ni | Nickel | 100 | 1 | 1.71 | ug/L | U | | 0.5 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586199 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | K | Potassium | 100 | 1 | 2.08 | mg/L | NQ | | 0.05 | | 0.15 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586200 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Se | Selenium | 100 | 1 | 5 | ug/L | U | | 1.5 | | 5 | Y | INORGANIC | SW-846:6020 | GELC | 08/08/2014 | 07/08/2014 |
| 11586201 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Ag | Silver | 100 | 1 | 1 | ug/L | U | | 0.2 | | 1 | Y | INORGANIC | SW-846:6020 | GELC | 08/08/2014 | 07/08/2014 |
| 11586202 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Na | Sodium | 100 | 1 | 13.2 | mg/L | NQ | | 0.1 | | 0.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586203 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Tl | Thallium | 100 | 1 | 2 | ug/L | U | | 0.45 | | 2 | Y | INORGANIC | SW-846:6020 | GELC | 08/11/2014 | 07/08/2014 |
| 11586204 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | V | Vanadium | 100 | 1 | 8.4 | ug/L | NQ | | 1 | | 5 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |
| 11586205 | 57-006 | 2014-3701 | RE57-14-84196 | N | DC | QC | UF | FR | 57-4025 | 8 | 9 | ft | W | | Zn | Zinc | 100 | 1 | 5.47 | ug/L | J | | 3.3 | | 10 | Y | INORGANIC | SW-846:6010C | GELC | 07/28/2014 | 07/08/2014 |

| FS Result Recno | AOC | Chain Of Custody No. | Field Sample ID | Excavated Flag | Sampling Method | Sample Usage Code | Field Prep Code | Sample Purpose | Location ID | Start Depth | End Depth | Depth Units | Sample Type | Background Comparison Class Code | Parameter Code | Parameter Name | Percent Moisture | Dilution Factor | Report Result | Report Units | Validation Qualifier | Report Min Detectable Activity | Report Method Detection Limit | Report Uncertainty | Report Detection Limit | Best Value Flag | Method Category | Analytical Method | Lab ID | Analysis Date | Date Sampled |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11595569 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 83-32-9 | Acenaphthene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595568 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594906 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 67-64-1 | Acetone | 6.93 | 1 | 0.00537 | mg/kg | U | | 0.00179 | | 0.00537 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595046 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Al | Aluminum | 6.93 | 1 | 3560 | mg/kg | NQ | | 6.63 | | 19.5 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595536 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 62-53-3 | Aniline | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595583 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 120-12-7 | Anthracene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595047 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Sb | Antimony | 6.93 | 1 | 0.518 | mg/kg | J | | 0.322 | | 0.975 | Y | INORGANIC | SW-846:6010C | GELC | 08/07/2014 | 07/09/2014 |
| 11595048 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | As | Arsenic | 6.93 | 2 | 13.8 | mg/kg | NQ | | 0.209 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595579 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 103-33-3 | Azobenzene | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595049 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Ba | Barium | 6.93 | 1 | 1030 | mg/kg | NQ | | 0.0975 | | 0.488 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594922 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 71-43-2 | Benzene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595588 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595595 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595593 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595598 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595594 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595554 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 6.93 | 1 | 0.716 | mg/kg | U | | 0.179 | | 0.716 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595542 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595050 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Be | Beryllium | 6.93 | 2 | 0.58 | mg/kg | NQ | | 0.0209 | | 0.105 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595552 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595538 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595591 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594947 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 108-86-1 | Bromobenzene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594916 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594926 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594943 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-25-2 | Bromoform | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594902 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 74-83-9 | Bromomethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595580 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594913 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 6.93 | 1 | 0.00537 | mg/kg | U | | 0.00179 | | 0.00537 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594956 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594954 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594953 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595587 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595051 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Cd | Cadmium | 6.93 | 1 | 0.186 | mg/kg | J | | 0.0975 | | 0.488 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595052 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Ca | Calcium | 6.93 | 1 | 5160 | mg/kg | NQ | | 7.8 | | 24.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594909 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 6.93 | 1 | 0.00537 | mg/kg | U | | 0.00179 | | 0.00537 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594920 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595559 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.143 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595557 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594937 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594935 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594903 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-00-3 | Chloroethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594917 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 67-66-3 | Chloroform | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594900 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 74-87-3 | Chloromethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595564 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595539 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595575 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594949 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594952 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595053 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Cr | Chromium | 6.93 | 1 | 4.85 | mg/kg | NQ | | 0.146 | | 0.488 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595590 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 218-01-9 | Chrysene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595054 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Co | Cobalt | 6.93 | 1 | 2.23 | mg/kg | NQ | | 0.146 | | 0.488 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595055 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Cu | Copper | 6.93 | 1 | 11.3 | mg/kg | NQ | | 0.293 | | 0.975 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595226 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 6.93 | 1 | 0.263 | mg/kg | U | | 0.088 | | 0.263 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 |
| 11595584 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595592 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595597 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595571 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594957 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000537 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594936 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594925 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 74-95-3 | Dibromomethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594960 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595543 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594958 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595540 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594959 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595541 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595589 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594899 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594912 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594921 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594905 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594914 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594911 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595553 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594924 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594932 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594915 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594919 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594927 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594930 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595572 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595567 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595551 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595576 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595570 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 6.93 | 1 | 0.716 | mg/kg | U | | 0.107 | | 0.716 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595600 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595601 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595578 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 122-39-4 | Diphenylamine | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594939 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595585 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 206-44-0 | Fluoranthene | 6.93 | 1 | 0.0132 | mg/kg | J | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595574 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 86-73-7 | Fluorene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595599 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595558 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595561 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595547 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594933 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 6.93 | 1 | 0.00537 | mg/kg | U | | 0.00179 | | 0.00537 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595596 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594908 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 74-88-4 | Iodomethane | 6.93 | 1 | 0.00537 | mg/kg | U | | 0.00179 | | 0.00537 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595056 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Fe | Iron | 6.93 | 1 | 9240 | mg/kg | NQ | | 7.8 | | 24.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595549 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 78-59-1 | Isophorone | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594944 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594955 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595057 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Pb | Lead | 6.93 | 1 | 30.5 | mg/kg | NQ | | 0.322 | | 0.975 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595058 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Mg | Magnesium | 6.93 | 1 | 907 | mg/kg | NQ | | 8.29 | | 29.3 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595059 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Mn | Manganese | 6.93 | 1 | 357 | mg/kg | NQ | | 0.195 | | 0.975 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595060 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Hg | Mercury | 6.93 | 1 | 0.054 | mg/kg | NQ | | 0.00402 | | 0.012 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 |
| 11594928 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 6.93 | 1 | 0.00537 | mg/kg | U | | 0.00179 | | 0.00537 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594910 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 6.93 | 1 | 0.00537 | mg/kg | U | | 0.00179 | | 0.00537 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595560 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2-] | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595544 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595546 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595556 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 91-20-3 | Naphthalene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595061 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Ni | Nickel | 6.93 | 2 | 4.51 | mg/kg | NQ | | 0.105 | | 0.418 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595227 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | NO3 | Nitrate | 6.93 | 1 | 0.79 | mg/kg | J | | 0.355 | | 1.07 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 |
| 11595565 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.118 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595566 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595577 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595548 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595550 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595573 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595545 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595534 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595602 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595581 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595247 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | ClO4 | Perchlorate | 6.93 | 1 | 0.00516 | mg/kg | NQ | | 0.000535 | | 0.00214 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 |
| 11595582 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 85-01-8 | Phenanthrene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595537 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 108-95-2 | Phenol | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595062 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | K | Potassium | 6.93 | 1 | 683 | mg/kg | NQ | | 6.24 | | 24.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594948 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595586 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 129-00-0 | Pyrene | 6.93 | 1 | 0.0358 | mg/kg | U | | 0.0107 | | 0.0358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595535 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 110-86-1 | Pyridine | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595063 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Se | Selenium | 6.93 | 2 | 1.05 | mg/kg | U | | 0.345 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595064 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Ag | Silver | 6.93 | 1 | 0.162 | mg/kg | J | | 0.0975 | | 0.488 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595065 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Na | Sodium | 6.93 | 1 | 128 | mg/kg | NQ | | 6.83 | | 24.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594942 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 100-42-5 | Styrene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594938 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594945 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594934 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595066 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Tl | Thallium | 6.93 | 2 | 0.0633 | mg/kg | J | | 0.0627 | | 0.418 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11594929 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 108-88-3 | Toluene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594907 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.93 | 1 | 0.00537 | mg/kg | U | | 0.00179 | | 0.00537 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595555 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594918 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594931 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594923 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 79-01-6 | Trichloroethene | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594904 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595563 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595562 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 6.93 | 1 | 0.358 | mg/kg | U | | 0.107 | | 0.358 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594946 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594951 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594950 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595260 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | U-234 | Uranium-234 | 6.93 | 1 | 1.15 | pCi/g | NQ | 0.117 | | 0.0735 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595261 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 6.93 | 1 | 0.0574 | pCi/g | U | 0.0837 | | 0.0229 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595262 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | U-238 | Uranium-238 | 6.93 | 1 | 1.15 | pCi/g | NQ | 0.073 | | 0.0732 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 |
| 11595067 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | V | Vanadium | 6.93 | 1 | 9.86 | mg/kg | NQ | | 0.0975 | | 0.488 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594901 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594941 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 6.93 | 1 | 0.00107 | mg/kg | U | | 0.000358 | | 0.00107 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11594940 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 6.93 | 1 | 0.00215 | mg/kg | U | | 0.000717 | | 0.00215 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595068 | 57-007 | 2014-3718 | RE57-14-84134 | Y | HA | INV | NA | REG | 57-4011 | 0 | 1 | ft | S | SOIL | Zn | Zinc | 6.93 | 1 | 77.5 | mg/kg | NQ | | 0.39 | | 0.975 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595638 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595637 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11594968 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 67-64-1 | Acetone | 3.43 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595069 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Al | Aluminum | 3.43 | 1 | 4470 | mg/kg | NQ | | 6.37 | | 18.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11595605 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 62-53-3 | Aniline | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595827 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 120-12-7 | Anthracene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595070 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Sb | Antimony | 3.43 | 1 | 0.524 | mg/kg | J | | 0.309 | | 0.936 | Y | INORGANIC | SW-846:6010C | GELC | 08/07/2014 | 07/09/2014 |
| 11595071 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | As | Arsenic | 3.43 | 2 | 3 | mg/kg | NQ | | 0.205 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595823 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 103-33-3 | Azobenzene | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595072 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Ba | Barium | 3.43 | 1 | 325 | mg/kg | NQ | | 0.0936 | | 0.468 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 |
| 11594984 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 71-43-2 | Benzene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 |
| 11595832 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 3.43 | 1 | 0.0141 | mg/kg | J | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595839 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595837 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 3.43 | 1 | 0.0141 | mg/kg | J | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595842 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595838 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595623 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 3.43 | 1 | 0.689 | mg/kg | U | | 0.172 | | 0.689 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595611 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595073 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Be | Beryllium | 3.43 | 2 | 0.504 | mg/kg | NQ | | 0.0205 | | 0.102 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 |
| 11595621 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595607 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |
| 11595835 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 |

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11595009 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594978 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594988 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595005 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-25-2 | Bromoform | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594964 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-83-9 | Bromomethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595824 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594975 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 3.43 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595018 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595016 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595015 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595831 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595074 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Cd | Cadmium | 3.43 | 1 | 0.0964 | mg/kg | J | | 0.0936 | | 0.468 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595075 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Ca | Calcium | 3.43 | 1 | 2030 | mg/kg | NQ | | 7.49 | | 23.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594971 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 3.43 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594982 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595628 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.138 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595626 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594999 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594997 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594965 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-00-3 | Chloroethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594979 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 67-66-3 | Chloroform | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594962 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-87-3 | Chloromethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595633 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595608 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595819 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595011 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595014 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595076 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Cr | Chromium | 3.43 | 1 | 3.8 | mg/kg | NQ | | 0.14 | | 0.468 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595834 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 218-01-9 | Chrysene | 3.43 | 1 | 0.0169 | mg/kg | J | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595077 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Co | Cobalt | 3.43 | 1 | 2.93 | mg/kg | NQ | | 0.14 | | 0.468 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595078 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Cu | Copper | 3.43 | 1 | 5.32 | mg/kg | NQ | | 0.281 | | 0.936 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595228 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 3.43 | 1 | 0.219 | mg/kg | U | | 0.0733 | | 0.219 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 | | | |
| 11595828 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595836 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595841 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595640 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595019 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000518 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594998 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594987 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595022 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595612 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595020 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595609 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595021 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595610 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595833 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594961 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594974 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594983 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594967 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594976 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594973 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595622 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594986 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594994 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594977 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594981 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594989 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594992 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595641 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595636 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595620 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595820 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595639 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 3.43 | 1 | 0.689 | mg/kg | U | | 0.103 | | 0.689 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595844 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595845 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595822 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595001 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595829 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 3.43 | 1 | 0.0289 | mg/kg | J | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595818 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 86-73-7 | Fluorene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595843 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595627 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595630 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595616 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594995 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 3.43 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595840 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594970 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-88-4 | Iodomethane | 3.43 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595079 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Fe | Iron | 3.43 | 1 | 8880 | mg/kg | NQ | | 7.49 | | 23.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595618 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 78-59-1 | Isophorone | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595006 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595017 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595080 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Pb | Lead | 3.43 | 1 | 18.1 | mg/kg | NQ | | 0.309 | | 0.936 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595081 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Mg | Magnesium | 3.43 | 1 | 707 | mg/kg | NQ | | 7.96 | | 28.1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595082 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Mn | Manganese | 3.43 | 1 | 483 | mg/kg | NQ | | 0.187 | | 0.936 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595083 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Hg | Mercury | 3.43 | 1 | 0.0171 | mg/kg | NQ | | 0.00414 | | 0.0124 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 | | | |
| 11594990 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 3.43 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594972 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 3.43 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595629 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2-] | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595613 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595615 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595625 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 91-20-3 | Naphthalene | 3.43 | 1 | 0.0345 | mg/kg | U | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595084 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Ni | Nickel | 3.43 | 2 | 3.47 | mg/kg | NQ | | 0.102 | | 0.409 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 | | | |
| 11595229 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | NO3 | Nitrate | 3.43 | 1 | 1.04 | mg/kg | U | | 0.342 | | 1.04 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 | | | |
| 11595634 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.114 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595635 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595821 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595617 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595619 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595642 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595614 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595603 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595846 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595825 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595248 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | ClO4 | Perchlorate | 3.43 | 1 | 0.0048 | mg/kg | NQ | | 0.000513 | | 0.00205 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 | | | |
| 11595826 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 3.43 | 1 | 0.0138 | mg/kg | J | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595606 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-95-2 | Phenol | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595085 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | K | Potassium | 3.43 | 1 | 567 | mg/kg | NQ | | 5.99 | | 23.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595010 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595830 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 129-00-0 | Pyrene | 3.43 | 1 | 0.0217 | mg/kg | J | | 0.0103 | | 0.0345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595604 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 110-86-1 | Pyridine | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595086 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Se | Selenium | 3.43 | 2 | 1.02 | mg/kg | U | | 0.338 | | 1.02 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 | | | |
| 11595087 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Ag | Silver | 3.43 | 1 | 0.13 | mg/kg | J | | 0.0936 | | 0.468 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595088 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Na | Sodium | 3.43 | 1 | 150 | mg/kg | NQ | | 6.55 | | 23.4 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595004 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-42-5 | Styrene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595000 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595007 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594996 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595089 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Tl | Thallium | 3.43 | 2 | 0.409 | mg/kg | U | | 0.0614 | | 0.409 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 | | | |
| 11594991 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-88-3 | Toluene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594969 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 3.43 | 1 | 0.00518 | mg/kg | U | | 0.00173 | | 0.00518 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595624 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594980 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594993 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594985 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594966 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595632 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595631 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 3.43 | 1 | 0.345 | mg/kg | U | | 0.103 | | 0.345 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595008 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595013 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595012 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595263 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | U-234 | Uranium-234 | 3.43 | 1 | 1.1 | pCi/g | NQ | 0.103 | | 0.0683 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 | | | |
| 11595264 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 3.43 | 1 | 0.0558 | pCi/g | U | 0.074 | | 0.0183 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 | | | |
| 11595265 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | U-238 | Uranium-238 | 3.43 | 1 | 1.19 | pCi/g | NQ | 0.0646 | | 0.071 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 | | | |
| 11595090 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | V | Vanadium | 3.43 | 1 | 8.31 | mg/kg | NQ | | 0.0936 | | 0.468 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594963 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595003 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 3.43 | 1 | 0.00104 | mg/kg | U | | 0.000345 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595002 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 3.43 | 1 | 0.00207 | mg/kg | U | | 0.000691 | | 0.00207 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595091 | 57-007 | 2014-3718 | RE57-14-84145 | Y | HA | INV | NA | REG | 57-4011 | 1 | 2 | ft | R | QBT3 | Zn | Zinc | 3.43 | 1 | 47.8 | mg/kg | NQ | | 0.375 | | 0.936 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11599318 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 83-32-9 | Acenaphthene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599317 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599079 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 67-64-1 | Acetone | 8.98 | 1 | 0.00549 | mg/kg | U | | 0.00183 | | 0.00549 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597626 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Al | Aluminum | 8.98 | 1 | 6430 | mg/kg | NQ | | 7.4 | | 21.8 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599285 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 62-53-3 | Aniline | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599332 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 120-12-7 | Anthracene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597627 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Sb | Antimony | 8.98 | 1 | 1.09 | mg/kg | U | | 0.359 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597628 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | As | Arsenic | 8.98 | 2 | 18.6 | mg/kg | NQ | | 0.211 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11599328 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 103-33-3 | Azobenzene | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597629 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Ba | Barium | 8.98 | 1 | 1380 | mg/kg | NQ | | 0.109 | | 0.544 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599095 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 71-43-2 | Benzene | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599512 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599519 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599517 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599522 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599518 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599303 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 8.98 | 1 | 0.729 | mg/kg | U | | 0.182 | | 0.729 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599291 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597630 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Be | Beryllium | 8.98 | 2 | 0.644 | mg/kg | NQ | | 0.0211 | | 0.106 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11599301 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599287 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599515 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599120 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 108-86-1 | Bromobenzene | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599089 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599099 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599116 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-25-2 | Bromoform | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599075 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 74-83-9 | Bromomethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599329 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599086 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 8.98 | 1 | 0.00549 | mg/kg | U | | 0.00183 | | 0.00549 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599129 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599127 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599126 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599511 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597631 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Cd | Cadmium | 8.98 | 1 | 0.544 | mg/kg | U | | 0.109 | | 0.544 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597632 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Ca | Calcium | 8.98 | 1 | 1830 | mg/kg | NQ | | 8.7 | | 27.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599082 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 8.98 | 1 | 0.00549 | mg/kg | U | | 0.00183 | | 0.00549 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599093 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599308 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.146 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599306 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599110 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599108 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599076 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-00-3 | Chloroethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599090 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 67-66-3 | Chloroform | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599073 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 74-87-3 | Chloromethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599313 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599288 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599324 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11599122 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599125 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597633 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Cr | Chromium | 8.98 | 1 | 5.1 | mg/kg | NQ | | 0.163 | | 0.544 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599514 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 218-01-9 | Chrysene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597872 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Co | Cobalt | 8.98 | 1 | 1.53 | mg/kg | NQ | | 0.163 | | 0.544 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597873 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Cu | Copper | 8.98 | 1 | 10 | mg/kg | NQ | | 0.326 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11598082 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 8.98 | 1 | 0.275 | mg/kg | U | | 0.0917 | | 0.275 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599333 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599516 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599521 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599320 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599130 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000549 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599109 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599098 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 74-95-3 | Dibromomethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599133 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599292 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599131 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599289 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599132 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599290 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599513 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599072 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599085 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599094 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599078 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599087 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599084 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599302 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599097 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599105 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599088 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599092 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599100 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599103 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599321 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599316 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599300 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599325 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599319 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 8.98 | 1 | 0.729 | mg/kg | U | | 0.109 | | 0.729 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599524 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599525 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599327 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 122-39-4 | Diphenylamine | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599112 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599509 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 206-44-0 | Fluoranthene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599323 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 86-73-7 | Fluorene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599523 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599307 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599310 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599296 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599106 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 8.98 | 1 | 0.00549 | mg/kg | U | | 0.00183 | | 0.00549 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599520 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599081 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 74-88-4 | Iodomethane | 8.98 | 1 | 0.00549 | mg/kg | U | | 0.00183 | | 0.00549 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597874 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Fe | Iron | 8.98 | 1 | 10600 | mg/kg | NQ | | 8.7 | | 27.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599298 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 78-59-1 | Isophorone | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599117 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 98-82-8 | Isopropylbenzene | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599128 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597875 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Pb | Lead | 8.98 | 1 | 21.2 | mg/kg | NQ | | 0.359 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597876 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Mg | Magnesium | 8.98 | 1 | 780 | mg/kg | NQ | | 9.25 | | 32.6 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597877 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Mn | Manganese | 8.98 | 1 | 271 | mg/kg | NQ | | 0.218 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597878 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Hg | Mercury | 8.98 | 1 | 0.0197 | mg/kg | NQ | | 0.00402 | | 0.012 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599101 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 8.98 | 1 | 0.00549 | mg/kg | U | | 0.00183 | | 0.00549 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599083 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-09-2 | Methylene Chloride | 8.98 | 1 | 0.00549 | mg/kg | U | | 0.00183 | | 0.00549 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599309 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 91-57-6 | Methylnaphthalene[2-] | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599293 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 95-48-7 | Methylphenol[2-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599295 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 106-44-5 | Methylphenol[4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599305 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 91-20-3 | Naphthalene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597879 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Ni | Nickel | 8.98 | 2 | 4.05 | mg/kg | NQ | | 0.106 | | 0.423 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11598083 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | NO3 | Nitrate | 8.98 | 1 | 1.1 | mg/kg | U | | 0.363 | | 1.1 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 08/11/2014 | 07/11/2014 | | | |
| 11599314 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 88-74-4 | Nitroaniline[2-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.12 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599315 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 99-09-2 | Nitroaniline[3-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599326 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 100-01-6 | Nitroaniline[4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599297 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 98-95-3 | Nitrobenzene | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599299 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 88-75-5 | Nitrophenol[2-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599322 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 100-02-7 | Nitrophenol[4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599294 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599283 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599526 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599330 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 87-86-5 | Pentachlorophenol | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598158 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | ClO4 | Perchlorate | 8.98 | 1 | 0.000814 | mg/kg | J | | 0.000541 | | 0.00216 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 | | | |
| 11599331 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 85-01-8 | Phenanthrene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599286 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 108-95-2 | Phenol | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597880 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | K | Potassium | 8.98 | 1 | 831 | mg/kg | NQ | | 6.96 | | 27.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599121 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 103-65-1 | Propylbenzene[1-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599510 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 129-00-0 | Pyrene | 8.98 | 1 | 0.0365 | mg/kg | U | | 0.0109 | | 0.0365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599284 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 110-86-1 | Pyridine | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597881 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Se | Selenium | 8.98 | 2 | 1.06 | mg/kg | U | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11597882 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Ag | Silver | 8.98 | 1 | 0.13 | mg/kg | J | | 0.109 | | 0.544 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597883 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Na | Sodium | 8.98 | 1 | 126 | mg/kg | NQ | | 7.61 | | 27.2 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599115 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 100-42-5 | Styrene | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599111 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599118 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599107 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 127-18-4 | Tetrachloroethene | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597884 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Tl | Thallium | 8.98 | 2 | 0.086 | mg/kg | J | | 0.0634 | | 0.423 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11599102 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 108-88-3 | Toluene | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599080 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 8.98 | 1 | 0.00549 | mg/kg | U | | 0.00183 | | 0.00549 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599304 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599091 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599104 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599096 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 79-01-6 | Trichloroethene | 8.98 | 1 | 0.00135 | mg/kg | J+ | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599077 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-69-4 | Trichlorofluoromethane | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599312 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599311 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 8.98 | 1 | 0.365 | mg/kg | U | | 0.109 | | 0.365 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599119 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599124 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599123 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11598188 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | U-234 | Uranium-234 | 8.98 | 1 | 1.13 | pCi/g | NQ | 0.0978 | | 0.0677 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 | | | |
| 11598189 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | U-235/236 | Uranium-235/236 | 8.98 | 1 | 0.116 | pCi/g | NQ | 0.0702 | | 0.0245 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 | | | |
| 11598190 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | U-238 | Uranium-238 | 8.98 | 1 | 1.33 | pCi/g | NQ | 0.0613 | | 0.0729 | | Y | RAD | HASL-300:ISOU | GELC | 07/19/2014 | 07/11/2014 | | | |
| 11597885 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | V | Vanadium | 8.98 | 1 | 10.3 | mg/kg | NQ | | 0.109 | | 0.544 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599074 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 75-01-4 | Vinyl Chloride | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599114 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | 95-47-6 | Xylene[1,2-] | 8.98 | 1 | 0.0011 | mg/kg | U | | 0.000366 | | 0.0011 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599113 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 8.98 | 1 | 0.0022 | mg/kg | U | | 0.000733 | | 0.0022 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597886 | 57-007 | 2014-3795 | RE57-14-84165 | Y | HA | INV | NA | REG | 57-4020 | 0 | 1 | ft | S | SOIL | Zn | Zinc | 8.98 | 1 | 66.4 | mg/kg | NQ | | 0.435 | | 1.09 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11595500 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 83-32-9 | Acenaphthene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595499 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 208-96-8 | Acenaphthylene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595223 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 67-64-1 | Acetone | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595023 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Al | Aluminum | 3.67 | 1 | 4520 | mg/kg | NQ | | 6.5 | | 19.1 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595467 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 62-53-3 | Aniline | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595514 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 120-12-7 | Anthracene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595024 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Sb | Antimony | 3.67 | 1 | 0.956 | mg/kg | U | | 0.315 | | 0.956 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595025 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | As | Arsenic | 3.67 | 2 | 3.21 | mg/kg | NQ | | 0.202 | | 1.01 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 | | | |
| 11595510 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 103-33-3 | Azobenzene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595026 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Ba | Barium | 3.67 | 1 | 324 | mg/kg | NQ | | 0.0956 | | 0.478 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594860 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 71-43-2 | Benzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595519 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 56-55-3 | Benzo(a)anthracene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595526 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 50-32-8 | Benzo(a)pyrene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595524 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 205-99-2 | Benzo(b)fluoranthene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595529 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 191-24-2 | Benzo(g,h,i)perylene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595525 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 207-08-9 | Benzo(k)fluoranthene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595485 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 65-85-0 | Benzoic Acid | 3.67 | 1 | 0.692 | mg/kg | U | | 0.173 | | 0.692 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595473 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-51-6 | Benzyl Alcohol | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595027 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Be | Beryllium | 3.67 | 2 | 0.562 | mg/kg | NQ | | 0.0202 | | 0.101 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 | | | |
| 11595483 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 111-91-1 | Bis(2-chloroethoxy)methane | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595469 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 111-44-4 | Bis(2-chloroethyl)ether | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595522 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 117-81-7 | Bis(2-ethylhexyl)phthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594885 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-86-1 | Bromobenzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594854 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-97-5 | Bromochloromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594864 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-27-4 | Bromodichloromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594881 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-25-2 | Bromoform | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595219 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-83-9 | Bromomethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595511 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 101-55-3 | Bromophenyl-phenylether[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594851 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 78-93-3 | Butanone[2-] | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594894 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 104-51-8 | Butylbenzene[n-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594892 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 135-98-8 | Butylbenzene[sec-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594891 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 98-06-6 | Butylbenzene[tert-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595518 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 85-68-7 | Butylbenzylphthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595028 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Cd | Cadmium | 3.67 | 1 | 0.0976 | mg/kg | J | | 0.0956 | | 0.478 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595029 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Ca | Calcium | 3.67 | 1 | 2030 | mg/kg | NQ | | 7.65 | | 23.9 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594847 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-15-0 | Carbon Disulfide | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594858 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 56-23-5 | Carbon Tetrachloride | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595490 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 59-50-7 | Chloro-3-methylphenol[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.138 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595488 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-47-8 | Chloroaniline[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594875 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-90-7 | Chlorobenzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594873 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 124-48-1 | Chlorodibromomethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595220 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-00-3 | Chloroethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594855 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 67-66-3 | Chloroform | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595217 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-87-3 | Chloromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595495 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 91-58-7 | Chloronaphthalene[2-] | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595470 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-57-8 | Chlorophenol[2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595506 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594887 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-49-8 | Chlorotoluene[2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594890 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-43-4 | Chlorotoluene[4-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595030 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Cr | Chromium | 3.67 | 1 | 3.53 | mg/kg | NQ | | 0.143 | | 0.478 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595521 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 218-01-9 | Chrysene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595031 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Co | Cobalt | 3.67 | 1 | 1.91 | mg/kg | NQ | | 0.143 | | 0.478 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595032 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Cu | Copper | 3.67 | 1 | 5.64 | mg/kg | NQ | | 0.287 | | 0.956 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595224 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | CN(TOTAL) | Cyanide (Total) | 3.67 | 1 | 0.24 | mg/kg | U | | 0.0803 | | 0.24 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/17/2014 | 07/09/2014 | | | |
| 11595515 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 84-74-2 | Di-n-butylphthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595523 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 117-84-0 | Di-n-octylphthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595528 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 53-70-3 | Dibenz(a,h)anthracene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595502 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 132-64-9 | Dibenzofuran | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594895 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000519 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594874 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-93-4 | Dibromoethane[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594863 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-95-3 | Dibromomethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594898 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595474 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-50-1 | Dichlorobenzene[1,2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594896 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595471 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 541-73-1 | Dichlorobenzene[1,3-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594897 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595472 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-46-7 | Dichlorobenzene[1,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595520 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 91-94-1 | Dichlorobenzidine[3,3'-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595216 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-71-8 | Dichlorodifluoromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594850 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-34-3 | Dichloroethane[1,1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594859 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 107-06-2 | Dichloroethane[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595222 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-35-4 | Dichloroethene[1,1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11594852 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 156-59-2 | Dichloroethene[cis-1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594849 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 156-60-5 | Dichloroethene[trans-1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595484 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 120-83-2 | Dichlorophenol[2,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594862 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 78-87-5 | Dichloropropane[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594870 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 142-28-9 | Dichloropropane[1,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594853 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 594-20-7 | Dichloropropane[2,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594857 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 563-58-6 | Dichloropropene[1,1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594865 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 10061-01-5 | Dichloropropene[cis-1,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594868 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 10061-02-6 | Dichloropropene[trans-1,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595503 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 84-66-2 | Diethylphthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595498 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 131-11-3 | Dimethyl Phthalate | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595482 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 105-67-9 | Dimethylphenol[2,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595507 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595501 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 51-28-5 | Dinitrophenol[2,4-] | 3.67 | 1 | 0.692 | mg/kg | U | | 0.104 | | 0.692 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595531 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 121-14-2 | Dinitrotoluene[2,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595532 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 606-20-2 | Dinitrotoluene[2,6-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595509 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 122-39-4 | Diphenylamine | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594877 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-41-4 | Ethylbenzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595516 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 206-44-0 | Fluoranthene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595505 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 86-73-7 | Fluorene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595530 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 118-74-1 | Hexachlorobenzene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595489 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 87-68-3 | Hexachlorobutadiene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595492 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 77-47-4 | Hexachlorocyclopentadiene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595478 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 67-72-1 | Hexachloroethane | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594871 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 591-78-6 | Hexanone[2-] | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595527 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 193-39-5 | Indeno(1,2,3-cd)pyrene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594846 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 74-88-4 | Iodomethane | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595033 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Fe | Iron | 3.67 | 1 | 8810 | mg/kg | NQ | | 7.65 | | 23.9 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595480 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 78-59-1 | Isophorone | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594882 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 98-82-8 | Isopropylbenzene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594893 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 99-87-6 | Isopropyltoluene[4-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595034 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Pb | Lead | 3.67 | 1 | 17.2 | mg/kg | NQ | | 0.315 | | 0.956 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595035 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Mg | Magnesium | 3.67 | 1 | 667 | mg/kg | NQ | | 8.13 | | 28.7 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595036 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Mn | Manganese | 3.67 | 1 | 385 | mg/kg | NQ | | 0.191 | | 0.956 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595037 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Hg | Mercury | 3.67 | 1 | 0.026 | mg/kg | NQ | | 0.00412 | | 0.0123 | Y | INORGANIC | SW-846:7471A | GELC | 07/23/2014 | 07/09/2014 | | | |
| 11594866 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-10-1 | Methyl-2-pentanone[4-] | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594848 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-09-2 | Methylene Chloride | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595491 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 91-57-6 | Methylnaphthalene[2-] | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595475 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-48-7 | Methylphenol[2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595477 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 106-44-5 | Methylphenol[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595487 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 91-20-3 | Naphthalene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595038 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Ni | Nickel | 3.67 | 2 | 3.52 | mg/kg | NQ | | 0.101 | | 0.404 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 | | | |
| 11595225 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | NO3 | Nitrate | 3.67 | 1 | 1.04 | mg/kg | U | | 0.343 | | 1.04 | Y | GENERAL CHEMISTRY | EPA:300.0 | GELC | 07/15/2014 | 07/09/2014 | | | |
| 11595496 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 88-74-4 | Nitroaniline[2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.114 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595497 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 99-09-2 | Nitroaniline[3-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595508 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-01-6 | Nitroaniline[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595479 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 98-95-3 | Nitrobenzene | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595481 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 88-75-5 | Nitrophenol[2-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595504 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-02-7 | Nitrophenol[4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595476 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 621-64-7 | Nitroso-di-n-propylamine[N-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595290 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 62-75-9 | Nitrosodimethylamine[N-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595533 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595512 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 87-86-5 | Pentachlorophenol | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595246 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | ClO4 | Perchlorate | 3.67 | 1 | 0.00539 | mg/kg | NQ | | 0.000519 | | 0.00208 | Y | LCMS/MS PERCHLORATE | SW-846:6850 | GELC | 07/14/2014 | 07/09/2014 | | | |
| 11595513 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 85-01-8 | Phenanthrene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595468 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-95-2 | Phenol | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595039 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | K | Potassium | 3.67 | 1 | 572 | mg/kg | NQ | | 6.12 | | 23.9 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594886 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 103-65-1 | Propylbenzene[1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595517 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 129-00-0 | Pyrene | 3.67 | 1 | 0.0346 | mg/kg | U | | 0.0104 | | 0.0346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595291 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 110-86-1 | Pyridine | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595040 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Se | Selenium | 3.67 | 2 | 1.01 | mg/kg | U | | 0.333 | | 1.01 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 | | | |
| 11595041 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Ag | Silver | 3.67 | 1 | 0.164 | mg/kg | J | | 0.0956 | | 0.478 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595042 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Na | Sodium | 3.67 | 1 | 137 | mg/kg | NQ | | 6.69 | | 23.9 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594880 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 100-42-5 | Styrene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594876 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594883 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594872 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 127-18-4 | Tetrachloroethene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595043 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Tl | Thallium | 3.67 | 2 | 0.404 | mg/kg | U | | 0.0606 | | 0.404 | Y | INORGANIC | SW-846:6020 | GELC | 08/10/2014 | 07/09/2014 | | | |
| 11594867 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-88-3 | Toluene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594845 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 3.67 | 1 | 0.00519 | mg/kg | U | | 0.00173 | | 0.00519 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595486 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 120-82-1 | Trichlorobenzene[1,2,4-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594856 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 71-55-6 | Trichloroethane[1,1,1-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594869 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 79-00-5 | Trichloroethane[1,1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594861 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 79-01-6 | Trichloroethene | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595221 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-69-4 | Trichlorofluoromethane | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595494 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-95-4 | Trichlorophenol[2,4,5-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11595493 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 88-06-2 | Trichlorophenol[2,4,6-] | 3.67 | 1 | 0.346 | mg/kg | U | | 0.104 | | 0.346 | Y | SVOC | SW-846:8270D | GELC | 07/18/2014 | 07/09/2014 | | | |
| 11594884 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 96-18-4 | Trichloropropane[1,2,3-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594889 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-63-6 | Trimethylbenzene[1,2,4-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594888 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 108-67-8 | Trimethylbenzene[1,3,5-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595257 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | U-234 | Uranium-234 | 3.67 | 1 | 1.24 | pCi/g | NQ | 0.149 | | 0.0867 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 | | | |
| 11595258 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | U-235/236 | Uranium-235/236 | 3.67 | 1 | 0.0365 | pCi/g | U | 0.107 | | 0.0264 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 | | | |
| 11595259 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | U-238 | Uranium-238 | 3.67 | 1 | 1.28 | pCi/g | NQ | 0.093 | | 0.0881 | | Y | RAD | HASL-300:ISOU | GELC | 07/26/2014 | 07/09/2014 | | | |
| 11595044 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | V | Vanadium | 3.67 | 1 | 7.85 | mg/kg | NQ | | 0.0956 | | 0.478 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595218 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 75-01-4 | Vinyl Chloride | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594879 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | 95-47-6 | Xylene[1,2-] | 3.67 | 1 | 0.00104 | mg/kg | U | | 0.000346 | | 0.00104 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11594878 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Xylene[m+p] | Xylene[1,3-]+Xylene[1,4-] | 3.67 | 1 | 0.00208 | mg/kg | U | | 0.000692 | | 0.00208 | Y | VOC | SW-846:8260B | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11595045 | 57-007 | 2014-3718 | RE57-14-84119 | Y | HA | QC | NA | FD | 57-4011 | 1 | 2 | ft | R | QBT3 | Zn | Zinc | 3.67 | 1 | 47.2 | mg/kg | NQ | | 0.382 | | 0.956 | Y | INORGANIC | SW-846:6010C | GELC | 07/31/2014 | 07/09/2014 | | | |
| 11597795 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 83-32-9 | Acenaphthene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597794 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 208-96-8 | Acenaphthylene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599734 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 67-64-1 | Acetone | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597979 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Al | Aluminum | 10.9 | 1 | 6930 | mg/kg | NQ | | 7.18 | | 21.1 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597762 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 62-53-3 | Aniline | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597809 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 120-12-7 | Anthracene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597980 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Sb | Antimony | 10.9 | 1 | 0.367 | mg/kg | J | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597981 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | As | Arsenic | 10.9 | 2 | 16.6 | mg/kg | NQ | | 0.21 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11597805 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 103-33-3 | Azobenzene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597982 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Ba | Barium | 10.9 | 1 | 1250 | mg/kg | NQ | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599750 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 71-43-2 | Benzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11598051 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 56-55-3 | Benzo(a)anthracene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598058 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 50-32-8 | Benzo(a)pyrene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598056 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 205-99-2 | Benzo(b)fluoranthene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598061 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 191-24-2 | Benzo(g,h,i)perylene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598057 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 207-08-9 | Benzo(k)fluoranthene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597780 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 65-85-0 | Benzoic Acid | 10.9 | 1 | 0.745 | mg/kg | U | | 0.186 | | 0.745 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597768 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 100-51-6 | Benzyl Alcohol | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597983 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Be | Beryllium | 10.9 | 2 | 0.658 | mg/kg | NQ | | 0.021 | | 0.105 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11597778 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 111-91-1 | Bis(2-chloroethoxy)methane | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597764 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 111-44-4 | Bis(2-chloroethyl)ether | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598054 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 117-81-7 | Bis(2-ethylhexyl)phthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599775 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 108-86-1 | Bromobenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599744 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 74-97-5 | Bromochloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599754 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 75-27-4 | Bromodichloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599771 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 75-25-2 | Bromoform | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599730 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 74-83-9 | Bromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597806 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 101-55-3 | Bromophenyl-phenylether[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599741 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 78-93-3 | Butanone[2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599784 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 104-51-8 | Butylbenzene[n-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599782 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 135-98-8 | Butylbenzene[sec-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599781 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 98-06-6 | Butylbenzene[tert-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11598050 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 85-68-7 | Butylbenzylphthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597984 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Cd | Cadmium | 10.9 | 1 | 0.528 | mg/kg | U | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597985 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Ca | Calcium | 10.9 | 1 | 1840 | mg/kg | NQ | | 8.45 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599737 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 75-15-0 | Carbon Disulfide | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599748 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 56-23-5 | Carbon Tetrachloride | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597785 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 59-50-7 | Chloro-3-methylphenol[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.149 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597783 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 106-47-8 | Chloroaniline[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599765 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 108-90-7 | Chlorobenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599763 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 124-48-1 | Chlorodibromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599731 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 75-00-3 | Chloroethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599745 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 67-66-3 | Chloroform | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599728 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 74-87-3 | Chloromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597790 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 91-58-7 | Chloronaphthalene[2-] | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597765 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 95-57-8 | Chlorophenol[2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597801 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 7005-72-3 | Chlorophenyl-phenyl[4-] Ether | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599777 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 95-49-8 | Chlorotoluene[2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599780 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 106-43-4 | Chlorotoluene[4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597986 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Cr | Chromium | 10.9 | 1 | 7.68 | mg/kg | NQ | | 0.158 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11598053 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 218-01-9 | Chrysene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597987 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Co | Cobalt | 10.9 | 1 | 2.37 | mg/kg | NQ | | 0.158 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597988 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | Cu | Copper | 10.9 | 1 | 11.1 | mg/kg | NQ | | 0.317 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11598092 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | CN(TOTAL) | Cyanide (Total) | 10.9 | 1 | 0.238 | mg/kg | U | | 0.0794 | | 0.238 | Y | GENERAL CHEMISTRY | SW-846:9012A | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597810 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 84-74-2 | Di-n-butylphthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598055 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 117-84-0 | Di-n-octylphthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598060 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 53-70-3 | Dibenz(a,h)anthracene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597797 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 132-64-9 | Dibenzofuran | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599785 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 96-12-8 | Dibromo-3-Chloropropane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000561 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599764 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 106-93-4 | Dibromoethane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599753 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 74-95-3 | Dibromomethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599788 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597769 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 95-50-1 | Dichlorobenzene[1,2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599786 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597766 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 541-73-1 | Dichlorobenzene[1,3-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599787 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597767 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 106-46-7 | Dichlorobenzene[1,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598052 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 91-94-1 | Dichlorobenzidine[3,3'-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599727 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 75-71-8 | Dichlorodifluoromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599740 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 75-34-3 | Dichloroethane[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599749 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 107-06-2 | Dichloroethane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599733 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 75-35-4 | Dichloroethene[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599742 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 156-59-2 | Dichloroethene[cis-1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599739 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 156-60-5 | Dichloroethene[trans-1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597779 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 120-83-2 | Dichlorophenol[2,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599752 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 78-87-5 | Dichloropropane[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599760 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 142-28-9 | Dichloropropane[1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599743 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 594-20-7 | Dichloropropane[2,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599747 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 563-58-6 | Dichloropropene[1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599755 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 10061-01-5 | Dichloropropene[cis-1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599758 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 10061-02-6 | Dichloropropene[trans-1,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597798 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 84-66-2 | Diethylphthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597793 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 131-11-3 | Dimethyl Phthalate | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597777 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 105-67-9 | Dimethylphenol[2,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597802 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 534-52-1 | Dinitro-2-methylphenol[4,6-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597796 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 51-28-5 | Dinitrophenol[2,4-] | 10.9 | 1 | 0.745 | mg/kg | U | | 0.112 | | 0.745 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598063 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 121-14-2 | Dinitrotoluene[2,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598064 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 606-20-2 | Dinitrotoluene[2,6-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597804 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 122-39-4 | Diphenylamine | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599767 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 100-41-4 | Ethylbenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11598048 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 206-44-0 | Fluoranthene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597800 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 86-73-7 | Fluorene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598062 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 118-74-1 | Hexachlorobenzene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597784 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 87-68-3 | Hexachlorobutadiene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597787 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 77-47-4 | Hexachlorocyclopentadiene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597773 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 67-72-1 | Hexachloroethane | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599761 | 57-007 | 2014-3795 | RE57-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | ft | S | SOIL | 591-78-6 | Hexanone[2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |

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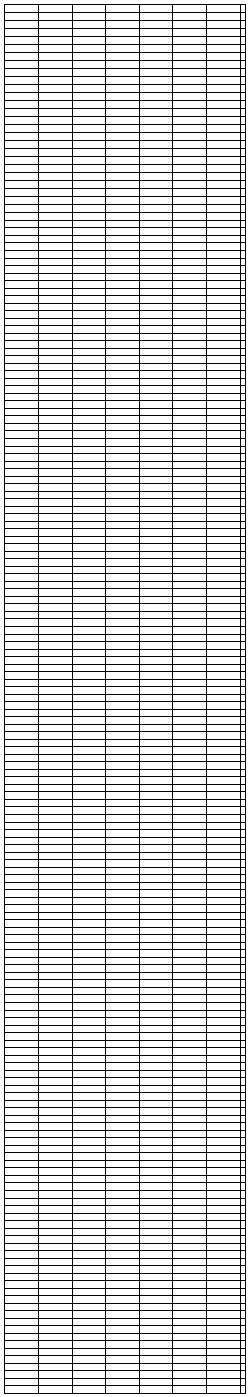
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11598059 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 193-39-5 | Indeno(1,2,3-cd)pyrene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599736 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 74-88-4 | Iodomethane | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597989 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Fe | Iron | 10.9 | 1 | 11800 | mg/kg | HQ | | 8.45 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597775 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 78-59-1 | Isophorone | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599772 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 98-82-8 | Isopropylbenzene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599783 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 99-87-6 | Isopropyltoluene[4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597990 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Pb | Lead | 10.9 | 1 | 15 | mg/kg | HQ | | 0.349 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597991 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Mg | Magnesium | 10.9 | 1 | 833 | mg/kg | HQ | | 8.98 | | 31.7 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597992 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Mn | Manganese | 10.9 | 1 | 451 | mg/kg | HQ | | 0.211 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597993 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Hg | Mercury | 10.9 | 1 | 0.0251 | mg/kg | HQ | | 0.00433 | | 0.0129 | Y | INORGANIC | SW-846:7471A | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599756 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 108-10-1 | Methyl-2-pentanone[4-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599738 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 75-09-2 | Methylene Chloride | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599786 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 91-57-6 | Methylnaphthalene[2-] | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597770 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 95-48-7 | Methylphenol[2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597772 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 108-44-5 | Methylphenol[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597782 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 91-20-3 | Naphthalene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597994 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Ni | Nickel | 10.9 | 2 | 4.06 | mg/kg | HQ | | 0.105 | | 8.42 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11598149 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | NO3 | Nitrate | 10.9 | 1 | 1.12 | mg/kg | U | | 0.37 | | 1.12 | Y | GENERAL CHEMISTRY | EPA 300.0 | GELC | 08/11/2014 | 07/11/2014 | | | |
| 11597791 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 88-74-4 | Nitroaniline[2-] | 10.9 | 1 | 0.373 | mg/kg | U | | | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597792 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 99-09-2 | Nitroaniline[3-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597803 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 100-01-6 | Nitroaniline[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597774 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 98-95-3 | Nitrobenzene | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597776 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 88-75-5 | Nitrophenol[2-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597799 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 100-02-7 | Nitrophenol[4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597771 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 621-64-7 | Nitroso-di-n-propylamine[N-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597760 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 62-75-9 | Nitrosodimethylamine[N-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598085 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 108-60-1 | Oxybis(1-chloropropane)[2,2'-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597807 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 87-86-5 | Pentachlorophenol | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11598163 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | ClO4 | Perchlorate | 10.9 | 1 | 0.000885 | mg/kg | U | | 0.000561 | | 0.00224 | Y | CHEMS PERCHLORATE | SW-846:6850 | GELC | 07/22/2014 | 07/11/2014 | | | |
| 11597808 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 85-01-8 | Phenanthrene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597763 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 108-95-2 | Phenol | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597995 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | K | Potassium | 10.9 | 1 | 819 | mg/kg | HQ | | 6.76 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599776 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 103-65-1 | Propylbenzene[1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11598049 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 129-00-0 | Pyrene | 10.9 | 1 | 0.0373 | mg/kg | U | | 0.0112 | | 0.0373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597751 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 110-86-1 | Pyridine | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597998 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Se | Selenium | 10.9 | 2 | 1.05 | mg/kg | U | | 0.347 | | 1.05 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11597997 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Ag | Silver | 10.9 | 1 | 0.212 | mg/kg | U | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11597998 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Na | Sodium | 10.9 | 1 | 122 | mg/kg | HQ | | 7.39 | | 26.4 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599770 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 100-42-5 | Styrene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599766 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 630-20-6 | Tetrachloroethane[1,1,1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599773 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 79-34-5 | Tetrachloroethane[1,1,2,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599762 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 127-18-4 | Tetrachloroethene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599799 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Tl | Thallium | 10.9 | 2 | 0.0718 | mg/kg | U | | 0.063 | | 8.42 | Y | INORGANIC | SW-846:6020 | GELC | 08/15/2014 | 07/11/2014 | | | |
| 11599757 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 108-88-3 | Toluene | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599735 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 76-13-1 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 10.9 | 1 | 0.00561 | mg/kg | U | | 0.00187 | | 0.00561 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597781 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 120-82-1 | Trichlorobenzene[1,2,4-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599746 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 71-55-6 | Trichloroethane[1,1,1-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599759 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 79-00-5 | Trichloroethane[1,1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599751 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 79-01-6 | Trichloroethene | 10.9 | 1 | 0.00232 | mg/kg | J[+] | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599732 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 75-69-4 | Trichlorofluoromethane | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11597789 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 95-95-4 | Trichlorophenol[2,4,5-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11597788 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 88-06-2 | Trichlorophenol[2,4,6-] | 10.9 | 1 | 0.373 | mg/kg | U | | 0.112 | | 0.373 | Y | SVOC | SW-846:8270D | GELC | 07/24/2014 | 07/11/2014 | | | |
| 11599774 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 96-18-4 | Trichloropropane[1,2,3-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599779 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 95-63-6 | Trimethylbenzene[1,2,4-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599778 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 108-67-8 | Trimethylbenzene[1,3,5-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11598203 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | U-234 | Uranium-234 | 10.9 | 1 | 1.36 | pCi/g | HQ | 0.113 | | 0.0791 | | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 | | | |
| 11598204 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | U-235/236 | Uranium-235/236 | 10.9 | 1 | 0.0558 | pCi/g | U | 0.0814 | | 0.0209 | | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 | | | |
| 11598205 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | U-238 | Uranium-238 | 10.9 | 1 | 1.32 | pCi/g | HQ | 0.071 | | 0.0781 | | RAD | HASL-300:ISOU | GELC | 07/23/2014 | 07/11/2014 | | | |
| 11598000 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | V | Vanadium | 10.9 | 1 | 11.8 | mg/kg | HQ | | 0.106 | | 0.528 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |
| 11599729 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 75-01-4 | Vinyl Chloride | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599769 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | 95-47-6 | Xylene[1,2-] | 10.9 | 1 | 0.00112 | mg/kg | U | | 0.000374 | | 0.00112 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11599768 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Xylene(m+p) | Xylene[1,3-+Xylene[1,4-] | 10.9 | 1 | 0.00224 | mg/kg | U | | 0.000748 | | 0.00224 | Y | VOC | SW-846:8260B | GELC | 08/05/2014 | 07/11/2014 | | | |
| 11598001 | 57-007 | 2014-3795 | RES7-14-84121 | Y | HA | QC | NA | FD | 57-4020 | 0 | 1 | R | S | SOIL | Zn | Zinc | 10.9 | 1 | 68.5 | mg/kg | HQ | | 0.422 | | 1.06 | Y | INORGANIC | SW-846:6010C | GELC | 08/09/2014 | 07/11/2014 | | | |



| AOC | SAMPLE ID | LOCATION ID | DEPTH (FT) | MEDIA | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium | Calcium | Chromium | Cobalt | Copper | Cyanide (Total) | Iron | Lead | Magnesium | Manganese | Mercury | Nickel | Nitrate | Perchlorate | Potassium | Selenium | Silver | Sodium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Soil Background Value [mg/kg]** | | | | | 29200 | 0.83 | 8.17 | 295 | 1.83 | 0.4 | 6120 | 19.3 | 8.64 | 14.7 | 0.5 | 21500 | 22.3 | 4610 | 671 | 0.1 | 15.4 | — | — | 3460 | 1.52 | 1 | 915 | 0.73 | 39.6 | 48.8 |
| **Qbt2,3,4 Background Value [mg/kg]** | | | | | 7340 | 0.5 | 2.79 | 46 | 1.21 | 1.63 | 2200 | 7.14 | 3.14 | 4.66 | 0.5 | 14500 | 11.2 | 1690 | 482 | 0.1 | 6.58 | — | — | 3500 | 0.3 | 1 | 2770 | 1.1 | 17 | 63.5 |
| 57-006 | RE57-14-84178 | 57-4022 | 3 to 4 | FILL | 5370 | 1.06 (U) | 1.36 | 55.1 | 0.47 | 0.528 (U) | 874 | 8.29 (J) | 1.26 (J) | 2.74 | 0.255 (U) | 8440 | 10.1 | 421 | 326 (J) | 0.0178 | 2.75 | 1.39 | 0.00224 (U) | 750 | 1.06 (U) | 0.528 (U) | 279 | 0.0702 (J) | 5.63 (J) | 50.4 |
| 57-006 | RE57-14-84186 | 57-4022 | 5 to 6 | FILL | 5040 | 1.12 (U) | 3.11 | 75.2 | 0.646 | 0.56 (U) | 1830 | 5.92 | 1.81 | 3.62 | 0.282 (U) | 8400 | 10.4 | 634 | 351 | 0.0132 | 3.59 | 8.03 | 0.00229 (U) | 716 | 1 (U) | 0.56 (U) | 140 | 0.0669 (J) | 7.77 | 44.5 |
| 57-006 | RE57-14-84182 | 57-4022 | 8 to 9 | QBT3 | 4660 | 1.06 (U) | 2 | 96.2 | 1.06 | 0.529 (U) | 753 | 41.8 | 1.16 | 4.94 | 0.236 (U) | 10300 | 14.5 | 338 | 385 | 0.00695 (J) | 3.47 | 3.24 | 0.00218 (U) | 674 | 0.358 (J) | 0.529 (U) | 307 | 0.411 (U) | 3.89 | 62.8 |
| 57-006 | RE57-14-84179 | 57-4023 | 3 to 4 | FILL | 6000 | 1.09 (U) | 1.52 | 73.4 | 0.611 | 0.546 (U) | 1180 | 4.04 | 1.68 | 3.17 | 0.24 (U) | 9350 | 11.3 | 578 | 366 | 0.0111 (J) | 3.22 | 0.563 (J) | 0.00224 (U) | 746 | 1.04 (U) | 0.546 (U) | 223 | 0.0839 (J) | 7.22 | 53.6 |
| 57-006 | RE57-14-84183 | 57-4023 | 5 to 6 | QBT3 | 4390 | 1.05 (U) | 2.52 | 114 | 0.41 | 0.527 (U) | 907 | 3.37 | 1.3 | 2.99 | 0.255 (U) | 9170 | 12.4 | 312 | 536 | 0.00956 (J) | 3.34 | 1.7 | 0.0022 (U) | 695 | 0.966 (U) | 0.527 (U) | 310 | 0.386 (U) | 6.4 | 60.9 |
| 57-006 | RE57-14-84187 | 57-4023 | 8 to 9 | QBT3 | 3200 | 1.02 (U) | 0.989 (J) | 42.6 | 0.535 | 0.14 (J) | 362 (J) | 113 | 1.27 | 4.55 | 0.247 (U) | 7930 | 9.05 | 112 | 415 | 0.0112 (J) | 6.25 | 2.21 | 0.00211 (U) | 712 | 1.06 (U) | 0.51 (U) | 418 | 0.425 (U) | 1.73 | 66.5 |
| 57-006 | RE57-14-84180 | 57-4024 | 3 to 4 | FILL | 5390 | 1.09 (U) | 1.24 | 79.5 | 0.421 | 0.545 (U) | 1150 | 4.41 | 2.15 | 2.69 | 0.265 (U) | 10600 | 10.4 | 582 | 552 | 0.0112 (J) | 3.03 | 1.88 | 0.00223 (U) | 796 | 0.983 (U) | 0.545 (U) | 196 | 0.393 (U) | 10.6 | 45.5 |
| 57-006 | RE57-14-84184 | 57-4024 | 5 to 6 | FILL | 3790 | 0.953 (U) | 1.11 | 79.3 | 0.347 | 0.477 (U) | 536 | 23.9 | 0.703 | 2.22 | 0.238 (U) | 8680 | 10.5 | 179 | 451 | 0.0126 (U) | 1.47 | 3.56 | 0.00211 (U) | 718 | 1.04 (U) | 0.477 (U) | 418 | 0.418 (U) | 2.89 | 72.6 |
| 57-006 | RE57-14-84188 | 57-4024 | 8 to 9 | QBT3 | 3440 | 1.05 (U) | 1.93 | 126 | 0.505 | 0.526 (U) | 856 | 4.54 | 0.593 | 2.62 | 0.239 (U) | 7380 | 11.8 | 253 | 358 | 0.00442 (J) | 1.66 | 2.86 | 0.00212 (U) | 827 | 0.944 (U) | 0.526 (U) | 497 | 0.378 (U) | 2.68 | 58.4 |
| 57-006 | RE57-14-84181 | 57-4025 | 3 to 4 | FILL | 5330 | 1.1 (U) | 1.19 | 73.5 | 0.409 | 0.551 (U) | 1920 | 4.22 | 1.7 | 3.31 | 0.252 (U) | 9800 | 11.3 | 817 | 404 | 0.00516 (J) | 3.31 | 2.53 | 0.00223 (U) | 798 | 1.11 (U) | 0.551 (U) | 224 | 0.446 (U) | 7.83 | 50.4 |
| 57-006 | RE57-14-84185 | 57-4025 | 5 to 6 | FILL | 4310 | 0.961 (U) | 1.85 | 75.7 | 0.359 | 0.48 (U) | 914 | 13.1 | 1.19 | 4.12 | 0.254 (U) | 9410 | 12 | 300 | 435 | 0.00989 (J) | 2.79 | 5.42 | 0.00218 (U) | 655 | 1.07 (U) | 0.48 (U) | 274 | 0.426 (U) | 4.76 | 64.6 |
| 57-006 | RE57-14-84189 | 57-4025 | 8 to 9 | QBT3 | 4300 | 0.946 (U) | 2.21 | 136 | 0.477 | 0.473 (U) | 767 | 78.1 | 1.43 | 26 | 0.249 (U) | 8750 | 13.7 | 264 | 454 | 0.0116 (U) | 3.93 | 2.78 | 0.00212 (U) | 810 | 0.347 (J) | 0.473 (U) | 446 | 0.412 (U) | 3.67 | 75.1 |
| 57-007 | RE57-14-84156 | 57-4011 | 3 to 4 | QBT3 | 5190 | 1 (U) | 2.47 | 147 | 0.589 | 0.501 (U) | 1500 | 2.92 | 1.42 | 4.3 | 0.244 (U) | 8670 | 14 | 472 | 350 | 0.0185 | 3.06 | 0.588 (J) | 0.00107 (J) | 534 | 1.05 (U) | 0.501 (U) | 174 | 0.419 (U) | 6.28 | 52.2 |
| 57-007 | RE57-14-84135 | 57-4012 | 0 to 1 | ALLH | 5960 | 1.06 (U) | 2.4 | 152 | 0.797 | 0.528 (U) | 1510 | 3.91 | 2.46 | 4.22 | 0.279 (U) | 9920 | 15.7 | 740 | 578 | 0.0173 | 4.06 | 1.12 (U) | 0.000841 (J) | 843 | 1.11 (U) | 0.255 (J) | 124 | 0.444 (U) | 8.83 | 52.9 |
| 57-007 | RE57-14-84146 | 57-4012 | 1.25 to 2.25 | ALLH | 4480 | 0.986 (U) | 1.32 | 62.3 | 0.462 | 0.493 (U) | 1290 | 3.74 | 1.8 | 2.74 | 0.239 (U) | 9510 | 8.95 | 516 | 444 | 0.0133 | 3.11 | 1.05 (U) | 0.00209 (U) | 612 | 1.02 (U) | 0.206 (J) | 132 | 0.406 (U) | 8.33 | 40.7 |
| 57-007 | RE57-14-84157 | 57-4012 | 4.25 to 5.25 | QBT3 | 3670 | 1.06 (U) | 1.14 | 60.5 | 0.657 | 0.53 (U) | 624 | 68.3 (J) | 1.42 | 4.63 | 0.246 (U) | 8770 | 9.31 | 287 | 376 | 0.0088 (J) | 4.87 | 1.06 (U) | 0.00211 (U) | 811 | 1.04 (U) | 0.53 (U) | 388 | 0.416 (U) | 3.55 | 60.3 |
| 57-007 | RE57-14-84136 | 57-4013 | 0 to 1 | FILL | 4490 | 1.01 (U) | 2.22 | 151 | 0.478 | 0.505 (U) | 1270 | 3.59 | 2.04 | 3.35 | 0.27 (U) | 8650 | 11.1 | 570 | 437 | 0.013 | 3.78 | 1.16 | 0.000786 (J) | 695 | 1.05 (U) | 0.121 (J) | 108 | 0.419 (U) | 7.17 | 41.3 |
| 57-007 | RE57-14-84147 | 57-4013 | 1 to 2 | ALLH | 4800 | 1.02 (U) | 1.77 | 101 | 0.511 | 0.509 (U) | 1430 | 4.98 | 2.13 | 3.02 | 0.171 (J) | 8620 | 9.17 | 632 | 536 | 0.0124 | 3.81 | 0.656 (J) | 0.0021 (U) | 672 | 0.938 (U) | 0.185 (J) | 101 | 0.375 (U) | 8.72 | 39 |
| 57-007 | RE57-14-84158 | 57-4013 | 4 to 5 | QBT3 | 4150 | 0.99 (U) | 0.791 (J) | 50.4 | 0.637 | 0.495 (U) | 305 | 25.9 | 0.616 | 2.55 | 0.227 (U) | 8210 | 8.71 | 156 | 445 | 0.0144 | 1.32 | 0.521 (J) | 0.00213 (U) | 612 | 0.984 (U) | 0.495 (U) | 304 | 0.394 (U) | 1.65 | 65.2 |
| 57-007 | RE57-14-84148 | 57-4014 | 1 to 2 | FILL | 4830 | 1.04 (U) | 1.88 | 122 | 0.55 | 0.518 (U) | 2100 | 15.5 | 2.47 | 14.1 | 0.085 (J) | 9170 | 16.3 | 919 | 389 | 4.2 | 5.45 | 0.432 (J) | 0.00214 (U) | 759 | 1.05 (U) | 2.13 | 133 | 0.421 (U) | 10.6 | 59.2 |
| 57-007 | RE57-14-84137 | 57-4014 | 2 to 3 | QBT3 | 3410 | 0.992 (U) | 0.76 (J) | 51.2 | 0.543 | 0.121 (J) | 492 | 8.89 | 0.561 | 7.49 | 0.22 (U) | 7100 | 11.6 | 271 | 156 | 0.919 | 0.79 | 1.04 (U) | 0.00206 (U) | 629 | 0.97 (U) | 0.647 | 295 | 0.388 (U) | 3.07 | 73.7 |
| 57-007 | RE57-14-84159 | 57-4014 | 4 to 5 | QBT3 | 5260 | 1.03 (U) | 0.92 (J) | 36 | 0.781 | 0.112 (J) | 482 | 4.97 | 0.396 (J) | 3.99 | 0.243 (U) | 7540 | 12.7 | 245 | 126 | 0.257 | 1.5 | 1.07 (U) | 0.00214 (U) | 587 | 1.05 (U) | 0.513 (U) | 249 | 0.419 (U) | 2.74 | 73.3 |
| 57-007 | RE57-14-84149 | 57-4015 | 1.5 to 2.5 | FILL | 5230 | 1.05 (U) | 2.64 | 384 | 0.704 | 0.574 | 4550 | 19.1 | 3.82 | 65.1 | 0.248 (U) | 11300 | 33.6 | 2180 | 227 | 20.6 | 9.64 | 1.07 (U) | 0.0011 (J) | 1040 | 1.05 (U) | 15.2 | 137 | 0.418 (U) | 21.6 | 113 |
| 57-007 | RE57-14-84138 | 57-4015 | 2.5 to 3.5 | QBT3 | 2540 | 0.486 (J) | 0.585 (J) | 28.9 | 0.595 | 0.486 (U) | 170 | 27.7 | 0.336 (J) | 4.6 | 0.252 (U) | 6780 | 10.1 | 72.6 | 145 | 0.0267 | 0.813 | 1.03 (U) | 0.00206 (U) | 618 | 0.984 (U) | 0.486 (U) | 387 | 0.394 (U) | 1.41 | 75.4 |
| 57-007 | RE57-14-84160 | 57-4015 | 4.5 to 5.5 | QBT3 | 2720 | 0.991 (U) | 0.527 (J) | 50.5 | 1.08 | 0.106 (J) | 93.5 | 4.2 | 0.188 (J) | 5.83 | 0.245 (U) | 7070 | 10.1 | 63.1 | 141 | 0.00941 (J) | 1.23 | 1.04 (U) | 0.00208 (U) | 678 | 0.981 (U) | 0.495 (U) | 416 | 0.392 (U) | 1.03 | 64.8 |
| 57-007 | RE57-14-84139 | 57-4016 | 0 to 1 | ALLH | 4070 | 1 (U) | 1.33 | 111 | 0.516 | 0.194 (J) | 1200 | 3.17 | 1.43 | 3.21 | 0.252 (U) | 7700 | 12 | 506 | 387 | 0.0361 | 2.75 | 1.05 (U) | 0.0021 (U) | 599 | 0.994 (U) | 0.105 (J) | 112 | 0.398 (U) | 6.49 | 44.5 |
| 57-007 | RE57-14-84990 | 57-4016 | 2.5 to 3.5 | ALLH | 5430 | 1.03 (U) | 1.62 (J) | 33.7 | 0.491 | 0.516 (U) | 518 | 3.23 (J) | 0.807 | 1.65 | 0.256 (U) | 7220 | 9.89 | 289 | 319 (J) | 0.0101 (J) | 2.19 | 1.09 (U) | 0.00215 (U) | 337 | 1.07 (U) | 0.17 (J) | 97.9 | 0.429 (U) | 3.81 | 44.9 |
| 57-007 | RE57-14-84150 | 57-4016 | 3 to 4 | ALLH | 29600 | 1.15 (U) | 3.85 | 70.5 | 2.29 | 0.575 (U) | 4290 | 11.9 | 2.62 | 11.4 | 0.283 (U) | 20800 | 18.6 | 2830 | 92.5 | 0.0145 | 9.16 | 1.16 (U) | 0.00159 (J) | 1740 | 1.03 (U) | 0.25 (J) | 196 | 0.156 (J) | 21.6 | 47.3 |
| 57-007 | RE57-14-84161 | 57-4016 | 6 to 7 | QBT3 | 4140 | 0.94 (U) | 0.842 (J) | 28.1 | 0.504 | 0.47 (U) | 284 | 29.1 | 0.794 | 2.56 | 0.236 (U) | 7890 | 7.96 | 136 | 339 | 0.0201 | 2.68 | 1.04 (U) | 0.000636 (J) | 580 | 1.03 (U) | 0.47 (U) | 317 | 0.413 (U) | 1.91 | 52.6 |
| 57-007 | RE57-14-84140 | 57-4017 | 0 to 1 | ALLH | 5730 | 0.488 (J) | 1.28 (J) | 77.3 | 0.472 | 0.524 (U) | 1100 | 3.67 | 1.86 | 2.66 | 0.272 (U) | 8540 | 9.8 | 596 | 412 | 0.0114 (J) | 3.24 | 1.09 (U) | 0.00217 (U) | 711 | 1.08 (U) | 0.115 (J) | 103 | 0.0873 (J) | 8.3 | 43.1 |
| 57-007 | RE57-14-84151 | 57-4017 | 1 to 2 | ALLH | 4510 | 0.437 (J) | 1.01 (J) | 54.8 | 0.393 | 0.479 (U) | 1020 | 3.63 | 1.69 | 2.2 | 0.252 (U) | 7730 | 9.28 | 525 | 313 | 0.0114 (J) | 2.74 | 1.05 (U) | 0.00206 (U) | 635 | 1.03 (U) | 0.479 (U) | 107 | 0.413 (U) | 7.1 | 41.4 |
| 57-007 | RE57-14-85005 | 57-4017 | 2.5 to 3.5 | QBT3 | 3300 | 0.875 (U) | 0.997 | 19.6 | 0.592 | 0.438 (U) | 415 | 10.7 | 0.831 | 1.28 | 0.254 (U) | 7280 | 8.02 | 195 | 279 | 0.0137 | 1.63 | 1.04 (U) | 0.00204 (U) | 282 | 0.917 (U) | 0.438 (U) | 96.1 | 0.367 (U) | 2.4 | 53.2 |
| 57-007 | RE57-14-84162 | 57-4017 | 4 to 5 | QBT3 | 3660 | 0.986 (U) | 0.789 (J) | 22 | 0.749 | 0.493 (U) | 228 | 46.9 | 0.78 | 2.79 | 0.251 (U) | 7820 | 11.5 | 108 | 434 | 0.00703 (J) | 1.85 | 1.04 (U) | 0.00209 (U) | 727 | 0.984 (U) | 0.493 (U) | 434 | 0.394 (U) | 1.39 | 64.3 |
| 57-007 | RE57-14-84141 | 57-4018 | 0 to 1 | FILL | 8710 | 1.04 (U) | 1.73 | 89.1 | 0.794 | 0.521 (U) | 1090 | 3.36 | 2.06 | 3.83 | 0.273 (U) | 10700 | 13.4 | 707 | 369 | 0.0165 | 3.91 | 1.11 (U) | 0.00223 (U) | 1250 | 1.02 (U) | 0.244 (J) | 315 | 0.407 (U) | 7.69 | 55.7 |
| 57-007 | RE57-14-84991 | 57-4018 | 2.5 to 3.5 | ALLH | 4070 | 0.961 (U) | 1.98 | 82.1 | 0.419 | 0.481 (U) | 2180 | 3.99 | 1.64 | 3.24 | 0.142 (J) | 8200 | 10.4 | 685 | 475 | 0.0302 | 3.77 | 1.05 (U) | 0.00209 (U) | 615 | 0.959 (U) | 0.258 (J) | 63 | 0.384 (U) | 7.17 | 46.2 |
| 57-007 | RE57-14-84152 | 57-4018 | 4.4 to 5.4 | ALLH | 4190 | 1.01 (U) | 1.29 | 33.8 | 0.39 | 0.507 (U) | 877 | 3.35 | 0.675 | 1.75 | 0.223 (U) | 7970 | 7.74 | 344 | 169 | 0.0626 | 2.1 | 1.05 (U) | 0.000582 (J) | 532 | 1.02 (U) | 0.114 (J) | 213 | 0.409 (U) | 4.78 | 43.4 |
| 57-007 | RE57-14-84163 | 57-4018 | 7.4 to 8.4 | QBT3 | 4780 | 0.978 (U) | 1.44 | 35.6 | 0.676 | 0.489 (U) | 543 | 60.6 | 1.4 | 3.43 | 0.259 (U) | 8010 | 11.2 | 276 | 361 | 0.0198 | 4.81 | 1.04 (U) | 0.00206 (U) | 755 | 1.01 (U) | 0.489 (U) | 377 | 0.404 (U) | 3.77 | 52.3 |
| 57-007 | RE57-14-84164 | 57-4019 | 0 to 1 | ALLH | 7590 | 1.05 (U) | 2.05 | 105 | 0.829 | 0.524 (U) | 1140 | 10.3 | 3.42 | 3.92 | 0.236 (U) | 10600 | 13.5 | 1020 | 565 | 0.018 | 5.48 | 1.11 (U) | 0.00221 (U) | 975 | 1.02 (U) | 0.149 (J) | 125 | 0.0899 (J) | 15.1 | 41.1 |
| 57-007 | RE57-14-84142 | 57-4019 | 1.5 to 2.5 | ALLH | 5300 | 0.465 (J) | 1.55 | 83.3 | 0.488 | 0.505 (U) | 1250 | 4.49 | 1.88 | 3.1 | 0.73 | 8300 | 10.2 | 700 | 412 | 0.0112 (J) | 3.69 | 0.947 (J) | 0.00216 (U) | 741 | 1.06 (U) | 0.505 (U) | 106 | 0.424 (U) | 8.84 | 43.2 |
| 57-007 | RE57-14-84175 | 57-4019 | 4.5 to 5.5 | QBT3 | 7010 | 1.11 (U) | 1.95 | 53.4 | 0.618 | 0.553 (U) | 759 | 6.69 | 1.41 | 3.11 | 0.268 (U) | 9210 | 15.5 | 483 | 326 | 0.0191 | 3.11 | 1.11 (U) | 0.0022 (U) | 627 | 1.06 (U) | 0.553 (U) | 186 | 0.423 (U) | 6.78 | 59.2 |
| 57-007 | RE57-14-84154 | 57-4020 | 2.5 to 3.5 | ALLH | 5880 | 0.404 (J) | 1.54 | 126 | 0.519 | 0.56 (U) | 1270 | 3.57 | 1.89 | 3.3 | 0.281 (U) | 9890 | 12.2 | 622 | 443 | 0.0158 | 3.69 | 1.15 (U) | 0.000788 (J) | 867 | 1.08 (U) | 0.56 (U) | 103 | 0.433 (U) | 9.9 | 47 |
| 57-007 | RE57-14-84176 | 57-4020 | 5.5 to 6.5 | QBT3 | 5260 | 0.465 (J) | 2.52 | 58.3 | 0.834 | 0.12 (J) | 620 | 4.18 | 1.94 | 3.14 | 0.267 (U) | 8900 | 12.3 | 432 | 452 | 0.0149 | 4.51 | 1.11 (U) | 0.00222 (U) | 581 | 1.08 (U) | 0.549 (U) | 207 | 0.432 (U) | 5.73 | 53.8 |
| 57-007 | RE57-14-84155 | 57-4021 | 0 to 1 | ALLH | 5920 | 0.361 (J) | 1.52 | 126 | 0.633 | 0.538 (U) | 2160 | 3.81 | 2.47 | 4.61 | 0.27 (U) | 8470 | 13.3 | 903 | 570 | 0.0147 | 4.67 | 1.12 (U) | 0.00225 (U) | 1100 | 1.1 (U) | 0.123 (J) | 104 | 0.105 (J) | 9.65 | 50.4 |
| 57-007 | RE57-14-84144 | 57-4021 | 4.5 to 5.5 | ALLH | 8920 | 0.997 (U) | 1.78 | 58.8 | 0.905 | 0.499 (U) | 1190 | 6.26 | 3.3 | 4.55 | 0.252 (U) | 11500 | 12.4 | 1330 | 278 | 0.0228 | 4.89 | 1.07 (U) | 0.00214 (U) | 958 | 0.97 (U) | 0.499 (U) | 133 | 0.283 (J) | 13.8 | 46.6 |
| 57-007 | RE57-14-84177 | 57-4021 | 6.5 to 7.5 | QBT3 | 7440 | 1.05 (U) | 1.49 | 60.1 | 0.791 | 0.525 (U) | 1090 | 5.82 | 2.36 | 3.42 | 0.226 (U) | 9810 | 12.6 | 774 | 408 | 0.0144 | 4.17 | 1.07 (U) | 0.00212 (U) | 802 | 1.01 (U) | 0.525 (U) | 207 | 0.072 (J) | 8.97 | 50.6 |
| 57-007 | RE57-15-88102 | 57-4026 | 3.5 to 4.5 | ALLH | — | — | 1.87 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 57-007 | RE57-15-88100 | 57-4026 | 6.5 to 7.5 | QBT3 | — | — | 5.12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 57-007 | RE57-15-88101 | 57-4027 | 2 to 3 | ALLH | — | — | 1.75 (J) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 57-007 | RE57-15-88103 | 57-4027 | 5 to 6 | QBT3 | — | — | 1.78 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| AOC | SAMPLE ID | LOCATION ID | DEPTH (FT) | MEDIA | Acenaphthene | Acenaphthylene | Acetone | Aniline | Anthracene | Azobenzene | Benzene | Benzo(a)anthracene | Benzo(a)pyrene | Benzo(b)fluoranthene | Benzo(g,h,i)perylene | Benzo(k)fluoranthene | Benzoic Acid | Benzyl Alcohol | Bis(2-chloroethoxy)methane | Bis(2-chloroethyl)ether | Bis(2-ethylhexyl)phthalate | Bromobenzene | Bromochloromethane | Bromodichloromethane | Bromoform | Bromomethane | Bromophenyl-phenylether(4-) | Butanone(2-) | Butylbenzene(n-) | Butylbenzene(sec-) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S7-006 | RES7-14-84178 | S7-4022 | 3 to 4 | FILL | 0.0373 (U) | 0.0373 (U) | 0.0056 (U) | 0.373 (U) | 0.0373 (U) | 0.373 (U) | 0.00112 (U) | 0.0373 (U) | 0.0373 (U) | 0.0373 (U) | 0.0373 (U) | 0.0373 (U) | 0.746 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) | 0.0056 (U) | 0.00112 (U) | 0.00112 (U) |
| S7-006 | RES7-14-84186 | S7-4022 | 5 to 6 | FILL | 0.0384 (U) | 0.0384 (U) | 0.00576 (U) | 0.384 (U) | 0.0384 (U) | 0.384 (U) | 0.00115 (U) | 0.0384 (U) | 0.0384 (U) | 0.0384 (U) | 0.0384 (U) | 0.0384 (U) | 0.767 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.384 (U) | 0.00576 (U) | 0.00115 (U) | 0.00115 (U) |
| S7-006 | RES7-14-84182 | S7-4022 | 8 to 9 | QBT3 | 0.0364 (U) | 0.0364 (U) | 0.00547 (U) | 0.364 (U) | 0.0364 (U) | 0.364 (U) | 0.00109 (U) | 0.0364 (U) | 0.0364 (U) | 0.0364 (U) | 0.0364 (U) | 0.0364 (U) | 0.729 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.269 (J) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.364 (U) | 0.00547 (U) | 0.00109 (U) | 0.00109 (U) |
| S7-006 | RES7-14-84179 | S7-4023 | 3 to 4 | FILL | 0.0377 (U) | 0.0377 (U) | 0.00565 (U) | 0.377 (U) | 0.0377 (U) | 0.377 (U) | 0.00113 (U) | 0.0377 (U) | 0.0377 (U) | 0.0377 (U) | 0.0377 (U) | 0.0377 (U) | 0.753 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.377 (U) | 0.00565 (U) | 0.00113 (U) | 0.00113 (U) |
| S7-006 | RES7-14-84183 | S7-4023 | 5 to 6 | QBT3 | 0.0367 (U) | 0.0367 (U) | 0.00552 (U) | 0.367 (U) | 0.0367 (U) | 0.367 (U) | 0.0011 (U) | 0.0367 (U) | 0.0367 (U) | 0.0367 (U) | 0.0367 (U) | 0.0367 (U) | 0.734 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.367 (U) | 0.00552 (U) | 0.0011 (U) | 0.0011 (U) |
| S7-006 | RES7-14-84187 | S7-4023 | 8 to 9 | QBT3 | 0.0356 (U) | 0.0356 (U) | 0.00533 (U) | 0.356 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.711 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.00533 (U) | 0.00107 (U) | 0.00107 (U) |
| S7-006 | RES7-14-84180 | S7-4024 | 3 to 4 | FILL | 0.0374 (U) | 0.0374 (U) | 0.00561 (U) | 0.374 (U) | 0.0374 (U) | 0.374 (U) | 0.00112 (U) | 0.0374 (U) | 0.0374 (U) | 0.0374 (U) | 0.0374 (U) | 0.0374 (U) | 0.747 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.374 (U) | 0.00561 (U) | 0.00112 (U) | 0.00112 (U) |
| S7-006 | RES7-14-84184 | S7-4024 | 5 to 6 | FILL | 0.0355 (U) | 0.0355 (U) | 0.00534 (U) | 0.355 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.71 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.00534 (U) | 0.00107 (U) | 0.00107 (U) |
| S7-006 | RES7-14-84188 | S7-4024 | 8 to 9 | QBT3 | 0.0356 (U) | 0.0356 (U) | 0.00534 (U) | 0.356 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.712 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.00534 (U) | 0.00107 (U) | 0.00107 (U) |
| S7-006 | RES7-14-84181 | S7-4025 | 3 to 4 | FILL | 0.0376 (U) | 0.0376 (U) | 0.00564 (U) | 0.376 (U) | 0.0376 (U) | 0.376 (U) | 0.00113 (U) | 0.0376 (U) | 0.0376 (U) | 0.0376 (U) | 0.0376 (U) | 0.0376 (U) | 0.751 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.376 (U) | 0.00564 (U) | 0.00113 (U) | 0.00113 (U) |
| S7-006 | RES7-14-84185 | S7-4025 | 5 to 6 | FILL | 0.0366 (U) | 0.0366 (U) | 0.0055 (U) | 0.366 (U) | 0.0366 (U) | 0.366 (U) | 0.0011 (U) | 0.0366 (U) | 0.0366 (U) | 0.0366 (U) | 0.0366 (U) | 0.0366 (U) | 0.732 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.366 (U) | 0.0055 (U) | 0.0011 (U) | 0.0011 (U) |
| S7-006 | RES7-14-84189 | S7-4025 | 8 to 9 | QBT3 | 0.0358 (U) | 0.0358 (U) | 0.00538 (U) | 0.358 (U) | 0.0358 (U) | 0.358 (U) | 0.00108 (U) | 0.0358 (U) | 0.0358 (U) | 0.0358 (U) | 0.0358 (U) | 0.0358 (U) | 0.717 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.358 (U) | 0.00538 (U) | 0.00108 (U) | 0.00108 (U) |
| S7-007 | RES7-14-84156 | S7-4011 | 3 to 4 | QBT3 | 0.0351 (U) | 0.0351 (U) | 0.00527 (U) | 0.351 (U) | 0.0351 (U) | 0.351 (U) | 0.00105 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 0.702 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) | 0.00527 (U) | 0.00105 (U) | 0.00105 (U) |
| S7-007 | RES7-14-84135 | S7-4012 | 0 to 1 | ALLH | 0.0371 (U) | 0.0371 (U) | 0.00558 (U) | 0.371 (U) | 0.0371 (U) | 0.371 (U) | 0.00112 (U) | 0.0371 (U) | 0.0371 (U) | 0.0371 (U) | 0.0371 (U) | 0.0371 (U) | 0.742 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.371 (U) | 0.00558 (U) | 0.00112 (U) | 0.00112 (U) |
| S7-007 | RES7-14-84146 | S7-4012 | 1.25 to 2.25 | ALLH | 0.0349 (U) | 0.0349 (U) | 0.00525 (U) | 0.349 (U) | 0.0349 (U) | 0.349 (U) | 0.00105 (U) | 0.0349 (U) | 0.0349 (U) | 0.0349 (U) | 0.0349 (U) | 0.0349 (U) | 1.62 | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.349 (U) | 0.00525 (U) | 0.00105 (U) | 0.00105 (U) |
| S7-007 | RES7-14-84157 | S7-4012 | 4.25 to 5.25 | QBT3 | 0.0353 (U) | 0.0353 (U) | 0.00531 (U) | 0.353 (U) | 0.0353 (U) | 0.353 (U) | 0.00106 (U) | 0.0353 (U) | 0.0353 (U) | 0.0353 (U) | 0.0353 (U) | 0.0353 (U) | 0.707 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.353 (U) | 0.00531 (U) | 0.00106 (U) | 0.00106 (U) |
| S7-007 | RES7-14-84136 | S7-4013 | 0 to 1 | FILL | 0.0359 (U) | 0.0359 (U) | 0.00541 (U) | 0.359 (U) | 0.0359 (U) | 0.359 (U) | 0.00108 (U) | 0.0359 (U) | 0.0359 (U) | 0.0359 (U) | 0.0359 (U) | 0.0359 (U) | 0.718 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.359 (U) | 0.00541 (U) | 0.00108 (U) | 0.00108 (U) |
| S7-007 | RES7-14-84147 | S7-4013 | 1 to 2 | ALLH | 0.0351 (U) | 0.0351 (U) | 0.00528 (U) | 0.351 (U) | 0.0351 (U) | 0.351 (U) | 0.00106 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 0.701 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.351 (U) | 0.00528 (U) | 0.00106 (U) | 0.00106 (U) |
| S7-007 | RES7-14-84158 | S7-4013 | 4 to 5 | QBT3 | 0.0358 (U) | 0.0358 (U) | 0.00536 (U) | 0.358 (U) | 0.0358 (U) | 0.358 (U) | 0.00107 (U) | 0.0358 (U) | 0.0358 (U) | 0.0358 (U) | 0.0358 (U) | 0.0358 (U) | 0.715 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.358 (U) | 0.00536 (U) | 0.00107 (U) | 0.00107 (U) |
| S7-007 | RES7-14-84148 | S7-4014 | 1 to 2 | FILL | 0.0354 (U) | 0.0354 (U) | 0.00536 (U) | 0.354 (U) | 0.0354 (U) | 0.354 (U) | 0.00107 (U) | 0.0354 (U) | 0.0354 (U) | 0.0354 (U) | 0.0354 (U) | 0.0354 (U) | 0.708 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.354 (U) | 0.00536 (U) | 0.00107 (U) | 0.00107 (U) |
| S7-007 | RES7-14-84137 | S7-4014 | 2 to 3 | QBT3 | 0.0346 (U) | 0.0346 (U) | 0.0052 (U) | 0.346 (U) | 0.0346 (U) | 0.346 (U) | 0.00104 (U) | 0.0346 (U) | 0.0346 (U) | 0.0346 (U) | 0.0346 (U) | 0.0346 (U) | 0.693 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) | 0.0052 (U) | 0.00104 (U) | 0.00104 (U) |
| S7-007 | RES7-14-84159 | S7-4014 | 4 to 5 | QBT3 | 0.0355 (U) | 0.0355 (U) | 0.00534 (U) | 0.355 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.71 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.00534 (U) | 0.00107 (U) | 0.00107 (U) |
| S7-007 | RES7-14-84149 | S7-4015 | 1.5 to 2.5 | FILL | 0.0357 (U) | 0.0357 (U) | 0.00536 (U) | 0.357 (U) | 0.0357 (U) | 0.357 (U) | 0.00107 (U) | 0.0357 (U) | 0.0357 (U) | 0.0357 (U) | 0.0357 (U) | 0.0357 (U) | 0.714 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.13 (J) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.357 (U) | 0.00536 (U) | 0.00107 (U) | 0.00107 (U) |
| S7-007 | RES7-14-84138 | S7-4015 | 2.5 to 3.5 | QBT3 | 0.0342 (U) | 0.0342 (U) | 0.00515 (U) | 0.342 (U) | 0.0342 (U) | 0.342 (U) | 0.00103 (U) | 0.0342 (U) | 0.0342 (U) | 0.0342 (U) | 0.0342 (U) | 0.0342 (U) | 0.684 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.342 (U) | 0.00515 (U) | 0.00103 (U) | 0.00103 (U) |
| S7-007 | RES7-14-84160 | S7-4015 | 4.5 to 5.5 | QBT3 | 0.0346 (U) | 0.0346 (U) | 0.00519 (U) | 0.346 (U) | 0.0346 (U) | 0.346 (U) | 0.00104 (U) | 0.0346 (U) | 0.0346 (U) | 0.0346 (U) | 0.0346 (U) | 0.0346 (U) | 0.692 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) | 0.00519 (U) | 0.00104 (U) | 0.00104 (U) |
| S7-007 | RES7-14-84139 | S7-4016 | 0 to 1 | ALLH | 0.0348 (U) | 0.0348 (U) | 0.00524 (U) | 0.348 (U) | 0.0348 (U) | 0.348 (U) | 0.00105 (U) | 0.0348 (U) | 0.0348 (U) | 0.0348 (U) | 0.0348 (U) | 0.0348 (U) | 0.697 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) | 0.00524 (U) | 0.00105 (U) | 0.00105 (U) |
| S7-007 | RES7-14-84990 | S7-4016 | 2.5 to 3.5 | ALLH | 0.0362 (U) | 0.0362 (U) | 0.00543 (U) | 0.362 (U) | 0.0362 (U) | 0.362 (U) | 0.00109 (U) | 0.0362 (U) | 0.0362 (U) | 0.0362 (U) | 0.0362 (U) | 0.0362 (U) | 0.724 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.362 (U) | 0.00543 (U) | 0.00109 (U) | 0.00109 (U) |
| S7-007 | RES7-14-84150 | S7-4016 | 3 to 4 | ALLH | 0.0385 (U) | 0.0385 (U) | 0.00578 (U) | 0.385 (U) | 0.0385 (U) | 0.385 (U) | 0.00116 (U) | 0.0385 (U) | 0.0385 (U) | 0.0385 (U) | 0.0385 (U) | 0.0385 (U) | 0.77 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.385 (U) | 0.00578 (U) | 0.00116 (U) | 0.00116 (U) |
| S7-007 | RES7-14-84161 | S7-4016 | 6 to 7 | QBT3 | 0.0345 (U) | 0.0345 (U) | 0.00519 (U) | 0.345 (U) | 0.0345 (U) | 0.345 (U) | 0.00104 (U) | 0.0345 (U) | 0.0345 (U) | 0.0345 (U) | 0.0345 (U) | 0.0345 (U) | 0.691 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.345 (U) | 0.00519 (U) | 0.00104 (U) | 0.00104 (U) |
| S7-007 | RES7-14-84140 | S7-4017 | 0 to 1 | ALLH | 0.0361 (U) | 0.0361 (U) | 0.00543 (U) | 0.361 (U) | 0.0361 (U) | 0.361 (U) | 0.00109 (U) | 0.0361 (U) | 0.0361 (U) | 0.0361 (U) | 0.0361 (U) | 0.0361 (U) | 0.722 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) | 0.00543 (U) | 0.00109 (U) | 0.00109 (U) |
| S7-007 | RES7-14-84151 | S7-4017 | 1 to 2 | ALLH | 0.0348 (U) | 0.0348 (U) | 0.00523 (U) | 0.348 (U) | 0.0348 (U) | 0.348 (U) | 0.00105 (U) | 0.0348 (U) | 0.0348 (U) | 0.0348 (U) | 0.0348 (U) | 0.0348 (U) | 0.697 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) | 0.00523 (U) | 0.00105 (U) | 0.00105 (U) |
| S7-007 | RES7-14-85005 | S7-4017 | 2.5 to 3.5 | QBT3 | 0.0344 (U) | 0.0344 (U) | 0.00518 (U) | 0.344 (U) | 0.0344 (U) | 0.344 (U) | 0.00104 (U) | 0.0344 (U) | 0.0344 (U) | 0.0344 (U) | 0.0344 (U) | 0.0344 (U) | 0.688 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) | 0.00518 (U) | 0.00104 (U) | 0.00104 (U) |
| S7-007 | RES7-14-84162 | S7-4017 | 4 to 5 | QBT3 | 0.0347 (U) | 0.0347 (U) | 0.00522 (U) | 0.347 (U) | 0.0347 (U) | 0.347 (U) | 0.00104 (U) | 0.0347 (U) | 0.0347 (U) | 0.0347 (U) | 0.0347 (U) | 0.0347 (U) | 0.695 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.347 (U) | 0.00522 (U) | 0.00104 (U) | 0.00104 (U) |
| S7-007 | RES7-14-84141 | S7-4018 | 0 to 1 | FILL | 0.0371 (U) | 0.0371 (U) | 0.00557 (U) | 0.371 (U) | 0.0371 (U) | 0.371 (U) | 0.00111 (U) | 0.0371 (U) | 0.0371 (U) | 0.0371 (U) | 0.0371 (U) | 0.0371 (U) | 0.742 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.371 (U) | 0.00557 (U) | 0.00111 (U) | 0.00111 (U) |
| S7-007 | RES7-14-84991 | S7-4018 | 2.5 to 3.5 | ALLH | 0.0349 (U) | 0.0349 (U) | 0.00524 (U) | 0.349 (U) | 0.0349 (U) | 0.349 (U) | 0.00105 (U) | 0.0349 (U) | 0.0349 (U) | 0.0349 (U) | 0.0349 (U) | 0.0349 (U) | 0.324 (J) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.349 (U) | 0.00524 (U) | 0.00105 (U) | 0.00105 (U) |
| S7-007 | RES7-14-84152 | S7-4018 | 4.4 to 5.4 | ALLH | 0.0351 (U) | 0.0351 (U) | 0.00526 (U) | 0.351 (U) | 0.0351 (U) | 0.351 (U) | 0.00105 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 0.0351 (U) | 2.83 | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) | 0.00526 (U) | 0.00105 (U) | 0.00105 (U) |
| S7-007 | RES7-14-84163 | S7-4018 | 7.4 to 8.4 | QBT3 | 0.0344 (U) | 0.0344 (U) | 0.00518 (U) | 0.344 (U) | 0.0344 (U) | 0.344 (U) | 0.00104 (U) | 0.0344 (U) | 0.0344 (U) | 0.0344 (U) | 0.0344 (U) | 0.0344 (U) | 0.689 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) | 0.00518 (U) | 0.00104 (U) | 0.00104 (U) |
| S7-007 | RES7-14-84164 | S7-4019 | 0 to 1 | ALLH | 0.037 (U) | 0.037 (U) | 0.00556 (U) | 0.37 (U) | 0.037 (U) | 0.37 (U) | 0.00111 (U) | 0.037 (U) | 0.037 (U) | 0.037 (U) | 0.037 (U) | 0.037 (U) | 0.741 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) | 0.00556 (U) | 0.00111 (U) | 0.00111 (U) |
| S7-007 | RES7-14-84142 | S7-4019 | 1.5 to 2.5 | ALLH | 0.0361 (U) | 0.0361 (U) | 0.00543 (U) | 0.361 (U) | 0.0361 (U) | 0.361 (U) | 0.00109 (U) | 0.0361 (U) | 0.0361 (U) | 0.0361 (U) | 0.0361 (U) | 0.0361 (U) | 0.722 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) | 0.00543 (U) | 0.00109 (U) | 0.00109 (U) |
| S7-007 | RES7-14-84175 | S7-4019 | 4.5 to 5.5 | QBT3 | 0.037 (U) | 0.037 (U) | 0.00557 (U) | 0.37 (U) | 0.037 (U) | 0.37 (U) | 0.00111 (U) | 0.037 (U) | 0.037 (U) | 0.037 (U) | 0.037 (U) | 0.037 (U) | 0.74 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) | 0.00557 (U) | 0.00111 (U) | 0.00111 (U) |
| S7-007 | RES7-14-84154 | S7-4020 | 2.5 to 3.5 | ALLH | 0.0382 (U) | 0.0382 (U) | 0.00574 (U) | 0.382 (U) | 0.0382 (U) | 0.382 (U) | 0.00115 (U) | 0.0382 (U) | 0.0382 (U) | 0.0382 (U) | 0.0382 (U) | 0.0382 (U) | 0.763 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.382 (U) | 0.00574 (U) | 0.00115 (U) | 0.00115 (U) |
| S7-007 | RES7-14-84176 | S7-4020 | 5.5 to 6.5 | QBT3 | 0.0369 (U) | 0.0369 (U) | 0.00555 (U) | 0.369 (U) | 0.0369 (U) | 0.369 (U) | 0.00111 (U) | 0.0369 (U) | 0.0369 (U) | 0.0369 (U) | 0.0369 (U) | 0.0369 (U) | 0.738 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.369 (U) | 0.00555 (U) | 0.00111 (U) | 0.00111 (U) |
| S7-007 | RES7-14-84155 | S7-4021 | 0 to 1 | ALLH | 0.0373 (U) | 0.0373 (U) | 0.00561 (U) | 0.373 (U) | 0.0373 (U) | 0.373 (U) | 0.00112 (U) | 0.0373 (U) | 0.0373 (U) | 0.0373 (U) | 0.0373 (U) | 0.0373 (U) | 0.745 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) | 0.00561 (U) | 0.00112 (U) | 0.00112 (U) |
| S7-007 | RES7-14-84144 | S7-4021 | 4.5 to 5.5 | ALLH | 0.0356 (U) | 0.0356 (U) | 0.00534 (U) | 0.356 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.0356 (U) | 0.712 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.00534 (U) | 0.00107 (U) | 0.00107 (U) |
| S7-007 | RES7-14-84177 | S7-4021 | 6.5 to 7.5 | QBT3 | 0.0355 (U) | 0.0355 (U) | 0.00533 (U) | 0.355 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.0355 (U) | 0.71 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.00533 (U) | 0.00107 (U) | 0.00107 (U) |

| SAMPLE ID | Butylbenzene(tert-) | Butylbenzylphthalate | Carbon Disulfide | Carbon Tetrachloride | Chloro-3-methylphenol(4-) | Chloroaniline(4-) | Chlorobenzene | Chlorodibromomethane | Chloroethane | Chloroform | Chloromethane | Chloronaphthalene(2-) | Chlorophenol(2-) | Chlorophenyl-phenyl(4-) Ether | Chlorotoluene(2-) | Chlorotoluene(4-) | Chrysene | Dibenz(a,h)anthracene | Dibenzofuran | Dibromo-3-Chloropropane(1,2-) | Dibromoethane(1,2-) | Dibromomethane | Dichlorobenzene(1,2-) | Dichlorobenzene(1,3-) | Dichlorobenzene(1,4-) | Dichlorobenzidine(3,3'-) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RES7-14-84178 | 0.00112 (U) | 0.373 (U) | 0.0056 (U) | 0.00112 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.0373 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.0373 (U) | 0.0373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) |
| RES7-14-84186 | 0.00115 (U) | 0.384 (U) | 0.00576 (U) | 0.00115 (U) | 0.384 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.0384 (U) | 0.384 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.0384 (U) | 0.0384 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.384 (U) |
| RES7-14-84182 | 0.00109 (U) | 0.364 (U) | 0.00547 (U) | 0.00109 (U) | 0.364 (U) | 0.364 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.0364 (U) | 0.364 (U) | 0.364 (U) | 0.00109 (U) | 0.00109 (U) | 0.0364 (U) | 0.0364 (U) | 0.364 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.364 (U) |
| RES7-14-84179 | 0.00113 (U) | 0.377 (U) | 0.00565 (U) | 0.00113 (U) | 0.377 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.0377 (U) | 0.377 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.0377 (U) | 0.0377 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.377 (U) |
| RES7-14-84183 | 0.0011 (U) | 0.367 (U) | 0.00552 (U) | 0.0011 (U) | 0.367 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0367 (U) | 0.367 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.0367 (U) | 0.0367 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.367 (U) |
| RES7-14-84187 | 0.00107 (U) | 0.356 (U) | 0.00533 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) |
| RES7-14-84180 | 0.00112 (U) | 0.374 (U) | 0.00561 (U) | 0.00112 (U) | 0.374 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.0374 (U) | 0.374 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.0374 (U) | 0.0374 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.374 (U) |
| RES7-14-84184 | 0.00107 (U) | 0.355 (U) | 0.00534 (U) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) |
| RES7-14-84188 | 0.00107 (U) | 0.356 (U) | 0.00534 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) |
| RES7-14-84181 | 0.00113 (U) | 0.376 (U) | 0.00564 (U) | 0.00113 (U) | 0.376 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.0376 (U) | 0.376 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.0376 (U) | 0.0376 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.376 (U) |
| RES7-14-84185 | 0.0011 (U) | 0.366 (U) | 0.0055 (U) | 0.0011 (U) | 0.366 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0366 (U) | 0.366 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0366 (U) | 0.0366 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.366 (U) |
| RES7-14-84189 | 0.00108 (U) | 0.358 (U) | 0.00538 (U) | 0.00108 (U) | 0.358 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.0358 (U) | 0.358 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.0358 (U) | 0.0358 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.358 (U) |
| RES7-14-84156 | 0.00105 (U) | 0.351 (U) | 0.00527 (U) | 0.00105 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.0351 (U) | 0.0351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) |
| RES7-14-84135 | 0.00112 (U) | 0.371 (U) | 0.00558 (U) | 0.00112 (U) | 0.371 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.0371 (U) | 0.371 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.0371 (U) | 0.0371 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.371 (U) |
| RES7-14-84146 | 0.00105 (U) | 0.349 (U) | 0.00525 (U) | 0.00105 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0349 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.0349 (U) | 0.0349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.000357 (J) | 0.349 (U) |
| RES7-14-84157 | 0.00106 (U) | 0.353 (U) | 0.00531 (U) | 0.00106 (U) | 0.353 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.0353 (U) | 0.353 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.0353 (U) | 0.0353 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.353 (U) |
| RES7-14-84136 | 0.00108 (U) | 0.359 (U) | 0.00541 (U) | 0.00108 (U) | 0.359 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.0359 (U) | 0.359 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.0359 (U) | 0.0359 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.359 (U) |
| RES7-14-84147 | 0.00106 (U) | 0.351 (U) | 0.00528 (U) | 0.00106 (U) | 0.351 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.0351 (U) | 0.0351 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.351 (U) |
| RES7-14-84158 | 0.00107 (U) | 0.358 (U) | 0.00536 (U) | 0.00107 (U) | 0.358 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0358 (U) | 0.358 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.0358 (U) | 0.0358 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.358 (U) |
| RES7-14-84148 | 0.00107 (U) | 0.354 (U) | 0.00536 (U) | 0.00107 (U) | 0.354 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0354 (U) | 0.354 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.0354 (U) | 0.0354 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.000375 (J) | 0.354 (U) |
| RES7-14-84137 | 0.00104 (U) | 0.346 (U) | 0.0052 (U) | 0.00104 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.0346 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.0346 (U) | 0.0346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) |
| RES7-14-84159 | 0.00107 (U) | 0.355 (U) | 0.00534 (U) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) |
| RES7-14-84149 | 0.00107 (U) | 0.339 (J) | 0.00536 (U) | 0.00107 (U) | 0.357 (U) | 0.357 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0357 (U) | 0.357 (U) | 0.357 (U) | 0.00107 (U) | 0.00107 (U) | 0.0357 (U) | 0.0357 (U) | 0.357 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.357 (U) |
| RES7-14-84138 | 0.00103 (U) | 0.342 (U) | 0.00515 (U) | 0.00103 (U) | 0.342 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.0342 (U) | 0.342 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.0342 (U) | 0.0342 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.342 (U) |
| RES7-14-84160 | 0.00104 (U) | 0.346 (U) | 0.00519 (U) | 0.00104 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.0346 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.0346 (U) | 0.0346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) |
| RES7-14-84139 | 0.00105 (U) | 0.348 (U) | 0.00524 (U) | 0.00105 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0348 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.0348 (U) | 0.0348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) |
| RES7-14-84990 | 0.00109 (U) | 0.362 (U) | 0.00543 (U) | 0.00109 (U) | 0.362 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.0362 (U) | 0.362 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.0362 (U) | 0.0362 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.362 (U) |
| RES7-14-84150 | 0.00116 (U) | 0.385 (U) | 0.00578 (U) | 0.00116 (U) | 0.385 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.0385 (U) | 0.385 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.0385 (U) | 0.0385 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.385 (U) |
| RES7-14-84161 | 0.00104 (U) | 0.345 (U) | 0.00519 (U) | 0.00104 (U) | 0.345 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.0345 (U) | 0.345 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.0345 (U) | 0.0345 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.345 (U) |
| RES7-14-84140 | 0.00109 (U) | 0.361 (U) | 0.00543 (U) | 0.00109 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.0361 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.0361 (U) | 0.0361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) |
| RES7-14-84151 | 0.00105 (U) | 0.348 (U) | 0.00523 (U) | 0.00105 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0348 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.0348 (U) | 0.0348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) |
| RES7-14-85005 | 0.00104 (U) | 0.344 (U) | 0.00518 (U) | 0.00104 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.0344 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.0344 (U) | 0.0344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) |
| RES7-14-84162 | 0.00104 (U) | 0.347 (U) | 0.00522 (U) | 0.00104 (U) | 0.347 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.0347 (U) | 0.347 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.0347 (U) | 0.0347 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.347 (U) |
| RES7-14-84141 | 0.00111 (U) | 0.371 (U) | 0.00557 (U) | 0.00111 (U) | 0.371 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.0371 (U) | 0.371 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.0371 (U) | 0.0371 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.371 (U) |
| RES7-14-84991 | 0.00105 (U) | 0.349 (U) | 0.00524 (U) | 0.00105 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0349 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.0349 (U) | 0.0349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00043 (J+) | 0.349 (U) |
| RES7-14-84152 | 0.00105 (U) | 0.351 (U) | 0.00526 (U) | 0.00105 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.0351 (U) | 0.0351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) |
| RES7-14-84163 | 0.00104 (U) | 0.344 (U) | 0.00518 (U) | 0.00104 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.0344 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.0344 (U) | 0.0344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) |
| RES7-14-84164 | 0.00111 (U) | 0.37 (U) | 0.00556 (U) | 0.00111 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.037 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.037 (U) | 0.037 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) |
| RES7-14-84142 | 0.00109 (U) | 0.361 (U) | 0.00543 (U) | 0.00109 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.0361 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.0361 (U) | 0.0361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) |
| RES7-14-84175 | 0.00111 (U) | 0.37 (U) | 0.00557 (U) | 0.00111 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.037 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.037 (U) | 0.037 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) |
| RES7-14-84154 | 0.00115 (U) | 0.382 (U) | 0.00574 (U) | 0.00115 (U) | 0.382 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.0382 (U) | 0.382 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.0382 (U) | 0.0382 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.382 (U) |
| RES7-14-84176 | 0.00111 (U) | 0.369 (U) | 0.00555 (U) | 0.00111 (U) | 0.369 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.0369 (U) | 0.369 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.0369 (U) | 0.0369 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.369 (U) |
| RES7-14-84155 | 0.00112 (U) | 0.373 (U) | 0.00561 (U) | 0.00112 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.0373 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.0373 (U) | 0.0373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) |
| RES7-14-84144 | 0.00107 (U) | 0.356 (U) | 0.00534 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) |
| RES7-14-84177 | 0.00107 (U) | 0.355 (U) | 0.00533 (U) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) |

| SAMPLE ID | Dichlorodifluoromethane | Dichloroethane(1,1-) | Dichloroethane(1,2-) | Dichloroethene(1,1-) | Dichloroethene(cis-1,2) | Dichloroethene(trans-1,2-) | Dichlorophenol(2,4-) | Dichloropropane(1,2-) | Dichloropropane(1,3-) | Dichloropropane(2,2-) | Dichloropropene(1,1-) | Dichloropropene(cis-1,3-) | Dichloropropene(trans-1,3-) | Diethylphthalate | Dimethyl Phthalate | Dimethylphenol(2,4-) | Di-n-butylphthalate | Dinitro-2-methylphenol(4,6-) | Dinitrophenol(2,4-) | Dinitrotoluene(2,4-) | Dinitrotoluene(2,6-) | Di-n-octylphthalate | Diphenylamine | Ethylbenzene | Fluoranthene | Fluorene |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RES7-14-84178 | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.746 (UJ) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.0373 (U) | 0.0373 (U) |
| RES7-14-84186 | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.767 (UJ) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.00115 (U) | 0.0384 (U) | 0.0384 (U) |
| RES7-14-84182 | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.364 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.729 (UJ) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.00109 (U) | 0.0364 (U) | 0.0364 (U) |
| RES7-14-84179 | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.753 (UJ) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.00113 (U) | 0.0377 (U) | 0.0377 (U) |
| RES7-14-84183 | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.734 (UJ) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.0011 (U) | 0.0367 (U) | 0.0367 (U) |
| RES7-14-84187 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.711 (UJ) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) |
| RES7-14-84180 | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.747 (UJ) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.00112 (U) | 0.0374 (U) | 0.0374 (U) |
| RES7-14-84184 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.71 (UJ) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) |
| RES7-14-84188 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.712 (UJ) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) |
| RES7-14-84181 | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.751 (UJ) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.00113 (U) | 0.0376 (U) | 0.0376 (U) |
| RES7-14-84185 | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.732 (UJ) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.0011 (U) | 0.0366 (U) | 0.0366 (U) |
| RES7-14-84189 | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.717 (UJ) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.00108 (U) | 0.0358 (U) | 0.0358 (U) |
| RES7-14-84156 | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.702 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.0351 (U) | 0.0351 (U) |
| RES7-14-84135 | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.742 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.00112 (U) | 0.0145 (J) | 0.0371 (U) |
| RES7-14-84146 | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.699 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.0349 (U) | 0.0349 (U) |
| RES7-14-84157 | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.707 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.00106 (U) | 0.0353 (U) | 0.0353 (U) |
| RES7-14-84136 | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.718 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.00108 (U) | 0.0359 (U) | 0.0359 (U) |
| RES7-14-84147 | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.701 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00106 (U) | 0.013 (J) | 0.0351 (U) |
| RES7-14-84158 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.715 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.00107 (U) | 0.0358 (U) | 0.0358 (U) |
| RES7-14-84148 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.708 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.00107 (U) | 0.0354 (U) | 0.0354 (U) |
| RES7-14-84137 | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.693 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.0346 (U) | 0.0346 (U) |
| RES7-14-84159 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.71 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) |
| RES7-14-84149 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.357 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.714 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.00107 (U) | 0.0357 (U) | 0.0357 (U) |
| RES7-14-84138 | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.684 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.00103 (U) | 0.0342 (U) | 0.0342 (U) |
| RES7-14-84160 | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.692 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.0346 (U) | 0.0346 (U) |
| RES7-14-84139 | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.697 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.0348 (U) | 0.0348 (U) |
| RES7-14-84990 | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.724 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.00109 (U) | 0.0362 (U) | 0.0362 (U) |
| RES7-14-84150 | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.77 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.00116 (U) | 0.0385 (U) | 0.0385 (U) |
| RES7-14-84161 | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.691 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.00104 (U) | 0.0345 (U) | 0.0345 (U) |
| RES7-14-84140 | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.722 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.0361 (U) | 0.0361 (U) |
| RES7-14-84151 | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.697 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.0348 (U) | 0.0348 (U) |
| RES7-14-85005 | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.688 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.0344 (U) | 0.0344 (U) |
| RES7-14-84162 | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.695 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.00104 (U) | 0.0347 (U) | 0.0347 (U) |
| RES7-14-84141 | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.742 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.00111 (U) | 0.0371 (U) | 0.0371 (U) |
| RES7-14-84991 | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.698 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.0349 (U) | 0.0349 (U) |
| RES7-14-84152 | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.702 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.0351 (U) | 0.0351 (U) |
| RES7-14-84163 | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.689 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.0344 (U) | 0.0344 (U) |
| RES7-14-84164 | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.741 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.037 (U) | 0.037 (U) |
| RES7-14-84142 | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.722 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.0361 (U) | 0.0361 (U) |
| RES7-14-84175 | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.74 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.037 (U) | 0.037 (U) |
| RES7-14-84154 | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.763 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.00115 (U) | 0.0382 (U) | 0.0382 (U) |
| RES7-14-84176 | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.738 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.00111 (U) | 0.0369 (U) | 0.0369 (U) |
| RES7-14-84155 | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.745 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.0373 (U) | 0.0373 (U) |
| RES7-14-84144 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.712 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.0356 (U) |
| RES7-14-84177 | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.71 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.0355 (U) |

| SAMPLE ID | Hexachlorobenzene | Hexachlorobutadiene | Hexachlorocyclopentadiene | Hexachloroethane | Hexanone(2-) | Indeno(1,2,3-cd)pyrene | Iodomethane | Isophorone | Isopropylbenzene | Isopropyltoluene(4-) | Methyl-2-pentanone(4-) | Methylene Chloride | Methylnaphthalene(2-) | Methylphenol(2-) | Methylphenol(4-) | Naphthalene | Nitroaniline(2-) | Nitroaniline(3-) | Nitroaniline(4-) | Nitrobenzene | Nitrophenol(2-) | Nitrophenol(4-) | Nitrosodimethylamine(N-) | Nitroso-di-n-propylamine(N-) | Oxybis(1-chloropropane)(2,2'-) | Pentachlorophenol |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RES7-14-84178 | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.0056 (U) | 0.0373 (U) | 0.0056 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.0056 (U) | 0.00248 (J) | 0.0373 (U) | 0.373 (U) | 0.373 (U) | 0.0373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) |
| RES7-14-84186 | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.00576 (U) | 0.0384 (U) | 0.00576 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.00576 (U) | 0.00576 (U) | 0.0384 (U) | 0.384 (U) | 0.384 (U) | 0.0384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) | 0.384 (U) |
| RES7-14-84182 | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.00547 (U) | 0.0364 (U) | 0.00547 (U) | 0.364 (U) | 0.00109 (U) | 0.00109 (U) | 0.00547 (U) | 0.00547 (U) | 0.0364 (U) | 0.364 (U) | 0.364 (U) | 0.0364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) | 0.364 (U) |
| RES7-14-84179 | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.00565 (U) | 0.0377 (U) | 0.00565 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.00565 (U) | 0.00565 (U) | 0.0377 (U) | 0.377 (U) | 0.377 (U) | 0.0377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) | 0.377 (U) |
| RES7-14-84183 | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.00552 (U) | 0.0367 (U) | 0.00552 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.00552 (U) | 0.0028 (J+) | 0.0367 (U) | 0.367 (U) | 0.367 (U) | 0.0367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) | 0.367 (U) |
| RES7-14-84187 | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00533 (U) | 0.0356 (U) | 0.00533 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00533 (U) | 0.00533 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) |
| RES7-14-84180 | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.00561 (U) | 0.0374 (U) | 0.00561 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.00561 (U) | 0.00561 (U) | 0.0374 (U) | 0.374 (U) | 0.374 (U) | 0.0374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) | 0.374 (U) |
| RES7-14-84184 | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00534 (U) | 0.0355 (U) | 0.00534 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00534 (U) | 0.00534 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) |
| RES7-14-84188 | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00534 (U) | 0.0356 (U) | 0.00534 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00534 (U) | 0.00534 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) |
| RES7-14-84181 | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.00564 (U) | 0.0376 (U) | 0.00564 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.00564 (U) | 0.00564 (U) | 0.0376 (U) | 0.376 (U) | 0.376 (U) | 0.0376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) | 0.376 (U) |
| RES7-14-84185 | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.0055 (U) | 0.0366 (U) | 0.0055 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0055 (U) | 0.0055 (U) | 0.0366 (U) | 0.366 (U) | 0.366 (U) | 0.0366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) | 0.366 (U) |
| RES7-14-84189 | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.00538 (U) | 0.0358 (U) | 0.00538 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.00538 (U) | 0.00538 (U) | 0.0358 (U) | 0.358 (U) | 0.358 (U) | 0.0358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) |
| RES7-14-84156 | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00527 (U) | 0.0351 (U) | 0.00527 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00527 (U) | 0.00527 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) |
| RES7-14-84135 | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.00558 (U) | 0.0371 (U) | 0.00558 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.00558 (U) | 0.00558 (U) | 0.0371 (U) | 0.371 (U) | 0.371 (U) | 0.0371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) |
| RES7-14-84146 | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.00525 (U) | 0.0349 (U) | 0.00525 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00525 (U) | 0.00299 (J) | 0.0349 (U) | 0.349 (U) | 0.349 (U) | 0.0349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) |
| RES7-14-84157 | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.00531 (U) | 0.0353 (U) | 0.00531 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.00531 (U) | 0.00531 (U) | 0.0353 (U) | 0.353 (U) | 0.353 (U) | 0.0353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) | 0.353 (U) |
| RES7-14-84136 | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.00541 (U) | 0.0359 (U) | 0.00541 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.00541 (U) | 0.00541 (U) | 0.0359 (U) | 0.359 (U) | 0.359 (U) | 0.0359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) | 0.359 (U) |
| RES7-14-84147 | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00528 (U) | 0.0351 (U) | 0.00528 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.00528 (U) | 0.00528 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) |
| RES7-14-84158 | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.00536 (U) | 0.0358 (U) | 0.00536 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.00536 (U) | 0.00536 (U) | 0.0358 (U) | 0.358 (U) | 0.358 (U) | 0.0358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) | 0.358 (U) |
| RES7-14-84148 | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.00536 (U) | 0.0354 (U) | 0.00536 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.00536 (U) | 0.00536 (U) | 0.0354 (U) | 0.354 (U) | 0.354 (U) | 0.0354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) | 0.354 (U) |
| RES7-14-84137 | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.0052 (U) | 0.0346 (U) | 0.0052 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.0052 (U) | 0.0052 (U) | 0.0346 (U) | 0.346 (U) | 0.346 (U) | 0.0346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) |
| RES7-14-84159 | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00534 (U) | 0.0355 (U) | 0.00534 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00534 (U) | 0.00534 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) |
| RES7-14-84149 | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.00536 (U) | 0.0357 (U) | 0.00536 (U) | 0.357 (U) | 0.00107 (U) | 0.00107 (U) | 0.00536 (U) | 0.00536 (U) | 0.0357 (U) | 0.357 (U) | 0.357 (U) | 0.0357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) | 0.357 (U) |
| RES7-14-84138 | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.00515 (U) | 0.0342 (U) | 0.00515 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.00515 (U) | 0.00515 (U) | 0.0342 (U) | 0.342 (U) | 0.342 (U) | 0.0342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) | 0.342 (U) |
| RES7-14-84160 | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.00519 (U) | 0.0346 (U) | 0.00519 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00519 (U) | 0.00519 (U) | 0.0346 (U) | 0.346 (U) | 0.346 (U) | 0.0346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) | 0.346 (U) |
| RES7-14-84139 | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.00524 (U) | 0.0348 (U) | 0.00524 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00524 (U) | 0.00524 (U) | 0.0348 (U) | 0.348 (U) | 0.348 (U) | 0.0348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) |
| RES7-14-84990 | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.00543 (U) | 0.0362 (U) | 0.00543 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.00543 (U) | 0.00543 (U) | 0.0362 (U) | 0.362 (U) | 0.362 (U) | 0.0362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) | 0.362 (U) |
| RES7-14-84150 | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.00578 (U) | 0.0385 (U) | 0.00578 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.00578 (U) | 0.00578 (U) | 0.0385 (U) | 0.385 (U) | 0.385 (U) | 0.0385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) | 0.385 (U) |
| RES7-14-84161 | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.00519 (U) | 0.0345 (U) | 0.00519 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.00519 (U) | 0.00519 (U) | 0.0345 (U) | 0.345 (U) | 0.345 (U) | 0.0345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) | 0.345 (U) |
| RES7-14-84140 | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.00543 (U) | 0.0361 (U) | 0.00543 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00543 (U) | 0.00277 (J+) | 0.0361 (U) | 0.361 (U) | 0.361 (U) | 0.0361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) |
| RES7-14-84151 | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.00523 (U) | 0.0348 (U) | 0.00523 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00523 (U) | 0.00523 (U) | 0.0348 (U) | 0.348 (U) | 0.348 (U) | 0.0348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) | 0.348 (U) |
| RES7-14-85005 | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.00518 (U) | 0.0344 (U) | 0.00518 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00518 (U) | 0.00518 (U) | 0.0344 (U) | 0.344 (U) | 0.344 (U) | 0.0344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) |
| RES7-14-84162 | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.00522 (U) | 0.0347 (U) | 0.00522 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.00522 (U) | 0.00522 (U) | 0.0347 (U) | 0.347 (U) | 0.347 (U) | 0.0347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) | 0.347 (U) |
| RES7-14-84141 | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.00557 (U) | 0.0371 (U) | 0.00557 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.00557 (U) | 0.00557 (U) | 0.0371 (U) | 0.371 (U) | 0.371 (U) | 0.0371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) | 0.371 (U) |
| RES7-14-84991 | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.00524 (U) | 0.0349 (U) | 0.00524 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00524 (U) | 0.00524 (U) | 0.0349 (U) | 0.349 (U) | 0.349 (U) | 0.0349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) | 0.349 (U) |
| RES7-14-84152 | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.00526 (U) | 0.0351 (U) | 0.00526 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00526 (U) | 0.00526 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.0351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) | 0.351 (U) |
| RES7-14-84163 | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.00518 (U) | 0.0344 (U) | 0.00518 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00518 (U) | 0.00518 (U) | 0.0344 (U) | 0.344 (U) | 0.344 (U) | 0.0344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) | 0.344 (U) |
| RES7-14-84164 | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.00556 (U) | 0.037 (U) | 0.00556 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00556 (U) | 0.00556 (U) | 0.037 (U) | 0.37 (U) | 0.37 (U) | 0.037 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) |
| RES7-14-84142 | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.00543 (U) | 0.0361 (U) | 0.00543 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00543 (U) | 0.00543 (U) | 0.0361 (U) | 0.361 (U) | 0.361 (U) | 0.0361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) | 0.361 (U) |
| RES7-14-84175 | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.00557 (U) | 0.037 (U) | 0.00557 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00557 (U) | 0.00557 (U) | 0.037 (U) | 0.37 (U) | 0.37 (U) | 0.037 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) | 0.37 (U) |
| RES7-14-84154 | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.00574 (U) | 0.0382 (U) | 0.00574 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.00574 (U) | 0.00574 (U) | 0.0382 (U) | 0.382 (U) | 0.382 (U) | 0.0382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) | 0.382 (U) |
| RES7-14-84176 | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.00555 (U) | 0.0369 (U) | 0.00555 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.00555 (U) | 0.00555 (U) | 0.0369 (U) | 0.369 (U) | 0.369 (U) | 0.0369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) | 0.369 (U) |
| RES7-14-84155 | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.00561 (U) | 0.0373 (U) | 0.00561 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00561 (U) | 0.00561 (U) | 0.0373 (U) | 0.373 (U) | 0.373 (U) | 0.0373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) | 0.373 (U) |
| RES7-14-84144 | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.00534 (U) | 0.0356 (U) | 0.00534 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00534 (U) | 0.00534 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.0356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) | 0.356 (U) |
| RES7-14-84177 | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.00533 (U) | 0.0355 (U) | 0.00533 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00533 (U) | 0.00533 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.0355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) | 0.355 (U) |

| SAMPLE ID | Phenanthrene | Phenol | Propylbenzene(1-) | Pyrene | Pyridine | Styrene | Tetrachloroethane(1,1,1,2-) | Tetrachloroethane(1,1,2,2-) | Tetrachloroethene | Toluene | Trichloro-1,2,2-trifluoroethane(1,1,2 | Trichlorobenzene(1,2,4-) | Trichloroethane(1,1,1-) | Trichloroethane(1,1,2-) | Trichloroethene | Trichlorofluoromethane | Trichlorophenol(2,4,5-) | Trichlorophenol(2,4,6-) | Trichloropropane(1,2,3-) | Trimethylbenzene(1,2,4-) | Trimethylbenzene(1,3,5-) | Vinyl Chloride | Xylene(1,2) | Xylene(1,3)+Xylene(1,4) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RES7-14-84178 | 0.0373 (U) | 0.373 (U) | 0.00112 (U) | 0.0373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.0056 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00224 (U) |
| RES7-14-84186 | 0.0384 (U) | 0.384 (U) | 0.00115 (U) | 0.0384 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00576 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.384 (U) | 0.384 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.0023 (U) |
| RES7-14-84182 | 0.0364 (U) | 0.364 (U) | 0.00109 (U) | 0.0364 (U) | 0.364 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00547 (U) | 0.364 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.364 (U) | 0.364 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00219 (U) |
| RES7-14-84179 | 0.0377 (U) | 0.377 (U) | 0.00113 (U) | 0.0377 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00565 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.377 (U) | 0.377 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00226 (U) |
| RES7-14-84183 | 0.0367 (U) | 0.367 (U) | 0.0011 (U) | 0.0367 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.00552 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.367 (U) | 0.367 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.00221 (U) |
| RES7-14-84187 | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00533 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00213 (U) |
| RES7-14-84180 | 0.0374 (U) | 0.374 (U) | 0.00112 (U) | 0.0374 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00561 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.000539 (J) | 0.00112 (U) | 0.374 (U) | 0.374 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00224 (U) |
| RES7-14-84184 | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00534 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.000726 (J) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00213 (U) |
| RES7-14-84188 | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00534 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00214 (U) |
| RES7-14-84181 | 0.0376 (U) | 0.376 (U) | 0.00113 (U) | 0.0376 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00564 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.376 (U) | 0.376 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00113 (U) | 0.00226 (U) |
| RES7-14-84185 | 0.0366 (U) | 0.366 (U) | 0.0011 (U) | 0.0366 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0055 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.366 (U) | 0.366 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0011 (U) | 0.0022 (U) |
| RES7-14-84189 | 0.0358 (U) | 0.358 (U) | 0.00108 (U) | 0.0358 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00538 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.358 (U) | 0.358 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00215 (U) |
| RES7-14-84156 | 0.0351 (U) | 0.351 (U) | 0.00105 (U) | 0.0351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00527 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00211 (U) |
| RES7-14-84135 | 0.0134 (J) | 0.371 (U) | 0.00112 (U) | 0.0371 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00558 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.371 (U) | 0.371 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00223 (U) |
| RES7-14-84146 | 0.0349 (U) | 0.349 (U) | 0.00105 (U) | 0.0349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00525 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0021 (U) |
| RES7-14-84157 | 0.0353 (U) | 0.353 (U) | 0.00106 (U) | 0.0353 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00531 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.353 (U) | 0.353 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00212 (U) |
| RES7-14-84136 | 0.0359 (U) | 0.359 (U) | 0.00108 (U) | 0.0359 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00541 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.359 (U) | 0.359 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00108 (U) | 0.00216 (U) |
| RES7-14-84147 | 0.0351 (U) | 0.351 (U) | 0.00106 (U) | 0.0351 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00528 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.351 (U) | 0.351 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00106 (U) | 0.00211 (U) |
| RES7-14-84158 | 0.0358 (U) | 0.358 (U) | 0.00107 (U) | 0.0358 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00536 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.358 (U) | 0.358 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00215 (U) |
| RES7-14-84148 | 0.0354 (U) | 0.354 (U) | 0.00107 (U) | 0.0354 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00536 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.354 (U) | 0.354 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00214 (U) |
| RES7-14-84137 | 0.0346 (U) | 0.346 (U) | 0.00104 (U) | 0.0346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.0052 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00208 (U) |
| RES7-14-84159 | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00534 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00214 (U) |
| RES7-14-84149 | 0.0357 (U) | 0.357 (U) | 0.00107 (U) | 0.0357 (U) | 0.357 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00536 (U) | 0.357 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.357 (U) | 0.357 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00215 (U) |
| RES7-14-84138 | 0.0342 (U) | 0.342 (U) | 0.00103 (U) | 0.0342 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00515 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.342 (U) | 0.342 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00103 (U) | 0.00206 (U) |
| RES7-14-84160 | 0.0346 (U) | 0.346 (U) | 0.00104 (U) | 0.0346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00519 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.346 (U) | 0.346 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00208 (U) |
| RES7-14-84139 | 0.0348 (U) | 0.348 (U) | 0.00105 (U) | 0.0348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00524 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0021 (U) |
| RES7-14-84990 | 0.0362 (U) | 0.362 (U) | 0.00109 (U) | 0.0362 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00543 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.362 (U) | 0.362 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00217 (U) |
| RES7-14-84150 | 0.0385 (U) | 0.385 (U) | 0.00116 (U) | 0.0385 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00578 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.385 (U) | 0.385 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00116 (U) | 0.00231 (U) |
| RES7-14-84161 | 0.0345 (U) | 0.345 (U) | 0.00104 (U) | 0.0345 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00519 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.345 (U) | 0.345 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00208 (U) |
| RES7-14-84140 | 0.0361 (U) | 0.361 (U) | 0.00109 (U) | 0.0361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00543 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00217 (U) |
| RES7-14-84151 | 0.0348 (U) | 0.348 (U) | 0.00105 (U) | 0.0348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00523 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.348 (U) | 0.348 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00209 (U) |
| RES7-14-85005 | 0.0344 (U) | 0.344 (U) | 0.00104 (U) | 0.0344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00518 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00207 (U) |
| RES7-14-84162 | 0.0347 (U) | 0.347 (U) | 0.00104 (U) | 0.0347 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00522 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.347 (U) | 0.347 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00209 (U) |
| RES7-14-84141 | 0.0371 (U) | 0.371 (U) | 0.00111 (U) | 0.0371 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00557 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.371 (U) | 0.371 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00223 (U) |
| RES7-14-84991 | 0.0349 (U) | 0.349 (U) | 0.00105 (U) | 0.0349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00524 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.349 (U) | 0.349 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0021 (U) |
| RES7-14-84152 | 0.0351 (U) | 0.351 (U) | 0.00105 (U) | 0.0351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00526 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.351 (U) | 0.351 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.00105 (U) | 0.0021 (U) |
| RES7-14-84163 | 0.0344 (U) | 0.344 (U) | 0.00104 (U) | 0.0344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00518 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.344 (U) | 0.344 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00104 (U) | 0.00207 (U) |
| RES7-14-84164 | 0.037 (U) | 0.37 (U) | 0.00111 (U) | 0.037 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00556 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00108 (J) | 0.00111 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00222 (U) |
| RES7-14-84142 | 0.0361 (U) | 0.361 (U) | 0.00109 (U) | 0.0361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00543 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.361 (U) | 0.361 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00109 (U) | 0.00217 (U) |
| RES7-14-84175 | 0.037 (U) | 0.37 (U) | 0.00111 (U) | 0.037 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00557 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.37 (U) | 0.37 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00223 (U) |
| RES7-14-84154 | 0.0382 (U) | 0.382 (U) | 0.00115 (U) | 0.0382 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00574 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.382 (U) | 0.382 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.00115 (U) | 0.0023 (U) |
| RES7-14-84176 | 0.0369 (U) | 0.369 (U) | 0.00111 (U) | 0.0369 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00555 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.369 (U) | 0.369 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00111 (U) | 0.00222 (U) |
| RES7-14-84155 | 0.0373 (U) | 0.373 (U) | 0.00112 (U) | 0.0373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00561 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00294 (J+) | 0.00112 (U) | 0.373 (U) | 0.373 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00112 (U) | 0.00225 (U) |
| RES7-14-84144 | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.0356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00534 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.356 (U) | 0.356 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00214 (U) |
| RES7-14-84177 | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.0355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00533 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.355 (U) | 0.355 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00107 (U) | 0.00213 (U) |

| AOC | SAMPLE ID | LOCATION ID | DEPTH (FT) | MEDIA | Uranium-234 | Uranium-235/236 | Uranium-238 |
|---|---|---|---|---|---|---|---|
| **Soil Background Value [pCi/g]** | | | | | 2.59 | 0.2 | 2.29 |
| **Qbt2,3,4 Background Value [pCi/g]** | | | | | 1.98 | 0.09 | 1.93 |
| 57-006 | RE57-14-84178 | 57-4022 | 3 to 4 | FILL | 1.21 | 0.0717 (U) | 1.32 |
| 57-006 | RE57-14-84186 | 57-4022 | 5 to 6 | FILL | 1.25 | 0.0857 | 1.19 |
| 57-006 | RE57-14-84182 | 57-4022 | 8 to 9 | QBT3 | 1.28 | 0.0555 (U) | 1.25 |
| 57-006 | RE57-14-84179 | 57-4023 | 3 to 4 | FILL | 1.31 | 0.0461 (U) | 1.33 |
| 57-006 | RE57-14-84183 | 57-4023 | 5 to 6 | QBT3 | 1.11 | 0.0708 (U) | 1.25 |
| 57-006 | RE57-14-84187 | 57-4023 | 8 to 9 | QBT3 | 1.43 | 0.0956 | 1.3 |
| 57-006 | RE57-14-84180 | 57-4024 | 3 to 4 | FILL | 1.24 | 0.0665 (U) | 1.14 |
| 57-006 | RE57-14-84184 | 57-4024 | 5 to 6 | FILL | 1.32 | 0.0752 | 1.27 |
| 57-006 | RE57-14-84188 | 57-4024 | 8 to 9 | QBT3 | 1.27 | 0.0717 | 1.32 |
| 57-006 | RE57-14-84181 | 57-4025 | 3 to 4 | FILL | 1.12 | 0.0795 | 1.11 |
| 57-006 | RE57-14-84185 | 57-4025 | 5 to 6 | FILL | 1.26 | -0.0163 (U) | 1.32 |
| 57-006 | RE57-14-84189 | 57-4025 | 8 to 9 | QBT3 | 1.22 | 0.0376 (U) | 1.29 |
| 57-007 | RE57-14-84156 | 57-4011 | 3 to 4 | QBT3 | 1.11 | 0.0702 (U) | 1.19 |
| 57-007 | RE57-14-84135 | 57-4012 | 0 to 1 | ALLH | 1.26 | 0.067 (U) | 1.32 |
| 57-007 | RE57-14-84146 | 57-4012 | 1.25 to 2.25 | ALLH | 1.24 | 0.0864 (U) | 1.41 |
| 57-007 | RE57-14-84157 | 57-4012 | 4.25 to 5.25 | QBT3 | 1.3 | 0.0472 (U) | 1.2 |
| 57-007 | RE57-14-84136 | 57-4013 | 0 to 1 | FILL | 1.27 | 0.065 (U) | 1.18 |
| 57-007 | RE57-14-84147 | 57-4013 | 1 to 2 | ALLH | 1.17 | 0.0346 (U) | 1.25 |
| 57-007 | RE57-14-84158 | 57-4013 | 4 to 5 | QBT3 | 1.46 | 0.0978 | 1.65 |
| 57-007 | RE57-14-84148 | 57-4014 | 1 to 2 | FILL | 1.17 | 0.0589 (U) | 1.27 |
| 57-007 | RE57-14-84137 | 57-4014 | 2 to 3 | QBT3 | 1.44 | 0.0642 (U) | 1.44 |
| 57-007 | RE57-14-84159 | 57-4014 | 4 to 5 | QBT3 | 1.3 | 0.083 | 1.43 |
| 57-007 | RE57-14-84149 | 57-4015 | 1.5 to 2.5 | FILL | 1.55 | 0.0848 | 1.25 |
| 57-007 | RE57-14-84138 | 57-4015 | 2.5 to 3.5 | QBT3 | 1.23 | 0.0627 (U) | 1.14 |
| 57-007 | RE57-14-84160 | 57-4015 | 4.5 to 5.5 | QBT3 | 1.18 | 0.0715 | 1.19 |
| 57-007 | RE57-14-84139 | 57-4016 | 0 to 1 | ALLH | 1.34 | 0.0768 (U) | 1.5 |
| 57-007 | RE57-14-84990 | 57-4016 | 2.5 to 3.5 | ALLH | 1.35 | 0.0861 | 1.34 |
| 57-007 | RE57-14-84150 | 57-4016 | 3 to 4 | ALLH | 1.55 | 0.0479 (U) | 1.67 |
| 57-007 | RE57-14-84161 | 57-4016 | 6 to 7 | QBT3 | 1.34 | 0.0956 | 1.37 |
| 57-007 | RE57-14-84140 | 57-4017 | 0 to 1 | ALLH | 1.09 | 0.0844 | 1.02 (J) |
| 57-007 | RE57-14-84151 | 57-4017 | 1 to 2 | ALLH | 1.37 | 0.0512 (U) | 1.33 |
| 57-007 | RE57-14-85005 | 57-4017 | 2.5 to 3.5 | QBT3 | 1.3 | 0.0577 | 1.4 |
| 57-007 | RE57-14-84162 | 57-4017 | 4 to 5 | QBT3 | 1.51 | 0.11 | 1.52 |
| 57-007 | RE57-14-84141 | 57-4018 | 0 to 1 | FILL | 1.33 | 0.0634 (U) | 1.28 |
| 57-007 | RE57-14-84991 | 57-4018 | 2.5 to 3.5 | ALLH | 1.18 | 0.0433 (U) | 1.26 |
| 57-007 | RE57-14-84152 | 57-4018 | 4.4 to 5.4 | ALLH | 1.34 | 0.0835 | 1.54 |
| 57-007 | RE57-14-84163 | 57-4018 | 7.4 to 8.4 | QBT3 | 1.16 | 0.0437 (U) | 1.14 |
| 57-007 | RE57-14-84164 | 57-4019 | 0 to 1 | ALLH | 1.37 | 0.0637 (U) | 1.39 |
| 57-007 | RE57-14-84142 | 57-4019 | 1.5 to 2.5 | ALLH | 1.31 | 0.0999 | 1.21 |
| 57-007 | RE57-14-84175 | 57-4019 | 4.5 to 5.5 | QBT3 | 1.34 | 0.115 | 1.59 |
| 57-007 | RE57-14-84154 | 57-4020 | 2.5 to 3.5 | ALLH | 1.26 | 0.0608 (U) | 1.24 |
| 57-007 | RE57-14-84176 | 57-4020 | 5.5 to 6.5 | QBT3 | 1.48 | 0.0896 | 1.66 |
| 57-007 | RE57-14-84155 | 57-4021 | 0 to 1 | ALLH | 1.28 | 0.083 (U) | 1.21 |
| 57-007 | RE57-14-84144 | 57-4021 | 4.5 to 5.5 | ALLH | 1.46 | 0.0799 (U) | 1.27 |
| 57-007 | RE57-14-84177 | 57-4021 | 6.5 to 7.5 | QBT3 | 1.32 | 0.076 | 1.3 |

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

ADEP

COC/Lab Request #: 2015-88



**Client Contact:**

**Lab Agreement # :** 126310011

**Project Number :** ADEP

**Site Name:** Los Alamos National Laboratory

**Analysis Turnaround Time:**

24 Hour - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☐
Other - ☒ 10 days

**Rad Screening Info:** Yes, Below Background

**Lab Reporting Limit Type:** Sample Quantitation Limit

**Special Instructions:**

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | As |
|---|---|---|---|---|
| RE57-15-88101 | Oct 15 2014 | 11:44 | SO | 1 |
| RE57-15-88103 | Oct 15 2014 | 13:00 | SO | 1 |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | Melissa Martz | 10/16/14 3:00 | | | |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 6952

**EVENT NAME:** TA-57 Fenton Hill - Additional Sampling - 57-1 and 57-2

**SAMPLE ID:** RE57-15-88101

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 10/15/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 1144 | MEDIA: | | AIIH |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4027 | OK | FIELD PREP: | NA | |
| LOCATION TYPE: | BH | OK | FIELD QC TYPE: | REG | |
| TOP DEPTH: | | 2 ft | SAMPLE USAGE: | INV | |
| BOTTOM DEPTH: | | 3 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | As+ | 125 ML POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** Sample 0-1 ft bgs above tuff. tuff encountered at 3 ft bgs 10 Day Turn

**LOCATION COMMENTS:** light brown, dry, silty sand. Minor weathered tuff. (abt 3)

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 221 dpm

Beta/Gamma 1846 dpm

PID Ambient Reading = 0.0 ppm

**COLLECTED BY (PRINT)** M Shendo

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Brad Pineapple | 10/15/2014 1510 | M. Martin | 10/15/14 1510 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 10/06/2014

Background: $\alpha = 21.8$ dpm
$\beta = 1466$ dpm

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 6952

**EVENT NAME:** TA-57 Fenton Hill - Additional Sampling - 57-1 and 57-2

**SAMPLE ID:** RE57-15-88103

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 10/15/2014 | FIELD MATRIX: | 10/15/14 | R |
| TIME COLLECTED (HH:MM): | | 1300 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4027 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | BH | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 5 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 6 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | As- | 125 ML POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** 2-3 ft bgs into tuff. Tuff hit at 3 ft bgs

**LOCATION COMMENTS:** Light gray, sanidine and quartz abundant.

**FIELD PARAMETERS:** 10 Day Turn

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 210 dpm

Beta/Gamma 1929 dpm

PID Ambient Reading = 0.1 ppm

**COLLECTED BY (PRINT)** P. Balcom

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) B Rappe<br>(Signature) B Rappe | 10/15/2014 1510 | (Printed Name) M. Martz<br>(Signature) | 10/15/14 1510 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 10/06/2014

Background: α = 21.8 dpm
β = 1466 dpm

# DATA VALIDATION REPORT

Chain Of Custody No. 2015-88

1. Distribution Of Samples In EDD.

| SDG | Analytical Method | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks |
|---|---|---|---|---|---|---|
| 359235 | SW-846:6020 | 2 | | | | |

| SDG | Analytical Method | Analysis Lot ID | Prep Lot ID | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks | Method Blanks | Matrix Spikes | Matrix Spike Dups | Analytical Spikes | Post-Digestion Spikes | Lab Control Samples | Lab Control Sample Dups | Blank Spike | Blank Spike Dups | Lab Duplicates | Storage Blanks | Preparation Blanks | Reagent Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 359235 | SW-846:6020 | 1428805 | 1428804 | 2 | | | | | 1 | 1 | | | | 1 | | | | 1 | | | |

2. Distribution Of Analytes In EDD.

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:6020 | INORGANIC | LCS | 1203191088 | LCS | 0 | 0 | 1 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203191087 | MB | 1 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-15-88101 | 1203191089 | DUP | 1 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-15-88101 | 1203191090 | MS | 0 | 0 | 1 | 0 |
| SW-846:6020 | INORGANIC | RE57-15-88101 | 359235001 | REG | 1 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-15-88103 | 359235002 | REG | 1 | 0 | 0 | 0 |

3. Are any analytes missing?

No.

4. Were any holding times exceeded?

No.

5. Any contaminants in blanks?

# DATA VALIDATION REPORT

No.

6. Any surrogate recoveries outside the control limits?

No.

7. Any MS/MSD recoveries or RPDs outside the control limits?

No.

8. Any LCS/LCSD or BS/BSD recoveries or RPDs outside the control limits?

No.

9. Any Field Duplicate RPDs outside the desired limits?

No.

10. Any Lab Duplicate RPDs outside the desired limits?

| Field Sample ID | Lab Sample ID | LD Lab Sample ID | Analytical Method | Parameter Name | Sample Matrix | Lab Result | LD Lab Result | Lab Units | Detect Flag | LD Detect Flag | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-15-88101 | 359235001 | 1203191089 | SW-846:6020 | Arsenic | SO | 1750 | 2700 | ug/kg | Y | Y | 42.8 | 20 |

11. Any required reporting limits exceeded?

No.

12. Additional Validator's Comments.

13. Display Flagged Data.

# DATA VALIDATION REPORT

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4027 | 2015-88 | RE57-15-88101 | REG | INIT | INORGANIC | SW-846:6020 | Arsenic | | J | I10a | Y | 1750 | ug/kg | 1.75 | mg/kg | | | SD | 10/15/2014 | | 1428805 | VAL | Y |

| Reason Code | Description |
|---|---|
| I10a | The sample and the duplicate sample results were >=5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples. |
| NQ | The analytical laboratory did not qualifiy the analyte as not detected and/or any other standard qualifire. The analyte is detected in the sample. |

14. Usable Result Count.

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-15-88101 | 57-4027 | REG | SW-846:6020 | 0 | 1 |
| RE57-15-88103 | 57-4027 | REG | SW-846:6020 | 0 | 1 |

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

October 24, 2014

Mr. Keith Greene
Los Alamos National Laboratory
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER
Work Order: 359235
SDG: 2015-88

Dear Mr. Greene:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on October 17, 2014, and analyzed for Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Hope Taylor for
Valerie Davis
Project Manager

Chain of Custody: 2015-88
Enclosures

**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Work Order #: 359235**
**SDG: 2015-88**

Table of Contents

Case Narrative.....1

Chain of Custody and Supporting Documentation.....4

Data Review Qualifier Flag Definition Sheet.....12

Metals Analysis.....15

Case Narrative.....16

Sample Data Summary.....21

Quality Control Summary.....25

# Case Narrative

**Case Narrative for**
**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Workorder #: 359235**
**SDG # : 2015-88**

**October 24, 2014**

**Laboratory Identification:**

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on October 17, 2014 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C). Shipping container temperatures were checked, documented, and within specifications. There are no additional comments concerning sample receipt.

**Sample Identification** The laboratory received the following samples:

| Laboratory ID | Client ID |
|---|---|
| 359235001 | RE57-15-88101 |
| 359235002 | RE57-15-88103 |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package**

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Hope Taylor for
Valerie Davis
Project Manager

**List of current GEL Certifications as of 24 October 2014**

| State | Certification |
|---|---|
| Alaska | UST−110 |
| Arkansas | 88−0651 |
| CLIA | 42D0904046 |
| California NELAP | 01151CA |
| Colorado | SC00012 |
| Connecticut | PH−0169 |
| Delaware | SC000122013−10 |
| DoD ELAP/ ISO17025 A2LA | 2567.01 |
| Florida NELAP | E87156 |
| Foreign Soils Permit | P330−12−00283, P330−12−00284 |
| Georgia | SC00012 |
| Georgia SDWA | 967 |
| Hawaii | SC000122013−10 |
| Idaho Chemistry | SC00012 |
| Idaho Radiochemistry | SC00012 |
| Illinois NELAP | 200029 |
| Indiana | C−SC−01 |
| Kansas NELAP | E−10332 |
| Kentucky | 90129 |
| Louisiana NELAP | 03046 (AI33904) |
| Louisiana SDWA | LA130005 |
| Maryland | 270 |
| Massachusetts | M−SC012 |
| Michigan | 9976 |
| Mississippi | SC000122013−10 |
| Nebraska | NE−OS−26−13 |
| Nevada | SC000122014−1 |
| New Hampshire NELAP | 2054 |
| New Jersey NELAP | SC002 |
| New Mexico | SC00012 |
| New York NELAP | 11501 |
| North Carolina | 233 |
| North Carolina SDWA | 45709 |
| Oklahoma | 9904 |
| Pennsylvania NELAP | 68−00485 |
| Plant Material Permit | PDEP−12−00260 |
| South Carolina Chemistry | 10120001 |
| South Carolina GVL | 23611001 |
| South Carolina Radiochemi | 10120002 |
| Tennessee | TN 02934 |
| Texas NELAP | T104704235−14−9 |
| Utah NELAP | SC000122014−16 |
| Vermont | VT87156 |
| Virginia NELAP | 460202 |
| Washington | C780−12 |
| Wisconsin | 999887790 |

# Chain of Custody and Supporting Documentation

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

359235 ADEP

COC/Lab Request #: 2015-88

Page 1 of 1

**Client Contact:**

**Lab Agreement #:** 126310011
**Project Number:** ADEP
**Analysis Turnaround Time:**
24 Hour - ☐ Other - ☒
7 Day - ☐ **10 days**
14 Day - ☐
21 Day - ☐
28 Day - ☐

**Site Name:** Los Alamos National Laboratory

**Rad Screening Info:** Yes, Below Background

**Lab Reporting Limit Type:** Sample Quantitation Limit

**Special Instructions:**

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | As-Rec |
|---|---|---|---|---|
| RE57-15-88101 | Oct 15 2014 | 11:44 | SO | 1 |
| RE57-15-88103 | Oct 15 2014 | 13:00 | SO | 1 |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| | Melissa Martz | 10/16/14 3:20 | | H Taylor | 10/17/14 0900 |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

GEL Laboratories LLC

# SAMPLE RECEIPT & REVIEW FORM

| | |
|---|---|
| Client: LANL | SDG/AR/COC/Work Order: 2015-88 |
| Received By: H. Taylor | Date Received: 10/7/14 |

| Suspected Hazard Information | Yes | No | *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. |
|---|---|---|---|
| COC/Samples marked as radioactive? | | ✓ | Maximum Net Counts Observed* (Observed Counts - Area Background Counts): |
| Classified Radioactive II or III by RSO? | | ✓ | If yes, Were swipes taken of sample contatiners < action levels? 0cpm |
| COC/Samples marked containing PCBs? | | ✓ | |
| Package, COC, and/or Samples marked as beryllium or asbestos containing? | | ✓ | If yes, samples are to be segregeated as Safety Controlled Samples, and opened by the GEL Safety Group. |
| Shipped as a DOT Hazardous? | | ✓ | Hazard Class Shipped: UN#: |
| Samples identified as Foreign Soil? | | ✓ | |

| | Sample Receipt Criteria | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items) |
|---|---|---|---|---|---|
| 1 | Shipping containers received intact and sealed? | ✓ | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 2 | Samples requiring cold preservation within (0 ≤ 6 deg. C)?* | ✓ | | | Preservation Method: Ice bags Blue ice Dry ice None Other (describe) *all temperatures are recorded in Celsius |
| 2a | Daily check performed and passed on IR temperature gun? | ✓ | | | Temperature Device Serial #: 130532792 Secondary Temperature Device Serial # (If Applicable): |
| 3 | Chain of custody documents included with shipment? | ✓ | | | |
| 4 | Sample containers intact and sealed? | ✓ | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 5 | Samples requiring chemical preservation at proper pH? | ✓ | | | Sample ID's, containers affected and observed pH: If Preservation added, Lot#: |
| 6 | VOA vials free of headspace (defined as < 6mm bubble)? | ✓ | | | Sample ID's and containers affected: |
| 7 | Are Encore containers present? | | | ✓ | (If yes, immediately deliver to Volatiles laboratory) |
| 8 | Samples received within holding time? | ✓ | | | ID's and tests affected: |
| 9 | Sample ID's on COC match ID's on bottles? | ✓ | | | Sample ID's and containers affected: |
| 10 | Date & time on COC match date & time on bottles? | ✓ | | | Sample ID's affected: |
| 11 | Number of containers received match number indicated on COC? | ✓ | | | Sample ID's affected: |
| 12 | Are sample containers identifiable as GEL provided? | | | ✓ | |
| 13 | COC form is properly signed in relinquished/received sections? | ✓ | | | |
| 14 | Carrier and tracking number. | | | | Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other<br>5908 1777 9090-4 5908 1777 9079-4<br>9080-4 9105-4<br>9116-5 9057-4<br>9127-4 9046-8<br>9068-4 |

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials HT Date 10/7/14 Page 1 of 1

GL-CHL-SR-001

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

4

CHARLESTON SC 29407
(843) 566-8171
REF: MR1A015AGWF0

FedEx Express

2 of 3
MPS# 0263 5908 1777 9090
Mstr# 5908 1777 9080 0201

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part# 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

4

CHARLESTON SC 29407
(843) 566-8171
REF: MR1A015AGWF0

FedEx Express

1 of 3
TRK# 0201 5908 1777 9080
## MASTER ##

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part# 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

5

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

FedEx Express

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5908 1777 9116

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 41.0 LB MAN
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

4C

CHARLESTON SC 29407
(843) 556-8171
REF: MR0A00EC6000

FedEx Express

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5908 1777 9127

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 44.0 LB MA
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

4C

FedEx Express

2 of 3
MPS# 0263 5908 1777 9068
Mstr# 5908 1777 9057

0201

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

4

FedEx Express

3 of 3
MPS# 0263 5908 1777 9079
Mstr# 5908 1777 9057

0201

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

4C

FedEx Express

3 of 3
MPS# 0263 5908 1777 9105
Mstr# 5908 1777 9080 0201

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

4C

FedEx Express

1 of 3
TRK# 0201 5908 1777 9057
## MASTER ##

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 16OCT14
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2806

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 3P010AXA3300053P01

18

FedEx Express

TRK# 0201 5908 1777 9046

FRI - 17 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11

# Data Review Qualifier Flag Definition Sheet

## Data Review Qualifier Definitions

| Qualifier | Explanation |
|---|---|
| * | A quality control analyte recovery is outside of specified acceptance criteria |
| ** | Analyte is a surrogate compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL |
| A | The TIC is a suspected aldol-condensation product |
| B | Target analyte was detected in the associated blank |
| B | Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL |
| BD | Results are either below the MDC or tracer recovery is low |
| C | Analyte has been confirmed by GC/MS analysis |
| D | Results are reported from a diluted aliquot of the sample |
| d | 5-day BOD-The 2:1 depletion requirement was not met for this sample |
| E | Organics-Concentration of the target analyte exceeds the instrument calibration range |
| E | Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria |
| H | Analytical holding time was exceeded |
| h | Preparation or preservation holding time was exceeded |
| J | Value is estimated |
| N | Metals-The Matrix spike sample recovery is not within specified control limits |
| N | Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more |
| ND | Analyte concentration is not detected above the reporting limit |
| UI | Gamma Spectroscopy-Uncertain identification |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | QC Samples were not spiked with this compound |
| Z | Paint Filter Test-Particulates passed through the filter, however no free liquids were observed. |

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

# Metals Analysis

# Case Narrative

**Metals Fractional Narrative**
**ARS International, LLC (ARSL)**
**SDG 2015-88**

| **Sample ID** | **Client ID** |
|---|---|
| 359235001 | RE57-15-88101 |
| 359235002 | RE57-15-88103 |
| 1203191087 | Method Blank (MB)**ICP-MS** |
| 1203191088 | Laboratory Control Sample (LCS) |
| 1203191091 | 359235001(RE57-15-88101L) Serial Dilution (SD) |
| 1203191089 | 359235001(RE57-15-88101D) Sample Duplicate (DUP) |
| 1203191090 | 359235001(RE57-15-88101S) Matrix Spike (MS) |

**Sample Analysis**

The samples in this SDG were analyzed on a "dry weight" basis.

**Method/Analysis Information**

| | |
|---|---|
| **Analytical Batch:** | 1428805 |
| **Prep Batch :** | 1428804 |
| **Standard Operating Procedures:** | GL-MA-E-014 REV# 25 and GL-MA-E-009 REV# 24 |
| **Analytical Method:** | SW846 3050B/6020A |
| **Prep Method :** | SW846 3050B |

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**System Configuration**

The Metals analysis - ICPMS was performed on a PerkinElmer NexION 300X ICPMS. The instrument is equipped with a ESI PFA-ST nebulizer, quadrupole mass spectrometer, dual mode electron multiplier detector, and Kinetic Energy Discrimination (KED) technology. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1600W power, 16 L/m for the plasma, and 1.2 L/m auxiliary gases, and 1.12 L/min carrier gas flow.

**Calibration Information**

**Instrument Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**CRDL/PQL Requirements**

The CRDL/PQL standard recoveries met the referenced advisory control limits.

**ICSA/ICSAB Statement**
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blanks (CCB) Requirements**
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**
The following sample was selected as the quality control (QC) sample for this SDG: 359235001 (RE57-15-88101).

**Matrix Spike (MS) Recovery Statement**
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable analytes met the acceptance criteria.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

**Serial Dilution % Difference Statement**
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the established acceptance percent difference criteria.

**Technical Information**

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Sample Dilutions**

Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times.

**Preparation Information**
The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. Data exception reports were included behind the Case Narrative or in the Miscellaneous Data section of this data package. A data exception report was not required for this SDG.

**Additional Comments**
Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:** Nik-Cole A. Elmore **Date:** 10-24-14

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
## for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2015-88  GEL Work Order: 359235

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Nick-Cole A. Elmore 10-24-14

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2015−88 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 359235001 **BASIS:** Dry Weight **DATE COLLECTED** 15−OCT−14

**CLIENT ID:** RE57−15−88101 **LEVEL:** Low **DATE RECEIVED** 17−OCT−14

**MATRIX:** SO **%SOLIDS:** 95.2

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7440−38−2 | Arsenic | 1750 | ug/kg | | 200 | 1000 | 1000 | 2 | MS | PRB | 10/24/14 09:32 | 141023−1 | 1428805 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1428805 | 1428804 | SW846 3050B | 0.524 | g | 50 | mL | 10/21/14 | EXF1 |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2015−88 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 359235002 **BASIS:** Dry Weight **DATE COLLECTED** 15−OCT−14

**CLIENT ID:** RE57−15−88103 **LEVEL:** Low **DATE RECEIVED** 17−OCT−14

**MATRIX:** SO **%SOLIDS:** 96.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7440−38−2 | Arsenic | 1780 | ug/kg | | 195 | 976 | 976 | 2 | MS | PRB | 10/24/14 09:39 | 141023−1 | 1428805 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1428805 | 1428804 | SW846 3050B | 0.533 | g | 50 | mL | 10/21/14 | EXF1 |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

# Quality Control Summary

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2015−88

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| 1203191087 | | | | | | | | |
| | Arsenic | 199 | ug/kg | +/−994 | U | MS | 199 | 994 |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2015−88 **Client ID** RE57−15−88101S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 95.2

**Sample ID:** 359235001 **Spike ID:** 1203191090

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | 75−125 | 6410 | | 1750 | | 5040 | 92.4 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2015−88 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−15−88101D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 359235001 **Duplicate ID:** 1203191089 **Percent Solids for Dup:** 95.2

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | +/−1010 | 1750 | | 2700 | | 42.8 | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2015−88

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203191088 | | | | | | | | |
| | Arsenic | ug/kg | 137000 | 140000 | | 102 | 83.2−117.5 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2015−88 **Client ID** RE57−15−88101L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 359235001 **Serial Dilution ID:** 1203191091

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 8.73 | | 10.7 | J | 22 | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

ADEP

COC/Lab Request #: 2015-82



**Client Contact:**

**Lab Agreement # :** 126310011

**Project Number :** ADEP

**Site Name:** Los Alamos National Laboratory

**Analysis Turnaround Time:**

24 Hour - ☐ Other - ☒
7 Day - ☐ **10 days**
14 Day - ☐
21 Day - ☐
28 Day - ☐

**Rad Screening Info:** Yes, Below Background

**Lab Reporting Limit Type:** Sample Quantitation Limit

**Special Instructions:**

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | As[redacted] |
|---|---|---|---|---|
| RE57-15-88100 | Oct 14 2014 | 14:07 | SO | 1 |
| RE57-15-88102 | Oct 14 2014 | 13:07 | SO | 1 |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| | Melissa Martin | 10/15/14 3:00 | | | |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 6952

**EVENT NAME:** TA-57 Fenton Hill - Additional Sampling - 57-1 and 57-2

**SAMPLE ID:** RE57-15-88100

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 10/14/2014 | FIELD MATRIX: | ~~S~~ R 10/14/14 | R |
| TIME COLLECTED (HH:MM): | | 1407 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4026 | OK | FIELD PREP: | NA | |
| LOCATION TYPE: | BH | OK | FIELD QC TYPE: | REG | |
| TOP DEPTH: | | 6.5 ft | SAMPLE USAGE: | INV | |
| BOTTOM DEPTH: | | 7.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | As+ | 125 ML POLY | 1 | ICE | Y | 10 day turn |

**SAMPLE COMMENTS:** 57-1 (2-3 ft into tuff) - tuff at 4.5 ft bgs

**LOCATION COMMENTS:** Qbt3 - light pink to light gray Sanidine and Quartz

10 Day Turn

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha ~~10.73~~ 9 dpm

Beta/Gamma ~~3540~~ 2510 dpm

PID Ambient Reading = 0.0 ppm

**COLLECTED BY (PRINT)** BRapp

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) BRapp<br>(Signature) Bonapp | 10/14/14 1540 | (Printed Name) M. Martz<br>(Signature) | 10/14/14 1540 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 10/07/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 6952 **EVENT NAME:** TA-57 Fenton Hill - Additional Sampling - 57-1 and 57-2

**SAMPLE ID:** RE57-15-88102 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 10/14/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 1307 | MEDIA: | | AIH |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4026 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | BH | OK ~~3.5 ft~~ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | ~~4~~ 3.5 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 4.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | As- | 125 ML POLY | 1 | ICE | Y | 10 Day turn |

SAMPLE COMMENTS: 57-1 (0-1 ft above tuff) moist, med-dark brown, some organics, sandy silt

LOCATION COMMENTS: Tuff at 4.5 ft bgs

10 Day Turn

FIELD PARAMETERS: (Qbt 3)

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha 37 dpm PID Ambient Reading = 0.0 ppm

Beta/Gamma 1956 dpm

COLLECTED BY (PRINT) B. Rappe / P. Balcom

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| B Rappe / Bonapp | 10/14/14 1540 | [illegible] | 10/14/14 1540 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 10/06/2014

# DATA VALIDATION REPORT

Chain Of Custody No. 2015-82

1. Distribution Of Samples In EDD.

| SDG | Analytical Method | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks |
|---|---|---|---|---|---|---|
| 359157 | SW-846:6020 | 2 | | | | |

| SDG | Analytical Method | Analysis Lot ID | Prep Lot ID | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks | Method Blanks | Matrix Spikes | Matrix Spike Dups | Analytical Spikes | Post-Digestion Spikes | Lab Control Samples | Lab Control Sample Dups | Blank Spike | Blank Spike Dups | Lab Duplicates | Storage Blanks | Preparation Blanks | Reagent Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 359157 | SW-846:6020 | 1428107 | 1428106 | 2 | | | | | 1 | 1 | | | | 1 | | | | 1 | | | |

2. Distribution Of Analytes In EDD.

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:6020 | INORGANIC | LCS | 1203189453 | LCS | 0 | 0 | 1 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203189452 | MB | 1 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-15-88100 | 1203189454 | DUP | 1 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-15-88100 | 1203189455 | MS | 0 | 0 | 1 | 0 |
| SW-846:6020 | INORGANIC | RE57-15-88100 | 359157001 | REG | 1 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-15-88102 | 359157002 | REG | 1 | 0 | 0 | 0 |

3. Are any analytes missing?

No.

4. Were any holding times exceeded?

No.

5. Any contaminants in blanks?

No.

6. Any surrogate recoveries outside the control limits?

No.

7. Any MS/MSD recoveries or RPDs outside the control limits?

No.

8. Any LCS/LCSD or BS/BSD recoveries or RPDs outside the control limits?

No.

9. Any Field Duplicate RPDs outside the desired limits?

No.

10. Any Lab Duplicate RPDs outside the desired limits?

No.

11. Any required reporting limits exceeded?

No.

12. Additional Validator's Comments.

13. Display Flagged Data.

None.

| Reason Code | Description |
|---|---|

# DATA VALIDATION REPORT

| Reason Code | Description |
|---|---|
| NQ | The analytical laboratory did not qualifiy the analyte as not detected and/or any other standard qualifire. The analyte is detected in the sample. |

14. Usable Result Count.

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-15-88100 | 57-4026 | REG | SW-846:6020 | 0 | 1 |
| RE57-15-88102 | 57-4026 | REG | SW-846:6020 | 0 | 1 |

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

October 24, 2014

Mr. Keith Greene
Los Alamos National Laboratory
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER
Work Order: 359157
SDG: 2015-82

Dear Mr. Greene:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on October 16, 2014, and analyzed for Metals. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Hope Taylor for
Valerie Davis
Project Manager

Chain of Custody: 2015-82
Enclosures

**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Work Order #: 359157**
**SDG: 2015-82**

Table of Contents

Case Narrative.....1

Chain of Custody and Supporting Documentation.....4

Data Review Qualifier Flag Definition Sheet.....9

Metals Analysis.....12

Case Narrative.....13

Sample Data Summary.....18

Quality Control Summary.....22

# Case Narrative

**Case Narrative for**
**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Workorder #: 359157**
**SDG # : 2015-82**

**October 24, 2014**

**Laboratory Identification:**

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on October 16, 2014 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C). Shipping container temperatures were checked, documented, and within specifications. There are no additional comments concerning sample receipt.

**Sample Identification** The laboratory received the following samples:

| Laboratory ID | Client ID |
|---|---|
| 359157001 | RE57-15-88100 |
| 359157002 | RE57-15-88102 |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package**

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Metals.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Hope Taylor for
Valerie Davis
Project Manager

**List of current GEL Certifications as of 24 October 2014**

| State | Certification |
|---|---|
| Alaska | UST−110 |
| Arkansas | 88−0651 |
| CLIA | 42D0904046 |
| California NELAP | 01151CA |
| Colorado | SC00012 |
| Connecticut | PH−0169 |
| Delaware | SC000122013−10 |
| DoD ELAP/ ISO17025 A2LA | 2567.01 |
| Florida NELAP | E87156 |
| Foreign Soils Permit | P330−12−00283, P330−12−00284 |
| Georgia | SC00012 |
| Georgia SDWA | 967 |
| Hawaii | SC000122013−10 |
| Idaho Chemistry | SC00012 |
| Idaho Radiochemistry | SC00012 |
| Illinois NELAP | 200029 |
| Indiana | C−SC−01 |
| Kansas NELAP | E−10332 |
| Kentucky | 90129 |
| Louisiana NELAP | 03046 (AI33904) |
| Louisiana SDWA | LA130005 |
| Maryland | 270 |
| Massachusetts | M−SC012 |
| Michigan | 9976 |
| Mississippi | SC000122013−10 |
| Nebraska | NE−OS−26−13 |
| Nevada | SC000122014−1 |
| New Hampshire NELAP | 2054 |
| New Jersey NELAP | SC002 |
| New Mexico | SC00012 |
| New York NELAP | 11501 |
| North Carolina | 233 |
| North Carolina SDWA | 45709 |
| Oklahoma | 9904 |
| Pennsylvania NELAP | 68−00485 |
| Plant Material Permit | PDEP−12−00260 |
| South Carolina Chemistry | 10120001 |
| South Carolina GVL | 23611001 |
| South Carolina Radiochemi | 10120002 |
| Tennessee | TN 02934 |
| Texas NELAP | T104704235−14−9 |
| Utah NELAP | SC000122014−16 |
| Vermont | VT87156 |
| Virginia NELAP | 460202 |
| Washington | C780−12 |
| Wisconsin | 999887790 |

# Chain of Custody and Supporting Documentation

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

ADEP

359157

COC/Lab Request #: 2015-82

Page 1 of 1

Client Contact:

Lab Agreement # : 126310011

Project Number : ADEP

Analysis Turnaround Time:
24 Hour - ☐ Other - ☒
7 Day - ☐ 10 days
14 Day - ☐
21 Day - ☐
28 Day - ☐

Site Name: Los Alamos National Laboratory

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | As |
|---|---|---|---|---|
| RE57-15-88100 | Oct 14 2014 | 14:07 | SO | 1 |
| RE57-15-88102 | Oct 14 2014 | 13:07 | SO | 1 |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| | Melissa Martinez | 10/15/14 3:00 | Mack | Sharita Mack | 10/16/14 9:10 |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

GEL Laboratories LLC

# SAMPLE RECEIPT & REVIEW FORM

| | |
|---|---|
| Client: LANL | SDG/AR/COC/Work Order: 2015-82 |
| Received By: S. Mack / H. Taylor | Date Received: 10/16/14 |

| Suspected Hazard Information | Yes | No | *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. |
|---|---|---|---|
| COC/Samples marked as radioactive? | | ✓ | Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0cpm |
| Classified Radioactive II or III by RSO? | | ✓ | If yes, Were swipes taken of sample contatiners < action levels? |
| COC/Samples marked containing PCBs? | | ✓ | |
| Package, COC, and/or Samples marked as beryllium or asbestos containing? | | ✓ | If yes, samples are to be segregeated as Safety Controlled Samples, and opened by the GEL Safety Group. |
| Shipped as a DOT Hazardous? | | ✓ | Hazard Class Shipped: UN#: |
| Samples identified as Foreign Soil? | | ✓ | |

| | Sample Receipt Criteria | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items) |
|---|---|---|---|---|---|
| 1 | Shipping containers received intact and sealed? | ✓ | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 2 | Samples requiring cold preservation within (0 ≤ 6 deg. C)?* | ✓ | | | Preservation Method: Ice bags Blue ice Dry ice None Other (describe) *all temperatures are recorded in Celsius |
| 2a | Daily check performed and passed on IR temperature gun? | ✓ | | | Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 130532792 |
| 3 | Chain of custody documents included with shipment? | ✓ | | | |
| 4 | Sample containers intact and sealed? | ✓ | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 5 | Samples requiring chemical preservation at proper pH? | ✓ | | | Sample ID's, containers affected and observed pH: If Preservation added, Lot#: |
| 6 | VOA vials free of headspace (defined as < 6mm bubble)? | ✓ | | | Sample ID's and containers affected: |
| 7 | Are Encore containers present? | | | ✓ | (If yes, immediately deliver to Volatiles laboratory) |
| 8 | Samples received within holding time? | ✓ | | | ID's and tests affected: |
| 9 | Sample ID's on COC match ID's on bottles? | ✓ | | | Sample ID's and containers affected: |
| 10 | Date & time on COC match date & time on bottles? | ✓ | | | Sample ID's affected: |
| 11 | Number of containers received match number indicated on COC? | ✓ | | | Sample ID's affected: |
| 12 | Are sample containers identifiable as GEL provided? | | | ✓ | |
| 13 | COC form is properly signed in relinquished/received sections? | ✓ | | | |
| 14 | Carrier and tracking number. | | | | Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other<br>5908 1777 9002-4<br>↓ ↓ 8999-4<br>9013-3<br>9024-2 |

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials HH Date 10/16/14 Page 1 of 1

GL-CHL-SR-001

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15OCT14
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2805

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

4C

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

FedEx Express

2 of 2
MPS# 0263 5908 1777 9002
Mstr# 5908 1777 8999

0201

THU - 16 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15OCT14
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2805

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

4C

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

FedEx Express

1 of 2
TRK# 0201 5908 1777 8999
## MASTER ##

THU - 16 OCT 10:30A
PRIORITY OVERNIGHT

X7 CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15OCT14
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2805

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MROA00EC60Q0

3c

FedEx Express

1 of 2
TRK# 0201 5908 1777 9013
## MASTER ##
X7 CHSA

THU - 16 OCT 10:30A
PRIORITY OVERNIGHT

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15OCT14
ACTWGT: 46.0 LB MAN
CAD: 0014176/CAFE2805

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MROA00EC60Q0

2e

FedEx Express

2 of 2
MPS# 0263 5908 1777 9024
Mstr# 5908 1777 9013
X7 CHSA

0201

THU - 16 OCT 10:30A
PRIORITY OVERNIGHT

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

# Data Review Qualifier Flag Definition Sheet

## Data Review Qualifier Definitions

| Qualifier | Explanation |
|---|---|
| * | A quality control analyte recovery is outside of specified acceptance criteria |
| ** | Analyte is a surrogate compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL |
| A | The TIC is a suspected aldol-condensation product |
| B | Target analyte was detected in the associated blank |
| B | Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL |
| BD | Results are either below the MDC or tracer recovery is low |
| C | Analyte has been confirmed by GC/MS analysis |
| D | Results are reported from a diluted aliquot of the sample |
| d | 5-day BOD-The 2:1 depletion requirement was not met for this sample |
| E | Organics-Concentration of the target analyte exceeds the instrument calibration range |
| E | Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria |
| H | Analytical holding time was exceeded |
| h | Preparation or preservation holding time was exceeded |
| J | Value is estimated |
| N | Metals-The Matrix spike sample recovery is not within specified control limits |
| N | Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more |
| ND | Analyte concentration is not detected above the reporting limit |
| UI | Gamma Spectroscopy-Uncertain identification |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | QC Samples were not spiked with this compound |
| Z | Paint Filter Test-Particulates passed through the filter, however no free liquids were observed. |

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

# Metals Analysis

# Case Narrative

**Metals Fractional Narrative**
**ARS International, LLC (ARSL)**
**SDG 2015-82**

| **Sample ID** | **Client ID** |
|---|---|
| 359157001 | RE57-15-88100 |
| 359157002 | RE57-15-88102 |
| 1203189452 | Method Blank (MB)**ICP-MS** |
| 1203189453 | Laboratory Control Sample (LCS) |
| 1203189456 | 359157001(RE57-15-88100L) Serial Dilution (SD) |
| 1203189454 | 359157001(RE57-15-88100D) Sample Duplicate (DUP) |
| 1203189455 | 359157001(RE57-15-88100S) Matrix Spike (MS) |

**Sample Analysis**

The samples in this SDG were analyzed on a "dry weight" basis.

**Method/Analysis Information**

| | |
|---|---|
| **Analytical Batch:** | 1428107 |
| **Prep Batch :** | 1428106 |
| **Standard Operating Procedures:** | GL-MA-E-014 REV# 25 and GL-MA-E-009 REV# 24 |
| **Analytical Method:** | SW846 3050B/6020A |
| **Prep Method :** | SW846 3050B |

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**System Configuration**

The Metals analysis - ICPMS was performed on a PerkinElmer NexION 300X ICPMS. The instrument is equipped with a ESI PFA-ST nebulizer, quadrupole mass spectrometer, dual mode electron multiplier detector, and Kinetic Energy Discrimination (KED) technology. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1600W power, 16 L/m for the plasma, and 1.2 L/m auxiliary gases, and 1.12 L/min carrier gas flow.

**Calibration Information**

**Instrument Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**CRDL/PQL Requirements**

The CRDL standard recoveries for SW846 6020A met the advisory control limits with the exception of uranium. Client sample concentrations were greater than two times the PQL; therefore the data were not adversely affected.

**ICSA/ICSAB Statement**
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blanks (CCB) Requirements**
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

## Quality Control (QC) Information

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**
The following sample was selected as the quality control (QC) sample for this SDG: 359157001 (RE57-15-88100).

**Matrix Spike (MS) Recovery Statement**
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable analytes met the acceptance criteria.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

**Serial Dilution % Difference Statement**
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the established acceptance percent difference criteria.

## Technical Information

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Sample Dilutions**
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times.

**Preparation Information**
The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. Data exception reports were included behind the Case Narrative or in the Miscellaneous Data section of this data package. A data exception report was not required for this SDG.

**Additional Comments**
Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:**_____ **Date:** 10-24-14

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
## for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2015-82  GEL Work Order: 359157

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Nick Cole A. Elmore 10-24-14

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2015−82 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 359157001 **BASIS:** Dry Weight **DATE COLLECTED** 14−OCT−14

**CLIENT ID:** RE57−15−88100 **LEVEL:** Low **DATE RECEIVED** 16−OCT−14

**MATRIX:** SO **%SOLIDS:** 94

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7440−38−2 | Arsenic | 5120 | ug/kg | | 212 | 1060 | 1060 | 2 | MS | PRB | 10/23/14 23:43 | 141023−1 | 1428107 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1428107 | 1428106 | SW846 3050B | 0.502 | g | 50 | mL | 10/20/14 | JXM5 |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2015−82 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 359157002 **BASIS:** Dry Weight **DATE COLLECTED** 14−OCT−14

**CLIENT ID:** RE57−15−88102 **LEVEL:** Low **DATE RECEIVED** 16−OCT−14

**MATRIX:** SO **%SOLIDS:** 90.2

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7440−38−2 | Arsenic | 1870 | ug/kg | | 218 | 1090 | 1090 | 2 | MS | PRB | 10/23/14 23:57 | 141023−1 | 1428107 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1428107 | 1428106 | SW846 3050B | 0.509 | g | 50 | mL | 10/20/14 | JXM5 |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

# Quality Control Summary

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2015−82

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| 1203189452 | | | | | | | | |
| | Arsenic | 197 | ug/kg | +/−984 | U | MS | 197 | 984 |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2015−82 **Client ID** RE57−15−88100S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 94

**Sample ID:** 359157001 **Spike ID:** 1203189455

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | 75−125 | 10500 | | 5120 | | 5100 | 106 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2015−82 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−15−88100D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 359157001 **Duplicate ID:** 1203189454 **Percent Solids for Dup:** 94

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | +/−1040 | 5120 | | 4970 | | 3.06 | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2015−82

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203189453 | | | | | | | | |
| | Arsenic | ug/kg | 137000 | 138000 | | 100 | 83.2−117.5 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2015−82 **Client ID** RE57−15−88100L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 359157001 **Serial Dilution ID:** 1203189456

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 24.2 | | 24.6 | J | 1.95 | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

ADEP

COC/Lab Request #: 2014-3910



Client Contact:

Lab Agreement # : 126310011

Project Number :

Analysis Turnaround Time:

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Site Name: Los Alamos National Laboratory

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 |
|---|---|---|---|---|---|---|
| RE57-14-84990 | Jul 17 2014 | 08:29 | SO | 1 | 1 | 1 |
| RE57-14-85005 | Jul 17 2014 | 08:39 | SO | 1 | 1 | 1 |
| RE57-14-84991 | Jul 17 2014 | 08:45 | SO | 1 | 1 | 1 |
| RE57-14-84992 | Jul 17 2014 | 08:45 | SO | 1 | | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| Sherwood | Sherwood | 7/18/14 3p m | | | |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 6784 **EVENT NAME:** Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84990 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/17/14 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 0829 | MEDIA: | UNK | | ALCH |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | 57-4016 | | OK | FIELD PREP: | NA | | OK |
| LOCATION TYPE: | | | BH | FIELD QC TYPE: | REG | | OK |
| TOP DEPTH: | 2 ft | | 2.5 ft | SAMPLE USAGE: | INV | | OK |
| BOTTOM DEPTH: | 3 ft | | 3.5 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | y | |

**SAMPLE COMMENTS:** moist; whesive soil w/ pieces of weathered tuff 0-1' below bottom of leachfield at location 7-5

**LOCATION COMMENTS:** 7-6

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 0 dpm

Beta/Gamma 39 dpm

PID Ambient Reading = 0.0 ppm

**COLLECTED BY (PRINT):** Bobbie Rappe / Pattie Baucom

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Brappe (Signature) Brappe | 07/17/2014 1105 | (Printed Name) S. Sherwood (Signature) Sheri Sherwood | 7/17/14 1105 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 07/16/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 6784 **EVENT NAME:** Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84991 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/17/14 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0845 | MEDIA: | UNK | ALLH |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4018 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | | BH | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | 2 ft | 2.5 ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | 3 ft | 3.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | y | |

**SAMPLE COMMENTS:** Silty sand; slight moist; root material

**LOCATION COMMENTS:** 7-8 0-1' below bottom of leachfield at location 7-5

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha Ø dpm PID Ambient Reading = 0.0 ppm

Beta/Gamma 6 dpm

**COLLECTED BY (PRINT):** Bobbie Rappe

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) BRappe (Signature) BRappe | 07/17/2014 1105 | (Printed Name) S Sherwood (Signature) Sheri Sherwood | 7/17/14 1105 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 07/16/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 6784

**EVENT NAME:** Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84992

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/17/14 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0845 | MEDIA: | | OK |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | DC | OK |
| LOCATION ID: | UNK | 57-4018 | FIELD PREP: | NA | OK |
| LOCATION TYPE: | | BH | FIELD QC TYPE: | FTB | OK |
| TOP DEPTH: | | 2.5 ft | SAMPLE USAGE: | QC | OK |
| BOTTOM DEPTH: | | 3.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |

**SAMPLE COMMENTS:** QAQC for RE57-14-84991

**LOCATION COMMENTS:** 7-8

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 0 dpm

Beta/Gamma 6 dpm

PID Ambient Reading = 0.0 ppm

**COLLECTED BY (PRINT):** Bobbie Rappe

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) BRappe<br>(Signature) Bonappe | 07/17/2014 1105 | (Printed Name) S. Sherwood<br>(Signature) Sheri Sherwood | 7/17/14 1105 |
| **RELINQUISHED BY** | **Date/Time** | **RECEIVED BY** | **Date/Time** |
| (Printed Name)<br>(Signature) | | (Printed Name)<br>(Signature) | |

Report Date 07/16/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 6784 **EVENT NAME:** Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-85005 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/17/14 | FIELD MATRIX: | S | | R |
| TIME COLLECTED (HH:MM): | | | 0839 | MEDIA: | UNK | | Qbt 3 |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | 57-4017 | | OK | FIELD PREP: | NA | | OK |
| LOCATION TYPE: | | | BH | FIELD QC TYPE: | REG | | OK |
| TOP DEPTH: | 2 ft | | 2.5 ft | SAMPLE USAGE: | INV | | OK |
| BOTTOM DEPTH: | 3 ft | | 3.5 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | y | |

**SAMPLE COMMENTS:** weathered tuff; slightly moist; some root material

**LOCATION COMMENTS:** 7-7 0-1' below bottom of leachfield at location 7-5

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 0 dpm

Beta/Gamma 3 dpm

PID Ambient Reading = 0.0 ppm

**COLLECTED BY (PRINT):** Maurice Shendo

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) BRAPPE<br>(Signature) Brapape | 07/17/2014 1105 | (Printed Name) S. Sherwood<br>(Signature) Shari Sherwood | 7/17/14 1105 |
| **RELINQUISHED BY** | **Date/Time** | **RECEIVED BY** | **Date/Time** |
| (Printed Name)<br>(Signature) | | (Printed Name)<br>(Signature) | |

Report Date 07/16/2014

# DATA VALIDATION REPORT

Chain Of Custody No. 2014-3910

1. Distribution Of Samples In EDD.

| SDG | Analytical Method | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks |
|---|---|---|---|---|---|---|
| 353064 | EPA:300.0 | 3 | | | | |
| 353064 | HASL-300:ISOU | 3 | | | | |
| 353064 | SW-846:6010C | 3 | | | | |
| 353064 | SW-846:6020 | 3 | | | | |
| 353064 | SW-846:6850 | 3 | | | | |
| 353064 | SW-846:7471A | 3 | | | | |
| 353064 | SW-846:8260B | 3 | | 1 | | |
| 353064 | SW-846:8270D | 3 | | | | |
| 353064 | SW-846:9012A | 3 | | | | |

| SDG | Analytical Method | Analysis Lot ID | Prep Lot ID | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks | Method Blanks | Matrix Spikes | Matrix Spike Dups | Analytical Spikes | Post-Digestion Spikes | Lab Control Samples | Lab Control Sample Dups | Blank Spike | Blank Spike Dups | Lab Duplicates | Storage Blanks | Preparation Blanks | Reagent Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 353064 | EPA:300.0 | 1408055 | 1408054 | 3 | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 353064 | HASL-300:ISOU | 1404967 | 1404967 | 3 | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 353064 | SW-846:6010C | 1405022 | 1405021 | 3 | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 353064 | SW-846:6020 | 1405009 | 1405008 | 3 | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 353064 | SW-846:6850 | 1404629 | 1404628 | 3 | | | | | 1 | | | | | 1 | | | | | | | |
| 353064 | SW-846:7471A | 1407455 | 1407454 | 3 | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 353064 | SW-846:8260B | 1407979 | 1407977 | 3 | | 1 | | | 2 | | | | | 4 | | | | | | | |
| 353064 | SW-846:8270D | 1405532 | 1405531 | 3 | | | | | 1 | | | | | 1 | | | | | | | |
| 353064 | SW-846:9012A | 1403585 | 1403584 | 3 | | | | | 1 | | | | | 1 | | | | 1 | | | |

2. Distribution Of Analytes In EDD.

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| EPA:300.0 | GENERAL CHEMISTRY | LCS | 1203139336 | LCS | 0 | 0 | 1 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | MB | 1203139333 | MB | 1 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84990 | 1203139334 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84990 | 353064001 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84991 | 353064003 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-85005 | 353064002 | REG | 1 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | LCS | 1203131430 | LCS | 0 | 0 | 1 | 0 |
| HASL-300:ISOU | RAD | MB | 1203131428 | MB | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84990 | 1203131429 | DUP | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84990 | 353064001 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84991 | 353064003 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-85005 | 353064002 | REG | 3 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203131594 | LCS | 0 | 0 | 17 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203131593 | MB | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84990 | 1203131595 | DUP | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84990 | 353064001 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84991 | 353064003 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-85005 | 353064002 | REG | 17 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203131569 | LCS | 0 | 0 | 5 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203131568 | MB | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84990 | 1203131570 | DUP | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84990 | 353064001 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84991 | 353064003 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-85005 | 353064002 | REG | 5 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | LCS | 1203130457 | LCS | 0 | 0 | 1 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | MB | 1203130456 | MB | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84990 | 353064001 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84991 | 353064003 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-85005 | 353064002 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | LCS | 1203137785 | LCS | 0 | 0 | 1 | 0 |
| SW-846:7471A | INORGANIC | MB | 1203137784 | MB | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84990 | 353064001 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84991 | 353064003 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-85005 | 353064002 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | WST46-14-85170 | 1203137786 | DUP | 1 | 0 | 0 | 0 |
| SW-846:8260B | VOC | LCS | 1203139144 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203139145 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | LCS | 1203139146 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203139147 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | MB | 1203139138 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | MB | 1203139139 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84990 | 353064001 | REG | 62 | 3 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:8260B | VOC | RE57-14-84991 | 353064003 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84992 | 353064004 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-85005 | 353064002 | REG | 62 | 3 | 0 | 0 |
| SW-846:8270D | SVOC | LCS | 1203132847 | LCS | 0 | 6 | 69 | 0 |
| SW-846:8270D | SVOC | MB | 1203132846 | MB | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84990 | 353064001 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84991 | 353064003 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-85005 | 353064002 | REG | 69 | 6 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | LCS | 1203127928 | LCS | 0 | 0 | 1 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | MB | 1203127923 | MB | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84140 | 1203127924 | DUP | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84990 | 353064001 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84991 | 353064003 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-85005 | 353064002 | REG | 1 | 0 | 0 | 0 |

3. Are any analytes missing?

No.

4. Were any holding times exceeded?

No.

5. Any contaminants in blanks?

No.

6. Any surrogate recoveries outside the control limits?

| Field Sample ID | Lab Sample ID | Analytical Method | Parameter Name | Analysis Lot ID | Analysis Date | Spike Recovery | Upper Limit | Lower Limit | Rejection Limit |
|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84991 | 353064003 | SW-846:8260B | Toluene-d8 | 1407979 | 07-31-2014 | 131 | 120 | 80 | 10 |

7. Any MS/MSD recoveries or RPDs outside the control limits?

No.

8. Any LCS/LCSD or BS/BSD recoveries or RPDs outside the control limits?

No.

9. Any Field Duplicate RPDs outside the desired limits?

No.

10. Any Lab Duplicate RPDs outside the desired limits?

| Field Sample ID | Lab Sample ID | LD Lab Sample ID | Analytical Method | Parameter Name | Sample Matrix | Lab Result | LD Lab Result | Lab Units | Detect Flag | LD Detect Flag | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84990 | 353064001 | 1203131595 | SW-846:6010C | Chromium | SO | 3230 | 4940 | ug/kg | Y | Y | 41.8 | 20 |
| RE57-14-84990 | 353064001 | 1203131595 | SW-846:6010C | Manganese | SO | 319000 | 202000 | ug/kg | Y | Y | 45.1 | 20 |
| RE57-14-84990 | 353064001 | 1203131570 | SW-846:6020 | Arsenic | SO | 1620 | 1320 | ug/kg | Y | Y | 20.3 | 20 |

11. Any required reporting limits exceeded?

No.

12. Additional Validator's Comments.

13. Display Flagged Data.

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4016 | 2014-3910 | RE57-14-84990 | REG | INIT | INORGANIC | SW-846:6020 | Arsenic | | J | I10a | Y | 1620 | ug/kg | 1.62 | mg/kg | | | SD | 07/17/2014 | | 1405009 | VAL | Y |
| 57-4016 | 2014-3910 | RE57-14-84990 | REG | INIT | INORGANIC | SW-846:6010C | Chromium | * | J | I10a | Y | 3230 | ug/kg | 3.23 | mg/kg | | | SD | 07/17/2014 | | 1405022 | VAL | Y |
| 57-4016 | 2014-3910 | RE57-14-84990 | REG | INIT | INORGANIC | SW-846:6010C | Manganese | * | J | I10a | Y | 319000 | ug/kg | 319 | mg/kg | | | SD | 07/17/2014 | | 1405022 | VAL | Y |
| 57-4018 | 2014-3910 | RE57-14-84991 | REG | INIT | VOC | SW-846:8260B | Dichlorobenzene[1,4-] | J | J+ | V3b | Y | 0.430 | ug/kg | 0.00043 | mg/kg | | | SD | 07/17/2014 | | 1407979 | VAL | Y |
| 57-4018 | 2014-3910 | RE57-14-84991 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0433 | pCi/g | .0433 | pCi/g | 0.0715 | 0.0229 | SD | 07/17/2014 | | 1404967 | VAL | Y |

# DATA VALIDATION REPORT

| Reason Code | Description |
|---|---|
| I10a | The sample and the duplicate sample results were >=5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples. |
| J_LAB | The analytical laboratory qualified the detected result as estimated (J) because the result was less the PQL but greater than the MDL |
| NQ | The analytical laboratory did not qualifiy the analyte as not detected and/or any other standard qualifire. The analyte is detected in the sample. |
| R5 | Analyte is not detected because the amount reported is less than the MDC. |
| U_LAB | The analytical laboratory qualified the analyte as not detected. |
| V3b | The surrogate is less than 10%R and the result is a detect, which indicates the potential for a severely low bias in the results. |

14. Usable Result Count.

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84990 | 57-4016 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84990 | 57-4016 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84990 | 57-4016 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84990 | 57-4016 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84990 | 57-4016 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84990 | 57-4016 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84990 | 57-4016 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84990 | 57-4016 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84990 | 57-4016 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84991 | 57-4018 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84991 | 57-4018 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84991 | 57-4018 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84991 | 57-4018 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84991 | 57-4018 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84991 | 57-4018 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84991 | 57-4018 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84991 | 57-4018 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84991 | 57-4018 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84992 | 57-4018 | FTB | SW-846:8260B | 0 | 62 |
| RE57-14-85005 | 57-4017 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-85005 | 57-4017 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-85005 | 57-4017 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-85005 | 57-4017 | REG | SW-846:6020 | 0 | 5 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-85005 | 57-4017 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-85005 | 57-4017 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-85005 | 57-4017 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-85005 | 57-4017 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-85005 | 57-4017 | REG | SW-846:9012A | 0 | 1 |

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

August 14, 2014

Mr. Keith Greene
Los Alamos National Laboratory
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER
Work Order: 353064
SDG: 2014-3910

Dear Mr. Greene:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on July 19, 2014, and analyzed for GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Hope Taylor for
Valerie Davis
Project Manager

Chain of Custody: 2014-3910
Enclosures

**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Work Order #: 353064**
**SDG: 2014-3910**

Table of Contents

Case Narrative.....1

Chain of Custody and Supporting Documentation.....5

Data Review Qualifier Flag Definition Sheet.....16

Volatile Analysis.....19

Case Narrative.....20

Sample Data Summary.....26

Quality Control Summary.....35

Quality Control Data.....55

Miscellaneous.....76

Semi-Volatile Analysis.....78

Case Narrative.....79

Sample Data Summary.....85

Quality Control Summary.....95

Quality Control Data.....110

Miscellaneous.....120

Perchlorates by LCMSMS Analysis.....122

Case Narrative.....123

Sample Data Summary.....129

Quality Control Summary.....133

Quality Control Data.....136

Metals Analysis.....142
Case Narrative.....143
Sample Data Summary.....148
Quality Control Summary.....153
Miscellaneous.....168
General Chem Analysis.....171
Case Narrative.....172
Sample Data Summary.....180
Quality Control Summary.....185
Radiological Analysis.....188
Sample Data Summary.....194
Quality Control Data.....198

# Case Narrative

**Case Narrative for**
**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Workorder #: 353064**
**SDG # : 2014-3910**

**August 14, 2014**

**Laboratory Identification:**

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on July 19, 2014 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C). Shipping container temperatures were checked, documented, and within specifications. There are no additional comments concerning sample receipt.

**Sample Identification** The laboratory received the following samples:

| Laboratory ID | Client ID |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 353064004 | RE57-14-84992 |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package**

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Hope Taylor for
Valerie Davis
Project Manager

**List of current GEL Certifications as of 14 August 2014**

| State | Certification |
|---|---|
| Alaska | UST−110 |
| Arkansas | 88−0651 |
| CLIA | 42D0904046 |
| California NELAP | 01151CA |
| Colorado | SC00012 |
| Connecticut | PH−0169 |
| Delaware | SC000122013−10 |
| DoD ELAP/ ISO17025 A2LA | 2567.01 |
| Florida NELAP | E87156 |
| Foreign Soils Permit | P330−12−00283, P330−12−00284 |
| Georgia | SC00012 |
| Georgia SDWA | 967 |
| Hawaii | SC000122013−10 |
| Idaho Chemistry | SC00012 |
| Idaho Radiochemistry | SC00012 |
| Illinois NELAP | 200029 |
| Indiana | C−SC−01 |
| Kansas NELAP | E−10332 |
| Kentucky | 90129 |
| Louisiana NELAP | 03046 (AI33904) |
| Louisiana SDWA | LA130005 |
| Maryland | 270 |
| Massachusetts | M−SC012 |
| Michigan | 9976 |
| Mississippi | SC000122013−10 |
| Nebraska | NE−OS−26−13 |
| Nevada | SC000122014−1 |
| New Hampshire NELAP | 2054 |
| New Jersey NELAP | SC002 |
| New Mexico | SC00012 |
| New York NELAP | 11501 |
| North Carolina | 233 |
| North Carolina SDWA | 45709 |
| Oklahoma | 9904 |
| Pennsylvania NELAP | 68−00485 |
| Plant Material Permit | PDEP−12−00260 |
| South Carolina Chemistry | 10120001 |
| South Carolina GVL | 23611001 |
| South Carolina Radiochemi | 10120002 |
| Tennessee | TN 02934 |
| Texas NELAP | T104704235−14−9 |
| Utah NELAP | SC000122014−14 |
| Vermont | VT87156 |
| Virginia NELAP | 460202 |
| Washington | C780−12 |
| Wisconsin | 999887790 |

# Chain of Custody and Supporting Documentation

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

353064

ADEP

COC/Lab Request #: 2014-3910

Page 1 of 1

**Client Contact:**

**Lab Agreement # :** 126310011

**Project Number :**

**Site Name:** Los Alamos National Laboratory

**Analysis Turnaround Time:**

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

**Rad Screening Info:** Yes, Below Background

**Lab Reporting Limit Type:** Sample Quantitation Limit

**Special Instructions:**

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 |
|---|---|---|---|---|---|---|
| RE57-14-84990 | Jul 17 2014 | 08:29 | SO | 1 | 1 | 1 |
| RE57-14-85005 | Jul 17 2014 | 08:39 | SO | 1 | 1 | 1 |
| RE57-14-84991 | Jul 17 2014 | 08:45 | SO | 1 | 1 | 1 |
| RE57-14-84992 | Jul 17 2014 | 08:45 | SO | 1 | | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| Sheri Sherwood | Sheri Sherwood | 7/18/14 3pm | P. Nient | Patricia Dent | 7-19-14 0840 |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

GEL Laboratories LLC

# SAMPLE RECEIPT & REVIEW FORM

| | |
|---|---|
| Client: LANL | SDG/AR/COC/Work Order: 2014-3910 |
| Received By: P. Nlent | Date Received: 7/19/14 |

| Suspected Hazard Information | Yes | No | *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. |
|---|---|---|---|
| COC/Samples marked as radioactive? | | X | Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0CPM |
| Classified Radioactive II or III by RSO? | | X | If yes, Were swipes taken of sample contatiners < action levels? |
| COC/Samples marked containing PCBs? | | X | |
| Package, COC, and/or Samples marked as beryllium or asbestos containing? | | X | If yes, samples are to be segregeated as Safety Controlled Samples, and opened by the GEL Safety Group. |
| Shipped as a DOT Hazardous? | | X | Hazard Class Shipped: UN#: |
| Samples identified as Foreign Soil? | | X | |

| | Sample Receipt Criteria | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items) |
|---|---|---|---|---|---|
| 1 | Shipping containers received intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 2 | Samples requiring cold preservation within (0 ≤ 6 deg. C)?* | X | | | Preservation Method: Ice bags Blue ice Dry ice None Other (describe) 2-5, 19, 21 *all temperatures are recorded in Celsius |
| 2a | Daily check performed and passed on IR temperature gun? | X | | | Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 130462966 |
| 3 | Chain of custody documents included with shipment? | X | | | |
| 4 | Sample containers intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 5 | Samples requiring chemical preservation at proper pH? | X | | | Sample ID's, containers affected and observed pH: If Preservation added, Lot#: |
| 6 | VOA vials free of headspace (defined as < 6mm bubble)? | X | | | Sample ID's and containers affected: |
| 7 | Are Encore containers present? | | | X | (If yes, immediately deliver to Volatiles laboratory) |
| 8 | Samples received within holding time? | X | | | ID's and tests affected: |
| 9 | Sample ID's on COC match ID's on bottles? | X | | | Sample ID's and containers affected: |
| 10 | Date & time on COC match date & time on bottles? | X | | | Sample ID's affected: |
| 11 | Number of containers received match number indicated on COC? | | | X | Sample ID's affected: SEE Continuation SHEET |
| 12 | Are sample containers identifiable as GEL provided? | | | X | |
| 13 | COC form is properly signed in relinquished/received sections? | X | | | |
| 14 | Carrier and tracking number. | | | | Circle Applicable: FedEx Air / FedEx Ground / UPS / Field Services / Courier / Other<br>5908 1777 3482-5 / 5908 1777 3508-4c<br>5908 1777 3520-3 / 5908 1777 3585-4c<br>5908 1777 3541-2 / 5908 1777 3471-19c<br>5908 1777 3530-5c / 5908 1777 3596-5c<br>5908 1777 3460-21 / 5908 1777 3493-5c<br>5908 1777 3519-3c |

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials qp Date 7-24-14 Page 1 of 2

GEL Laboratories LLC **SAMPLE RECEIPT & REVIEW CONTINUATION FORM**

Client: LANL Received By: P. Albert Date Received: 7-19-14 SDG/AR/COC/Work Order: 2014-3910

* RN# 2014-3916
WTRON-14-85014 rec'd (2) containers each for DOC, Al+Ca+K+Mg+Na+Hardness chain indicates (1) each.
WTRON-14-79852 rec'd (2) GROSS A/B containers chain indicates (1) each.
WTRON-14-79856 rec'd (2) GROSS A/B containers chain indicates (1) each.

* RN# 2014-3914
WT_IPC-14-55972 did not receive A ALK+pH container, Rec'd (1) container each for HEXP-8330, Ra226+228, chain indicates (2) HEXP, (4) Ra226+228 containers.

* RN # 2014-3913
WTLAP-14-76815 rec'd (2) Ra226+228 containers, chain indicates (4). WTLAP-14-76874 rec'd (1) SR90 chain indicates (3).

* RN #2014-3911
WTLAP-14-76885 rec'd (2) SR90 containers chain indicates (3).

* RN # 2014-3919
CAPA-14-81478 rec'd (1) 8260b container chain indicates (2).

* RN # 2014-3918
WST03-14-85019 did not receive PH container

PM (or PMA) review: Initials JP Date 7-24-14 Page 2 of 2

**Subject:** Sample receipt issue from 07/19/14
**From:** Pat Dent <Pat.Dent@gel.com>
**Date:** 7/23/2014 7:48 AM
**To:** "Keith R. Greene" <kgreene@lanl.gov>
**CC:** "team.davis" <team.davis@gel.com>, LANL@amrad.com, npatel@lanl.gov

RN#2014-3916
WTRON-14-85014 lab rec'd 2-containers each for DOC, al+ca+k+mg+na+Hardness chain indicates 1-each.
WTRON -14-79852,79856 lab rec'd 2-Gross A/B containers each chain indicates 1 each.

RN#2014-3914
**WT_IPC-14-55672- lab did not receive a container for ALK+PH PLEASE ADVISE!!**
lab received 1-container each for HEXP-8330,Ra226+228 chain indicates 2-HEXP,4-Ra226+228.

RN#2014-3913
WTLAP-14-76815 lab rec'd 2-Ra226+228 containers,chain indicates 4.WTLAP-14-76874 rec'd 1-SR90 container chain indicates 3.
.
RN#2014-3911
WTLAP-14-76885 lab rec'd 2-SR-90 containers, chain indicates 3.

RN#2014-3919
CAPA-14-81478 lab rec'd 1-8260b container chain indicates 2.

RN#2014-3918
WST03-14-85019 did not receive a PH container PLEASE ADVISE!!
Thanks!!

--
Patricia Dent
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Rd.
Charleston, S.C. 29407
Main: 843-556-8171 Ext 4264
Fax: 843-766-1178
Email: pad@gel.com
Web: www.gel.com

FedEx Saturday Delivery

151966 10/04 MWI

5

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 5.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991156W300

5c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

3 of 4

MPS# 0263 5908 1777 3482

Mstr# 5908 1777 3460

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RiT2 10/11 88

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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GENERAL ENGINEERING LAB
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REF: MR0A00EC60R0

3

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1 of 2

TRK# 0201 5908 1777 3520

## MASTER ##

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PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

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FedEx Express

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TRK# 0201 5908 1777 3541

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

521C2/ED4F/6F03

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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CHARLESTON SC 29407
(843) 556-8171
REF: MR0A00EC60R0

FedEx Express

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2 of 2
MPS# 0263 5908 1777 3530
Mstr# 5908 1777 3520 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

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(843) 556-8171
REF: WE991156W300

FedEx Express

J141214052201uv

1 of 4
TRK# 0201 5908 1777 3460
## MASTER ##

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 55.0 LB MA
CAD: 0014176/CAFE2804

BILL

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

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2 of 2

MPS# 0263 5908 1777 3519
Mstr# 5908 1777 3508

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PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

4

521C2/ED4F/6F03

FedEx Express

J412140522011uv

1 of 2

TRK# 0201 5908 1777 3508
## MASTER ##

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2804

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TO VALERIE DAVIS
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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991156W300

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521C2/ED4F/6F03

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J141214052201uv

1 of 2

TRK# 0201 5908 1777 3585

## MASTER ##

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SATURDAY 12:00P
PRIORITY OVERNIGHT

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 39.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991156W300

19c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

2 of 4

MPS# 0263 5908 1777 3471

Mstr# 5908 1777 3460 0201

XO CHSA

SATURDAY 12:00P
PRIORITY OVERNIGHT

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991156W300

5c

521C2/ED4F/6F03

FedEx Express

J1412140522 01 uv

2 of 2
MPS# 0263 5908 1777 3596
Mstr# 5908 1777 3585

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 18JUL14
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991156W300

5c

521C2/ED4F/6F03

FedEx Express

J1412140522 01 uv

4 of 4
MPS# 0263 5908 1777 3493
Mstr# 5908 1777 3460

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11

# Data Review Qualifier Flag Definition Sheet

## Data Review Qualifier Definitions

| Qualifier | Explanation |
|---|---|
| * | A quality control analyte recovery is outside of specified acceptance criteria |
| ** | Analyte is a surrogate compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL |
| A | The TIC is a suspected aldol-condensation product |
| B | Target analyte was detected in the associated blank |
| B | Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL |
| BD | Results are either below the MDC or tracer recovery is low |
| C | Analyte has been confirmed by GC/MS analysis |
| D | Results are reported from a diluted aliquot of the sample |
| d | 5-day BOD-The 2:1 depletion requirement was not met for this sample |
| E | Organics-Concentration of the target analyte exceeds the instrument calibration range |
| E | Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria |
| H | Analytical holding time was exceeded |
| h | Preparation or preservation holding time was exceeded |
| J | Value is estimated |
| N | Metals-The Matrix spike sample recovery is not within specified control limits |
| N | Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more |
| ND | Analyte concentration is not detected above the reporting limit |
| UI | Gamma Spectroscopy-Uncertain identification |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | QC Samples were not spiked with this compound |
| Z | Paint Filter Test-Particulates passed through the filter, however no free liquids were observed. |

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

# Volatile Analysis

# Case Narrative

**ChemStation Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3910**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer** |
| Analytical Method: | SW846 8260B |
| Prep Method: | SW846 5030 |
| Analytical Batch Number: | 1407979 |
| Prep Batch Number: | 1407977 |

## Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

| Sample ID | Client ID |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 353064004 | RE57-14-84992 |
| 1203139138 | Method Blank (MB) |
| 1203139139 | Method Blank (MB) |
| 1203139140 | 352465001(RE57-14-84187) Post Spike (PS) |
| 1203139141 | 352465001(RE57-14-84187) Post Spike (PS) |
| 1203139142 | 352465001(RE57-14-84187) Post Spike Duplicate (PSD) |
| 1203139143 | 352465001(RE57-14-84187) Post Spike Duplicate (PSD) |
| 1203139144 | Laboratory Control Sample (LCS) |
| 1203139145 | Laboratory Control Sample (LCS) |
| 1203139146 | Laboratory Control Sample (LCS) |
| 1203139147 | Laboratory Control Sample (LCS) |

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 353064 001, 002 and 003 in this SDG were analyzed on a "dry weight" basis. Samples 353064 004 in this SDG were analyzed on an "as received" basis.

## Preparation/Analytical Method Verification

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 21.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

## Calibration Information

A complete list of the initial calibration data files with the correct dates and times of analysis are shown in the Calibration History report located in the Standard Data section of the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L or 20 ug/L for low level analyses. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

### Initial Calibration
At the request of the client, linear curve fits, for target analytes that did not meet the x-intercept criteria of less than or equal to 3 times the MDL and had %RSDs less than 60%, were set to use the average response factor to quantitate data in this SDG.

### Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (CCV) met the acceptance criteria.

## Quality Control (QC) Information

### Blank (MB) Statement
Target analytes were detected in the blank 1203139139 (MB) below the reporting limit.

### Surrogate Recoveries
Surrogate recoveries, in sample 353064003 (RE57-14-84991), were outside the acceptance limits. Sample re-analysis confirmed matrix interference. See the Data Exception Report in the miscellaneous section of the deliverable.

### Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

### QC Sample Designation
Sample 352465001 (RE57-14-84187) was designated for spike analysis.

### Matrix Spike (PS) Recovery Statement
The spike recoveries were within the required acceptance limits.

### Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries were within the required acceptance limits.

### Relative Percent Difference (RPD) Statement
The RPDs between the matrix spike pair met the acceptance limits.

### Internal Standard (ISTD) Acceptance
In samples 353064001 (RE57-14-84990) and 353064003 (RE57-14-84991), internal standard responses were outside the required acceptance criteria. Sample re-analysis confirmed matrix interference. See the Data Exception Report in the miscellaneous section of the deliverable.

## Technical Information

### Holding Time Specifications

GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. Samples were not analyzed within the recommended holding. However, the samples were analyzed within two times the holding period. This satisfies the client criteria.

**Sample Preservation and Integrity**
All samples met the sample preservation and integrity requirements.

**Sample Dilutions/Methanol Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-analyses were not required for samples in this SDG.

**Miscellaneous Information**

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
The following DER was generated for this SDG: 1320761.

**Manual Integrations**
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

**TIC Comment**
Tentatively identified compounds (TIC) were requested for this sample delivery group/work order. Please note that non-requested target analytes that are reported on the quantitation reports will be present on the Form I. These detected analytes are included in the calibrated method and as a result will be reported on the Sample Data Summary (Form I) or Certificate of Analysis (C of A). TIC data are included on the Sample Data Summary (Form I).

**Additional Comments**
Additional comments were not required for this SDG.

**Residual Chlorine**
Residual Chlorine was not detected in any of the samples in this SDG.

**System Configuration**

The Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description | P & T Trap |
|---|---|---|---|---|---|
| VOA9.I | Agilent 6890/5973 GC/MS w/ OI Eclipse/Archon Autosampler | HP6890/HP5973 | DB-624 | J&W, 60m x 0.25mm x 1.4um | Trap 10 |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3910  GEL Work Order: 353064

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

B  The target analyte was detected in the associated blank.

H  Analytical holding time was exceeded

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Erin Haubert  **Name: Erin Haubert**

**Date: 14 AUG 2014**  **Title: Data Validator**

# Sample Data Summary

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064001** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84990** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 18:22** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:42** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X424.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.09 | ug/kg | 0.543 | 1.09 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-93-3 | 2-Butanone | U | 5.43 | ug/kg | 1.81 | 5.43 |
| 95-49-8 | 2-Chlorotoluene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 591-78-6 | 2-Hexanone | U | 5.43 | ug/kg | 1.81 | 5.43 |
| 106-43-4 | 4-Chlorotoluene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.43 | ug/kg | 1.81 | 5.43 |
| 67-64-1 | Acetone | U | 5.43 | ug/kg | 1.81 | 5.43 |
| 71-43-2 | Benzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-86-1 | Bromobenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-97-5 | Bromochloromethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-27-4 | Bromodichloromethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-25-2 | Bromoform | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-83-9 | Bromomethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-15-0 | Carbon disulfide | U | 5.43 | ug/kg | 1.81 | 5.43 |
| 56-23-5 | Carbon tetrachloride | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-90-7 | Chlorobenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-00-3 | Chloroethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 67-66-3 | Chloroform | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-87-3 | Chloromethane | U | 1.09 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064001** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84990** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 18:22** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:42** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X424.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-95-3 | Dibromomethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 100-41-4 | Ethylbenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-88-4 | Iodomethane | U | 5.43 | ug/kg | 1.81 | 5.43 |
| 98-82-8 | Isopropylbenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-09-2 | Methylene chloride | U | 5.43 | ug/kg | 1.81 | 5.43 |
| 100-42-5 | Styrene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 127-18-4 | Tetrachloroethylene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-88-3 | Toluene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-01-6 | Trichloroethylene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-69-4 | Trichlorofluoromethane | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.43 | ug/kg | 1.81 | 5.43 |
| 75-01-4 | Vinyl chloride | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 179601-23-1 | m,p-Xylenes | U | 2.17 | ug/kg | 0.725 | 2.17 |
| 104-51-8 | n-Butylbenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 103-65-1 | n-Propylbenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-47-6 | o-Xylene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 135-98-8 | sec-Butylbenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 98-06-6 | tert-Butylbenzene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.09 | ug/kg | 0.362 | 1.09 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 32.2 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:39** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064002** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **3.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-85005** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 18:50** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:43** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X425.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.04 | ug/kg | 0.518 | 1.04 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 78-93-3 | 2-Butanone | U | 5.18 | ug/kg | 1.73 | 5.18 |
| 95-49-8 | 2-Chlorotoluene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 591-78-6 | 2-Hexanone | U | 5.18 | ug/kg | 1.73 | 5.18 |
| 106-43-4 | 4-Chlorotoluene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.18 | ug/kg | 1.73 | 5.18 |
| 67-64-1 | Acetone | U | 5.18 | ug/kg | 1.73 | 5.18 |
| 71-43-2 | Benzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-86-1 | Bromobenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-97-5 | Bromochloromethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-27-4 | Bromodichloromethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-25-2 | Bromoform | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-83-9 | Bromomethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-15-0 | Carbon disulfide | U | 5.18 | ug/kg | 1.73 | 5.18 |
| 56-23-5 | Carbon tetrachloride | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-90-7 | Chlorobenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-00-3 | Chloroethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 67-66-3 | Chloroform | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-87-3 | Chloromethane | U | 1.04 | ug/kg | 0.345 | 1.04 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:39** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064002** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **3.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-85005** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 18:50** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:43** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X425.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-95-3 | Dibromomethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 100-41-4 | Ethylbenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-88-4 | Iodomethane | U | 5.18 | ug/kg | 1.73 | 5.18 |
| 98-82-8 | Isopropylbenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-09-2 | Methylene chloride | U | 5.18 | ug/kg | 1.73 | 5.18 |
| 100-42-5 | Styrene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 127-18-4 | Tetrachloroethylene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-88-3 | Toluene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-01-6 | Trichloroethylene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-69-4 | Trichlorofluoromethane | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.18 | ug/kg | 1.73 | 5.18 |
| 75-01-4 | Vinyl chloride | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 179601-23-1 | m,p-Xylenes | U | 2.07 | ug/kg | 0.691 | 2.07 |
| 104-51-8 | n-Butylbenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 103-65-1 | n-Propylbenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-47-6 | o-Xylene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 135-98-8 | sec-Butylbenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 98-06-6 | tert-Butylbenzene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.04 | ug/kg | 0.345 | 1.04 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.04 | ug/kg | 0.345 | 1.04 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 7.8 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064003** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **4.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84991** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 19:18** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:44** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X426.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.05 | ug/kg | 0.524 | 1.05 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 106-46-7 | 1,4-Dichlorobenzene | J | 0.430 | ug/kg | 0.349 | 1.05 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 78-93-3 | 2-Butanone | U | 5.24 | ug/kg | 1.75 | 5.24 |
| 95-49-8 | 2-Chlorotoluene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 591-78-6 | 2-Hexanone | U | 5.24 | ug/kg | 1.75 | 5.24 |
| 106-43-4 | 4-Chlorotoluene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.24 | ug/kg | 1.75 | 5.24 |
| 67-64-1 | Acetone | U | 5.24 | ug/kg | 1.75 | 5.24 |
| 71-43-2 | Benzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-86-1 | Bromobenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-97-5 | Bromochloromethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-27-4 | Bromodichloromethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-25-2 | Bromoform | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-83-9 | Bromomethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-15-0 | Carbon disulfide | U | 5.24 | ug/kg | 1.75 | 5.24 |
| 56-23-5 | Carbon tetrachloride | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-90-7 | Chlorobenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-00-3 | Chloroethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 67-66-3 | Chloroform | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-87-3 | Chloromethane | U | 1.05 | ug/kg | 0.349 | 1.05 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064003** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **4.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84991** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 19:18** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:44** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X426.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-95-3 | Dibromomethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 100-41-4 | Ethylbenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-88-4 | Iodomethane | U | 5.24 | ug/kg | 1.75 | 5.24 |
| 98-82-8 | Isopropylbenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-09-2 | Methylene chloride | U | 5.24 | ug/kg | 1.75 | 5.24 |
| 100-42-5 | Styrene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 127-18-4 | Tetrachloroethylene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-88-3 | Toluene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-01-6 | Trichloroethylene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-69-4 | Trichlorofluoromethane | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.24 | ug/kg | 1.75 | 5.24 |
| 75-01-4 | Vinyl chloride | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 179601-23-1 | m,p-Xylenes | U | 2.10 | ug/kg | 0.699 | 2.10 |
| 104-51-8 | n-Butylbenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 103-65-1 | n-Propylbenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-47-6 | o-Xylene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 135-98-8 | sec-Butylbenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 98-06-6 | tert-Butylbenzene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.05 | ug/kg | 0.349 | 1.05 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.05 | ug/kg | 0.349 | 1.05 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 31.8 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064004** | **Date Received:** | **07/19/2014 08:40** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84992** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 11:48** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:28** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X410.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064004** | **Date Received:** | **07/19/2014 08:40** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84992** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 11:48** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:28** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X410.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 7.57 | ug/kg | 0 | J |

# Quality Control Summary

**Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3910**

**Matrix Type: SOLID**

| Sample ID | Client ID | DCED4 %REC | TOL %REC | BFB %REC |
|---|---|---|---|---|
| 1203139144 | LCS for batch 1407977 | 83 | 93 | 88 |
| 1203139145 | LCS for batch 1407977 | 85 | 98 | 90 |
| 1203139138 | MB for batch 1407977 | 89 | 98 | 92 |
| 353064004 | RE57-14-84992 | 88 | 98 | 91 |
| 353064001 | RE57-14-84990 | 85 | 107 | 105 |
| 353064002 | RE57-14-85005 | 90 | 99 | 90 |
| 353064003 | RE57-14-84991 | 97 | 131 * | 117 |
| 1203139146 | LCS for batch 1407977 | 81 | 92 | 86 |
| 1203139147 | LCS for batch 1407977 | 88 | 95 | 93 |
| 1203139139 | MB for batch 1407977 | 87 | 96 | 89 |
| 1203139140 | RE57-14-84187PS | 81 | 96 | 89 |
| 1203139142 | RE57-14-84187PSD | 86 | 97 | 85 |
| 1203139141 | RE57-14-84187PS | 83 | 99 | 94 |
| 1203139143 | RE57-14-84187PSD | 86 | 98 | 93 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| DCED4 | = 1,2-Dichloroethane-d4 | (76%-122%) |
| TOL | = Toluene-d8 | (80%-120%) |
| BFB | = Bromofluorobenzene | (80%-120%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PS | m,p-Xylenes | 100 | 0.00 | HUh | 98.5 | 98 | 62-124 |
| 67-64-1 | PS | Acetone | 250 | 0.00 | HUh | 220 | 88 | 42-147 |
| 74-88-4 | PS | Iodomethane | 250 | 0.00 | HUh | 243 | 97 | 68-121 |
| 75-15-0 | PS | Carbon disulfide | 250 | 0.00 | HUh | 244 | 98 | 64-147 |
| 78-93-3 | PS | 2-Butanone | 250 | 0.00 | HUh | 228 | 91 | 44-145 |
| 108-10-1 | PS | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 243 | 97 | 71-133 |
| 591-78-6 | PS | 2-Hexanone | 250 | 0.00 | HUh | 247 | 99 | 47-147 |
| 75-71-8 | PS | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 38.7 | 77 | 46-134 |
| 74-87-3 | PS | Chloromethane | 50.0 | 0.00 | HUh | 58.9 | 118 | 54-139 |
| 75-01-4 | PS | Vinyl chloride | 50.0 | 0.00 | HUh | 62.1 | 124 | 47-141 |
| 74-83-9 | PS | Bromomethane | 50.0 | 0.00 | HUh | 48.7 | 97 | 47-135 |
| 75-00-3 | PS | Chloroethane | 50.0 | 0.00 | HUh | 52.2 | 104 | 52-129 |
| 75-69-4 | PS | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 44.8 | 90 | 61-126 |
| 75-35-4 | PS | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 45.6 | 91 | 67-135 |
| 75-09-2 | PS | Methylene chloride | 50.0 | 0.00 | HUh | 44.5 | 89 | 68-123 |
| 156-60-5 | PS | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 46.8 | 94 | 67-129 |
| 75-34-3 | PS | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 46.8 | 94 | 70-125 |
| 156-59-2 | PS | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 46.7 | 93 | 70-125 |
| 594-20-7 | PS | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 44.6 | 89 | 67-129 |
| 74-97-5 | PS | Bromochloromethane | 50.0 | 0.00 | HUh | 48.5 | 97 | 73-123 |
| 67-66-3 | PS | Chloroform | 50.0 | 0.00 | HUh | 42.4 | 85 | 70-123 |
| 71-55-6 | PS | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 44.3 | 89 | 71-128 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PS | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 43.0 | 86 | 68-129 |
| 56-23-5 | PS | Carbon tetrachloride | 50.0 | 0.00 | HUh | 44.6 | 89 | 70-129 |
| 107-06-2 | PS | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 39.1 | 78 | 67-119 |
| 71-43-2 | PS | Benzene | 50.0 | 0.00 | HUh | 48.6 | 97 | 67-124 |
| 79-01-6 | PS | Trichloroethylene | 50.0 | 0.00 | HUh | 45.9 | 92 | 68-130 |
| 78-87-5 | PS | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.1 | 96 | 69-122 |
| 74-95-3 | PS | Dibromomethane | 50.0 | 0.00 | HUh | 45.5 | 91 | 73-120 |
| 75-27-4 | PS | Bromodichloromethane | 50.0 | 0.00 | HUh | 44.6 | 89 | 67-124 |
| 10061-01-5 | PS | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 45.5 | 91 | 67-127 |
| 108-88-3 | PS | Toluene | 50.0 | 0.00 | HUh | 46.2 | 92 | 64-124 |
| 10061-02-6 | PS | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 42.2 | 84 | 68-122 |
| 79-00-5 | PS | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 44.5 | 89 | 73-121 |
| 142-28-9 | PS | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 42.1 | 84 | 69-119 |
| 127-18-4 | PS | Tetrachloroethylene | 50.0 | 0.00 | HUh | 48.5 | 97 | 64-123 |
| 124-48-1 | PS | Dibromochloromethane | 50.0 | 0.00 | HUh | 48.9 | 98 | 66-122 |
| 106-93-4 | PS | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 45.1 | 90 | 73-125 |
| 108-90-7 | PS | Chlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 68-120 |
| 100-41-4 | PS | Ethylbenzene | 50.0 | 0.00 | HUh | 45.4 | 91 | 63-122 |
| 95-47-6 | PS | o-Xylene | 50.0 | 0.00 | HUh | 48.7 | 97 | 64-122 |
| 100-42-5 | PS | Styrene | 50.0 | 0.00 | HUh | 47.1 | 94 | 70-126 |
| 75-25-2 | PS | Bromoform | 50.0 | 0.00 | HUh | 46.0 | 92 | 54-131 |
| 98-82-8 | PS | Isopropylbenzene | 50.0 | 0.00 | HUh | 48.2 | 96 | 64-132 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 48.3 | 97 | 68-132 |
| 96-18-4 | PS | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 42.6 | 85 | 66-131 |
| 108-86-1 | PS | Bromobenzene | 50.0 | 0.00 | HUh | 47.8 | 96 | 67-124 |
| 103-65-1 | PS | n-Propylbenzene | 50.0 | 0.00 | HUh | 43.9 | 88 | 60-127 |
| 108-67-8 | PS | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 46.5 | 93 | 62-129 |
| 95-49-8 | PS | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 47.6 | 95 | 63-125 |
| 106-43-4 | PS | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 43.7 | 87 | 63-124 |
| 98-06-6 | PS | tert-Butylbenzene | 50.0 | 0.00 | HUh | 49.0 | 98 | 64-131 |
| 95-63-6 | PS | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 44.9 | 90 | 63-126 |
| 135-98-8 | PS | sec-Butylbenzene | 50.0 | 0.00 | HUh | 46.4 | 93 | 59-133 |
| 99-87-6 | PS | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 46.1 | 92 | 58-130 |
| 541-73-1 | PS | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 62-125 |
| 106-46-7 | PS | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 62-122 |
| 104-51-8 | PS | n-Butylbenzene | 50.0 | 0.00 | HUh | 41.0 | 82 | 55-133 |
| 96-12-8 | PS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 43.8 | 88 | 54-133 |
| 630-20-6 | PS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 48.1 | 96 | 72-126 |
| 95-50-1 | PS | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.4 | 93 | 63-123 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PSD | m,p-Xylenes | 100 | 0.00 | HUh | 96.1 | 96 | 62-124 | 2 | 0-20 |
| 67-64-1 | PSD | Acetone | 250 | 0.00 | HUh | 247 | 99 | 42-147 | 12 | 0-20 |
| 74-88-4 | PSD | Iodomethane | 250 | 0.00 | HUh | 250 | 100 | 68-121 | 3 | 0-20 |
| 75-15-0 | PSD | Carbon disulfide | 250 | 0.00 | HUh | 246 | 98 | 64-147 | 1 | 0-20 |
| 78-93-3 | PSD | 2-Butanone | 250 | 0.00 | HUh | 254 | 102 | 44-145 | 11 | 0-20 |
| 108-10-1 | PSD | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 253 | 101 | 71-133 | 4 | 0-20 |
| 591-78-6 | PSD | 2-Hexanone | 250 | 0.00 | HUh | 261 | 105 | 47-147 | 6 | 0-20 |
| 75-71-8 | PSD | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 36.6 | 73 | 46-134 | 6 | 0-20 |
| 74-87-3 | PSD | Chloromethane | 50.0 | 0.00 | HUh | 54.8 | 110 | 54-139 | 7 | 0-20 |
| 75-01-4 | PSD | Vinyl chloride | 50.0 | 0.00 | HUh | 57.5 | 115 | 47-141 | 8 | 0-20 |
| 74-83-9 | PSD | Bromomethane | 50.0 | 0.00 | HUh | 45.6 | 91 | 47-135 | 6 | 0-20 |
| 75-00-3 | PSD | Chloroethane | 50.0 | 0.00 | HUh | 49.0 | 98 | 52-129 | 6 | 0-20 |
| 75-69-4 | PSD | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 42.6 | 85 | 61-126 | 5 | 0-20 |
| 75-35-4 | PSD | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 46.5 | 93 | 67-135 | 2 | 0-20 |
| 75-09-2 | PSD | Methylene chloride | 50.0 | 0.00 | HUh | 47.0 | 94 | 68-123 | 6 | 0-20 |
| 156-60-5 | PSD | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 47.7 | 95 | 67-129 | 2 | 0-20 |
| 75-34-3 | PSD | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 47.3 | 95 | 70-125 | 1 | 0-20 |
| 156-59-2 | PSD | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 47.6 | 95 | 70-125 | 2 | 0-20 |
| 594-20-7 | PSD | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 43.4 | 87 | 67-129 | 3 | 0-20 |
| 74-97-5 | PSD | Bromochloromethane | 50.0 | 0.00 | HUh | 51.2 | 102 | 73-123 | 5 | 0-20 |
| 67-66-3 | PSD | Chloroform | 50.0 | 0.00 | HUh | 43.9 | 88 | 70-123 | 3 | 0-20 |
| 71-55-6 | PSD | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 44.1 | 88 | 71-128 | 1 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PSD | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 42.3 | 85 | 68-129 | 2 | 0-20 |
| 56-23-5 | PSD | Carbon tetrachloride | 50.0 | 0.00 | HUh | 45.7 | 91 | 70-129 | 3 | 0-20 |
| 107-06-2 | PSD | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 40.9 | 82 | 67-119 | 5 | 0-20 |
| 71-43-2 | PSD | Benzene | 50.0 | 0.00 | HUh | 48.0 | 96 | 67-124 | 1 | 0-20 |
| 79-01-6 | PSD | Trichloroethylene | 50.0 | 0.00 | HUh | 46.4 | 93 | 68-130 | 1 | 0-20 |
| 78-87-5 | PSD | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.5 | 97 | 69-122 | 1 | 0-20 |
| 74-95-3 | PSD | Dibromomethane | 50.0 | 0.00 | HUh | 46.9 | 94 | 73-120 | 3 | 0-20 |
| 75-27-4 | PSD | Bromodichloromethane | 50.0 | 0.00 | HUh | 45.7 | 91 | 67-124 | 2 | 0-20 |
| 10061-01-5 | PSD | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 45.2 | 90 | 67-127 | 1 | 0-20 |
| 108-88-3 | PSD | Toluene | 50.0 | 0.00 | HUh | 46.2 | 92 | 64-124 | 0 | 0-20 |
| 10061-02-6 | PSD | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 42.5 | 85 | 68-122 | 1 | 0-20 |
| 79-00-5 | PSD | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 45.4 | 91 | 73-121 | 2 | 0-20 |
| 142-28-9 | PSD | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 42.0 | 84 | 69-119 | 0 | 0-20 |
| 127-18-4 | PSD | Tetrachloroethylene | 50.0 | 0.00 | HUh | 48.5 | 97 | 64-123 | 0 | 0-20 |
| 124-48-1 | PSD | Dibromochloromethane | 50.0 | 0.00 | HUh | 50.8 | 102 | 66-122 | 4 | 0-20 |
| 106-93-4 | PSD | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 47.0 | 94 | 73-125 | 4 | 0-20 |
| 108-90-7 | PSD | Chlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 68-120 | 0 | 0-20 |
| 100-41-4 | PSD | Ethylbenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 63-122 | 2 | 0-20 |
| 95-47-6 | PSD | o-Xylene | 50.0 | 0.00 | HUh | 48.8 | 98 | 64-122 | 0 | 0-20 |
| 100-42-5 | PSD | Styrene | 50.0 | 0.00 | HUh | 47.7 | 95 | 70-126 | 1 | 0-20 |
| 75-25-2 | PSD | Bromoform | 50.0 | 0.00 | HUh | 47.4 | 95 | 54-131 | 3 | 0-20 |
| 98-82-8 | PSD | Isopropylbenzene | 50.0 | 0.00 | HUh | 45.8 | 92 | 64-132 | 5 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PSD | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 47.8 | 96 | 68-132 | 1 | 0-20 |
| 96-18-4 | PSD | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 43.5 | 87 | 66-131 | 2 | 0-20 |
| 108-86-1 | PSD | Bromobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 67-124 | 3 | 0-20 |
| 103-65-1 | PSD | n-Propylbenzene | 50.0 | 0.00 | HUh | 41.7 | 83 | 60-127 | 5 | 0-20 |
| 108-67-8 | PSD | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 62-129 | 5 | 0-20 |
| 95-49-8 | PSD | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 45.5 | 91 | 63-125 | 4 | 0-20 |
| 106-43-4 | PSD | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 41.9 | 84 | 63-124 | 4 | 0-20 |
| 98-06-6 | PSD | tert-Butylbenzene | 50.0 | 0.00 | HUh | 46.9 | 94 | 64-131 | 4 | 0-20 |
| 95-63-6 | PSD | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 42.6 | 85 | 63-126 | 5 | 0-20 |
| 135-98-8 | PSD | sec-Butylbenzene | 50.0 | 0.00 | HUh | 44.2 | 88 | 59-133 | 5 | 0-20 |
| 99-87-6 | PSD | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 44.2 | 88 | 58-130 | 4 | 0-20 |
| 541-73-1 | PSD | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 45.6 | 91 | 62-125 | 1 | 0-20 |
| 106-46-7 | PSD | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 44.1 | 88 | 62-122 | 0 | 0-20 |
| 104-51-8 | PSD | n-Butylbenzene | 50.0 | 0.00 | HUh | 39.3 | 79 | 55-133 | 4 | 0-20 |
| 96-12-8 | PSD | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 46.7 | 93 | 54-133 | 6 | 0-20 |
| 630-20-6 | PSD | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 49.7 | 99 | 72-126 | 3 | 0-20 |
| 95-50-1 | PSD | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.2 | 92 | 63-123 | 0 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Sample Type:** | **Post Spike** |
| **Client ID:** | **RE57-14-84187PS** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203139141** | **%Moisture:** | **6.3** |
| **Instrument:** | **VOA9.I** | **Analysis Date:** | **08/05/2014 11:03** |
| **Analyst:** | **RXY1** | **Prep Batch ID:** | **1407977** |
| **Purge Vol:** | **5 mL** | **Batch ID:** | **1407979** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PS | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 240 | 96 | 68-146 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139143**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 11:31**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PSD | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 215 | 86 | 68-146 | 11 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 92.7 | 93 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 220 | 88 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 229 | 92 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 229 | 92 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 219 | 88 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 220 | 88 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 229 | 92 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 36.0 | 72 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 51.2 | 102 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 51.4 | 103 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 43.8 | 88 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 44.7 | 89 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 41.0 | 82 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 42.0 | 84 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 41.7 | 83 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 43.7 | 87 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 43.3 | 87 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 43.9 | 88 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 43.2 | 86 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 46.9 | 94 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 41.9 | 84 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 42.8 | 86 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 39.7 | 79 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 44.8 | 90 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 37.9 | 76 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 44.9 | 90 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 44.0 | 88 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 43.7 | 87 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 43.5 | 87 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 43.5 | 87 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 44.1 | 88 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 42.8 | 86 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 40.9 | 82 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 41.3 | 83 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 38.9 | 78 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 43.8 | 88 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 49.9 | 100 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 43.4 | 87 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 43.1 | 86 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 42.7 | 85 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 45.1 | 90 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 45.5 | 91 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 47.7 | 95 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 43.6 | 87 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 43.3 | 87 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 39.9 | 80 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 44.1 | 88 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 40.6 | 81 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 43.2 | 86 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 43.1 | 86 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 41.3 | 83 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 44.9 | 90 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 42.1 | 84 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 44.0 | 88 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 43.3 | 87 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 45.1 | 90 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 43.7 | 87 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 40.2 | 80 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 45.5 | 91 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 46.1 | 92 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 44.9 | 90 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139145**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 09:25**
**Dilution: 1**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 191 | 76 | 76-130 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 101 | 101 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 232 | 93 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 257 | 103 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 254 | 102 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 231 | 92 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 230 | 92 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 239 | 96 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 37.8 | 76 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 57.6 | 115 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 60.0 | 120 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 49.2 | 98 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 50.9 | 102 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 44.1 | 88 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 46.8 | 94 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 46.1 | 92 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 48.8 | 98 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 48.3 | 97 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 49.1 | 98 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 45.9 | 92 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 52.8 | 106 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 45.0 | 90 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 46.3 | 93 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 43.9 | 88 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 47.5 | 95 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 40.3 | 81 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 49.3 | 99 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 47.0 | 94 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 48.8 | 98 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 45.7 | 91 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 45.2 | 90 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 48.2 | 96 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 45.9 | 92 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 43.3 | 87 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 43.7 | 87 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 41.9 | 84 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 47.8 | 96 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 50.4 | 101 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 46.4 | 93 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 48.0 | 96 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 45.9 | 92 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 49.9 | 100 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 50.4 | 101 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 45.7 | 91 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 45.1 | 90 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 44.5 | 89 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 38.8 | 78 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 46.7 | 93 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 42.4 | 85 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 44.0 | 88 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 46.4 | 93 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 43.1 | 86 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 46.1 | 92 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 43.2 | 86 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 45.6 | 91 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 45.4 | 91 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 47.9 | 96 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 46.2 | 92 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 42.2 | 84 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 41.9 | 84 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 49.1 | 98 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 47.1 | 94 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139147**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 09:10**
**Dilution: 1**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 207 | 83 | 76-130 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1407977** | **Instrument ID:** | **VOA9.I** | **Data File:** | **073114V9\9X406B.D** |
| **Lab Sample ID:** | **1203139138** | **Prep Date:** | **07/31/2014 07:02** | **Analyzed:** | **07/31/14 09:54** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|
| 01 LCS for batch 1407977 | 1203139144 | 073114V9\9X403L.D | 07/31/14 | 0829 |
| 02 LCS for batch 1407977 | 1203139145 | 073114V9\9X405L.D | 07/31/14 | 0925 |
| 03 RE57-14-84992 | 353064004 | 073114V9\9X410.D | 07/31/14 | 1148 |
| 04 RE57-14-84990 | 353064001 | 073114V9\9X424.D | 07/31/14 | 1822 |
| 05 RE57-14-85005 | 353064002 | 073114V9\9X425.D | 07/31/14 | 1850 |
| 06 RE57-14-84991 | 353064003 | 073114V9\9X426.D | 07/31/14 | 1918 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1407977** | **Instrument ID:** | **VOA9.I** | **Data File:** | **080514V9\9Y206B.D** |
| **Lab Sample ID:** | **1203139139** | **Prep Date:** | **08/05/2014 07:02** | **Analyzed:** | **08/05/14 09:38** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 08 | LCS for batch 1407977 | 1203139146 | 080514V9\9Y203L.D | 08/05/14 | 0813 |
| 09 | LCS for batch 1407977 | 1203139147 | 080514V9\9Y205L.D | 08/05/14 | 0910 |
| 10 | RE57-14-84187PS | 1203139140 | 080514V9\9Y207.D | 08/05/14 | 1006 |
| 11 | RE57-14-84187PSD | 1203139142 | 080514V9\9Y208.D | 08/05/14 | 1034 |
| 12 | RE57-14-84187PS | 1203139141 | 080514V9\9Y209.D | 08/05/14 | 1103 |
| 13 | RE57-14-84187PSD | 1203139143 | 080514V9\9Y210.D | 08/05/14 | 1131 |

# Quality Control Data

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139138** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:54** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X406B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139138** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:54** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X406B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 5.77 | ug/kg | 0 | J |
| | unknown | 4.951 | 11.6 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139139** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:38** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y206B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | J | 1.88 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139139** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:38** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y206B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 6.4 | ug/kg | 0 | J |
| | unknown | 5.26 | 8.51 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139140** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:06** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y207.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 51.3 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 51.5 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 47.5 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 49.9 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 45.8 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 45.5 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 47.9 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 46.8 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 48.1 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 41.7 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 51.3 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 49.6 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 44.9 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | Hh | 244 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | Hh | 50.8 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | Hh | 264 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | Hh | 46.6 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 49.2 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 259 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | BHh | 235 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | Hh | 51.9 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | Hh | 51.0 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | Hh | 49.1 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | Hh | 51.9 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | Hh | 260 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | Hh | 49.4 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | Hh | 55.7 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | Hh | 45.3 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | Hh | 62.8 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139140** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:06** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y207.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 52.1 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | Hh | 48.5 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 41.3 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | Hh | 48.4 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | Hh | 259 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | Hh | 51.4 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | Hh | 47.4 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | Hh | 50.3 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | Hh | 51.8 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | Hh | 48.9 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | Hh | 47.8 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | Hh | 66.3 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 49.8 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 48.5 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | Hh | 105 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | Hh | 43.7 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | Hh | 46.8 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | Hh | 52.0 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | Hh | 52.3 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 49.9 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 45.0 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139141** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:03** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y209.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139141** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:03** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y209.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 256 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139142** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:34** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y208.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 53.0 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 47.0 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 51.0 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 48.4 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 50.5 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 49.6 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 45.1 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 46.4 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 45.5 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 49.8 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 50.1 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 43.6 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 47.2 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 44.8 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 47.1 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 46.3 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | Hh | 271 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | Hh | 279 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | Hh | 44.7 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 47.1 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 270 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | BHh | 264 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | Hh | 51.2 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | Hh | 49.4 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | Hh | 54.6 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | Hh | 50.6 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | Hh | 48.7 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | Hh | 262 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | Hh | 52.2 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | Hh | 46.8 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | Hh | 58.4 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139142** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:34** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y208.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 54.2 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | Hh | 50.0 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 39.0 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | Hh | 266 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | Hh | 50.2 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | Hh | 50.8 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | Hh | 45.4 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | Hh | 61.3 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 50.7 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 48.3 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | Hh | 103 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | Hh | 41.9 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | Hh | 44.5 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | Hh | 52.1 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | Hh | 47.2 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | Hh | 50.0 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 50.9 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 45.4 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139143** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:31** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y210.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139143** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:31** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y210.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 229 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139144** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 08:29** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X403L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 46.1 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 42.8 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 43.3 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 41.3 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 43.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 42.0 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 39.7 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 39.9 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 42.1 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 45.5 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 43.4 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 37.9 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 43.7 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 43.2 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 38.9 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 43.7 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 43.2 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 219 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 229 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 41.3 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 43.3 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 220 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | | 220 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 44.1 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 46.9 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 43.5 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 47.7 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 43.8 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 229 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 44.8 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 44.7 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 41.9 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 51.2 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139144** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 08:29** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X403L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 49.9 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 43.5 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 36.0 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 42.7 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 229 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 43.6 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 41.7 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 45.5 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 43.8 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 42.8 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 41.0 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 51.4 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 43.9 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 44.1 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 92.7 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 40.2 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 40.6 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 43.7 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 40.9 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139145** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:25** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X405L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139145** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:25** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X405L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 191 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139146** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 08:13** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y203L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 49.1 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 46.3 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 44.5 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 43.7 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 48.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 46.8 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 43.9 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 38.8 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 43.2 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 41.9 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 46.4 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 47.1 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 40.3 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 48.8 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 47.9 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 41.9 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 46.2 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 45.9 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 231 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 46.4 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 239 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 45.4 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 230 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | B | 232 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 49.3 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 46.7 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 52.8 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 45.2 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 45.7 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 49.2 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 254 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 47.5 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 48.0 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 50.9 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 45.0 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 57.6 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139146** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 08:13** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y203L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 50.4 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 45.7 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 37.8 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 45.9 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 257 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 46.1 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 50.4 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 47.8 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 45.9 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 47.0 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 44.1 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 60.0 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 49.1 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 48.2 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 101 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 42.2 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 42.4 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 49.9 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 45.6 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 46.1 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 48.8 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 43.3 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139147** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:10** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y205L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139147** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:10** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y205L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 207 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 05-AUG-14 | Federal | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| VOA GC/MS | SW846 8260B | Solid | LANL 352207, 352465 |
| **Batch ID:** | **Sample Numbers:** | | |
| 1407979 | See Below | | |

**Potentially affected work order(s)(SDG): 352207(2014-3685),352460(2014-3718),352465(2014-3719),353064(2014-3910)**

**Application Issues:**

Failed Recovery for Surrogate or Tracer

Sample Analyzed out of Holding

Other

Sample Prepped out of Holding

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. The following samples were prepped and analyzed out of holding:<br><br>352207-001<br>352465-001, 002, 004<br>MS 1203139140, 1203139141<br>MSD 1203139142, 1203139143<br>352460-001,002,003,004,005,006,008,009,010,011,012,013<br>353064-001,002,003,004<br><br>2. The following samples did not meet the acceptable recovery criteria for the internal standards.<br><br>352460-006, 009, 010, 013<br>353064-001, 003<br><br>3. Sample 353064003 did not meet the acceptable recovery criteria for the surrogate recoveries. | 1. The samples were prepped, analyzed, and reported within 2x the holding time. This was acceptable per the client.<br><br>2-3. Sample analysis confirmed the results. It is believed possible matrix interference has been demonstrated. |

**Originator's Name:**

Ramona Yarbrough 05-AUG-14

**Data Validator/Group Leader:**

Erin Haubert 07-AUG-14

# Semi-Volatile Analysis

# Case Narrative

**Semi-Volatile Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3910**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry** |
| Analytical Method: | SW846 3541/8270D |
| Prep Method: | SW846 3541 |
| Analytical Batch Number: | 1405532 |
| Prep Batch Number: | 1405531 |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3541/8270D:

| Sample ID | Client ID |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 1203132846 | MB for batch 1405531 |
| 1203132847 | Laboratory Control Sample (LCS) |
| 1203132848 | 353064001(RE57-14-84990) Matrix Spike (MS) |
| 1203132849 | 353064001(RE57-14-84990) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 32.

Raw data reports are processed and reviewed by the analyst using the data analysis software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP).

## Calibration Information

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Methodologies referenced N-Nitroso-diphenylamine. However, as stated in EPA Methodology, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, showed that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

**Initial Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG) in this batch. A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

**CCV Requirements**
All Calibration Verification Standards (CCV) did not meet the acceptance criteria as outlined in Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. This SDG satisfied the 8270D outlier acceptance criteria. Detected concentrations of these analytes should be considered as estimated.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG in this batch met the acceptance criteria.

**Surrogate Recoveries**
All the surrogate recoveries were within the established acceptance criteria for this SDG in this batch.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Sample 353064001 (RE57-14-84990) was selected for analysis as the matrix spike and matrix spike duplicate.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD, 1203132849 (RE57-14-84990), failed spike recovery for multiple analytes. Please see the QC Summary/Spike Recovery Report for the specific analytes and associated recoveries. The MS and LCS passed recoveries. The data are reported.

**MS/MSD Relative Percent Difference (RPD) Statement**
Multiple RPD values between the MS and MSD, 1203132848 (RE57-14-84990) and 1203132849 (RE57-14-84990), were not within the 0-30% limits. Please see the QC Summary/Spike Recovery Report for the specific analyte pairs and associated RPD values. These RPD failures are attributed to the large difference in the recovery values between analyte pairs in the MS and MSD. The MS and LCS passed recovery for all analytes. The data are reported.

**Internal Standard (ISTD) Acceptance**
Samples 1203132849 (RE57-14-84990) and 353064003 (RE57-14-84991) failed ISTD acceptance criteria. The samples were re-analyzed and confirmed the failure. The re-analysis data are reported. The initial analysis raw data have been placed in the Miscellaneous Section of the data package.

**Technical Information:**

**Holding Time Specifications**

All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. All reported compound mass spectra met the detection specifications in the method.

**Sample Dilutions**
The samples in this SDG in this batch did not require dilutions.

**Sample Re-extraction/Re-analysis**
Samples 1203132849 (RE57-14-84990) and 353064003 (RE57-14-84991) were re-analyzed due to internal standard responses outside of the acceptance criteria.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception report 1317727 was generated for the samples in this batch for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Manual integrations, if any, are included with the raw data.

**TIC Comment**
Tentatively identified compounds (TIC) may be requested for samples 1203132846 (MB), 353064001 (RE57-14-84990), 353064002 (RE57-14-85005) and 353064003 (RE57-14-84991) in this delivery group/work order. Please note that non-requested calibrated analytes detected in a client sample may be reported on the Form 1/Certificate of Analysis as TICs. TIC data, if requested, are included on the Sample Data Summary (Form 1) and are also included with the sample raw data.

**Additional Comments**
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to rounding differences in the calculation, the data reported in the Surrogate Recovery Report may differ slightly from the raw data. Due to software issue, the raw data may not correctly display the updated SPC limits. Please see Sample Data Summary Report and Surrogate Recovery Report for the correct surrogate acceptance limits.

**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the reviewer name associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**System Configuration**

The Semi-Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description |
|---|---|---|---|---|
| MSD5.I | Agilent 6890/5973 GC/MS w/ 7683 Autosampler | HP6890/HP5973 | DB-5MS | 25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane) |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3910  GEL Work Order: 353064

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Barbara Bailey  **Name: Barbara Bailey**

**Date: 14 AUG 2014**  **Title: Data Validator**

# Sample Data Summary

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064001** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84990** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 03:37** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2330.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 362 | ug/kg | 109 | 362 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 362 | ug/kg | 109 | 362 |
| 122-66-7 | Azobenzene | U | 362 | ug/kg | 109 | 362 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 362 | ug/kg | 109 | 362 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 362 | ug/kg | 109 | 362 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 362 | ug/kg | 109 | 362 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 362 | ug/kg | 109 | 362 |
| 120-83-2 | 2,4-Dichlorophenol | U | 362 | ug/kg | 109 | 362 |
| 105-67-9 | 2,4-Dimethylphenol | U | 362 | ug/kg | 109 | 362 |
| 51-28-5 | 2,4-Dinitrophenol | U | 724 | ug/kg | 109 | 724 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 362 | ug/kg | 109 | 362 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 362 | ug/kg | 109 | 362 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 95-57-8 | 2-Chlorophenol | U | 362 | ug/kg | 109 | 362 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 362 | ug/kg | 109 | 362 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 88-75-5 | 2-Nitrophenol | U | 362 | ug/kg | 109 | 362 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 362 | ug/kg | 109 | 362 |
| 101-55-3 | 4-Bromophenylphenylether | U | 362 | ug/kg | 109 | 362 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 362 | ug/kg | 145 | 362 |
| 106-47-8 | 4-Chloroaniline | U | 362 | ug/kg | 109 | 362 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 362 | ug/kg | 109 | 362 |
| 100-02-7 | 4-Nitrophenol | U | 362 | ug/kg | 109 | 362 |
| 83-32-9 | Acenaphthene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 208-96-8 | Acenaphthylene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 62-53-3 | Aniline | U | 362 | ug/kg | 109 | 362 |
| 120-12-7 | Anthracene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 56-55-3 | Benzo(a)anthracene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 50-32-8 | Benzo(a)pyrene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 65-85-0 | Benzoic acid | U | 724 | ug/kg | 181 | 724 |
| 100-51-6 | Benzyl alcohol | U | 362 | ug/kg | 109 | 362 |
| 85-68-7 | Butylbenzylphthalate | U | 362 | ug/kg | 109 | 362 |
| 218-01-9 | Chrysene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 84-74-2 | Di-n-butylphthalate | U | 362 | ug/kg | 109 | 362 |
| 117-84-0 | Di-n-octylphthalate | U | 362 | ug/kg | 109 | 362 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064001** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84990** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 03:37** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2330.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 132-64-9 | Dibenzofuran | U | 362 | ug/kg | 109 | 362 |
| 84-66-2 | Diethylphthalate | U | 362 | ug/kg | 109 | 362 |
| 131-11-3 | Dimethylphthalate | U | 362 | ug/kg | 109 | 362 |
| 122-39-4 | Diphenylamine | U | 362 | ug/kg | 109 | 362 |
| 206-44-0 | Fluoranthene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 86-73-7 | Fluorene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 118-74-1 | Hexachlorobenzene | U | 362 | ug/kg | 109 | 362 |
| 87-68-3 | Hexachlorobutadiene | U | 362 | ug/kg | 109 | 362 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 362 | ug/kg | 109 | 362 |
| 67-72-1 | Hexachloroethane | U | 362 | ug/kg | 109 | 362 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 78-59-1 | Isophorone | U | 362 | ug/kg | 109 | 362 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 362 | ug/kg | 109 | 362 |
| 621-64-7 | N-Nitrosodipropylamine | U | 362 | ug/kg | 109 | 362 |
| 91-20-3 | Naphthalene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 98-95-3 | Nitrobenzene | U | 362 | ug/kg | 109 | 362 |
| 87-86-5 | Pentachlorophenol | U | 362 | ug/kg | 109 | 362 |
| 85-01-8 | Phenanthrene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 108-95-2 | Phenol | U | 362 | ug/kg | 109 | 362 |
| 129-00-0 | Pyrene | U | 36.2 | ug/kg | 10.9 | 36.2 |
| 110-86-1 | Pyridine | U | 362 | ug/kg | 109 | 362 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 362 | ug/kg | 109 | 362 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 362 | ug/kg | 109 | 362 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 362 | ug/kg | 109 | 362 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 362 | ug/kg | 109 | 362 |
| 65794-96-9 | m,p-Cresols | U | 362 | ug/kg | 109 | 362 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 362 | ug/kg | 109 | 362 |
| 95-48-7 | o-Cresol | U | 362 | ug/kg | 109 | 362 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 362 | ug/kg | 120 | 362 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 362 | ug/kg | 109 | 362 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 1.915 | 308 | ug/kg | 91 | NJ |
| | unknown | 2.053 | 628 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064001** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84990** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 03:37** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2330.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.258 | 168 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.701 | 1250 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.325 | 352 | ug/kg | 96 | NJ |
| | unknown | 12.539 | 150 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.297 | 194 | ug/kg | 98 | NJ |
| 000506-30-9 | Eicosanoic acid | 14.235 | 205 | ug/kg | 86 | NJ |
| 074685-33-9 | 3-Eicosene, (E)- | 15.082 | 1000 | ug/kg | 99 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:39** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064002** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **3.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-85005** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 05:11** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.14 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2333.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 122-66-7 | Azobenzene | U | 344 | ug/kg | 103 | 344 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 344 | ug/kg | 103 | 344 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 344 | ug/kg | 103 | 344 |
| 120-83-2 | 2,4-Dichlorophenol | U | 344 | ug/kg | 103 | 344 |
| 105-67-9 | 2,4-Dimethylphenol | U | 344 | ug/kg | 103 | 344 |
| 51-28-5 | 2,4-Dinitrophenol | U | 688 | ug/kg | 103 | 688 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 344 | ug/kg | 103 | 344 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 344 | ug/kg | 103 | 344 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 95-57-8 | 2-Chlorophenol | U | 344 | ug/kg | 103 | 344 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 344 | ug/kg | 103 | 344 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 88-75-5 | 2-Nitrophenol | U | 344 | ug/kg | 103 | 344 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 344 | ug/kg | 103 | 344 |
| 101-55-3 | 4-Bromophenylphenylether | U | 344 | ug/kg | 103 | 344 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 344 | ug/kg | 138 | 344 |
| 106-47-8 | 4-Chloroaniline | U | 344 | ug/kg | 103 | 344 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 344 | ug/kg | 103 | 344 |
| 100-02-7 | 4-Nitrophenol | U | 344 | ug/kg | 103 | 344 |
| 83-32-9 | Acenaphthene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 208-96-8 | Acenaphthylene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 62-53-3 | Aniline | U | 344 | ug/kg | 103 | 344 |
| 120-12-7 | Anthracene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 56-55-3 | Benzo(a)anthracene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 50-32-8 | Benzo(a)pyrene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 65-85-0 | Benzoic acid | U | 688 | ug/kg | 172 | 688 |
| 100-51-6 | Benzyl alcohol | U | 344 | ug/kg | 103 | 344 |
| 85-68-7 | Butylbenzylphthalate | U | 344 | ug/kg | 103 | 344 |
| 218-01-9 | Chrysene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 84-74-2 | Di-n-butylphthalate | U | 344 | ug/kg | 103 | 344 |
| 117-84-0 | Di-n-octylphthalate | U | 344 | ug/kg | 103 | 344 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:39** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064002** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **3.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-85005** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 05:11** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.14 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2333.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 132-64-9 | Dibenzofuran | U | 344 | ug/kg | 103 | 344 |
| 84-66-2 | Diethylphthalate | U | 344 | ug/kg | 103 | 344 |
| 131-11-3 | Dimethylphthalate | U | 344 | ug/kg | 103 | 344 |
| 122-39-4 | Diphenylamine | U | 344 | ug/kg | 103 | 344 |
| 206-44-0 | Fluoranthene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 86-73-7 | Fluorene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 118-74-1 | Hexachlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 87-68-3 | Hexachlorobutadiene | U | 344 | ug/kg | 103 | 344 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 344 | ug/kg | 103 | 344 |
| 67-72-1 | Hexachloroethane | U | 344 | ug/kg | 103 | 344 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 78-59-1 | Isophorone | U | 344 | ug/kg | 103 | 344 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 344 | ug/kg | 103 | 344 |
| 621-64-7 | N-Nitrosodipropylamine | U | 344 | ug/kg | 103 | 344 |
| 91-20-3 | Naphthalene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 98-95-3 | Nitrobenzene | U | 344 | ug/kg | 103 | 344 |
| 87-86-5 | Pentachlorophenol | U | 344 | ug/kg | 103 | 344 |
| 85-01-8 | Phenanthrene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 108-95-2 | Phenol | U | 344 | ug/kg | 103 | 344 |
| 129-00-0 | Pyrene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 110-86-1 | Pyridine | U | 344 | ug/kg | 103 | 344 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 344 | ug/kg | 103 | 344 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 344 | ug/kg | 103 | 344 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 344 | ug/kg | 103 | 344 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 344 | ug/kg | 103 | 344 |
| 65794-96-9 | m,p-Cresols | U | 344 | ug/kg | 103 | 344 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 344 | ug/kg | 103 | 344 |
| 95-48-7 | o-Cresol | U | 344 | ug/kg | 103 | 344 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 344 | ug/kg | 113 | 344 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 344 | ug/kg | 103 | 344 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.039 | 240 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.711 | 2880 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:39** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064002** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **3.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-85005** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 05:11** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.14 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2333.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000057-10-3 | n-Hexadecanoic acid | 12.32 | 245 | ug/kg | 99 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.296 | 162 | ug/kg | 95 | NJ |
| | unknown | 15.096 | 471 | ug/kg | 0 | J |
| | unknown | 15.382 | 233 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064003** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **4.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84991** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/28/2014 02:15** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072714.b\s5G2726.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 122-66-7 | Azobenzene | U | 349 | ug/kg | 105 | 349 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 349 | ug/kg | 105 | 349 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 349 | ug/kg | 105 | 349 |
| 120-83-2 | 2,4-Dichlorophenol | U | 349 | ug/kg | 105 | 349 |
| 105-67-9 | 2,4-Dimethylphenol | U | 349 | ug/kg | 105 | 349 |
| 51-28-5 | 2,4-Dinitrophenol | U | 698 | ug/kg | 105 | 698 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 349 | ug/kg | 105 | 349 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 349 | ug/kg | 105 | 349 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 95-57-8 | 2-Chlorophenol | U | 349 | ug/kg | 105 | 349 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 349 | ug/kg | 105 | 349 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 88-75-5 | 2-Nitrophenol | U | 349 | ug/kg | 105 | 349 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 349 | ug/kg | 105 | 349 |
| 101-55-3 | 4-Bromophenylphenylether | U | 349 | ug/kg | 105 | 349 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 349 | ug/kg | 140 | 349 |
| 106-47-8 | 4-Chloroaniline | U | 349 | ug/kg | 105 | 349 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 349 | ug/kg | 105 | 349 |
| 100-02-7 | 4-Nitrophenol | U | 349 | ug/kg | 105 | 349 |
| 83-32-9 | Acenaphthene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 208-96-8 | Acenaphthylene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 62-53-3 | Aniline | U | 349 | ug/kg | 105 | 349 |
| 120-12-7 | Anthracene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 56-55-3 | Benzo(a)anthracene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 50-32-8 | Benzo(a)pyrene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 65-85-0 | Benzoic acid | J | 324 | ug/kg | 175 | 698 |
| 100-51-6 | Benzyl alcohol | U | 349 | ug/kg | 105 | 349 |
| 85-68-7 | Butylbenzylphthalate | U | 349 | ug/kg | 105 | 349 |
| 218-01-9 | Chrysene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 84-74-2 | Di-n-butylphthalate | U | 349 | ug/kg | 105 | 349 |
| 117-84-0 | Di-n-octylphthalate | U | 349 | ug/kg | 105 | 349 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064003** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **4.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84991** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/28/2014 02:15** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072714.b\s5G2726.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 132-64-9 | Dibenzofuran | U | 349 | ug/kg | 105 | 349 |
| 84-66-2 | Diethylphthalate | U | 349 | ug/kg | 105 | 349 |
| 131-11-3 | Dimethylphthalate | U | 349 | ug/kg | 105 | 349 |
| 122-39-4 | Diphenylamine | U | 349 | ug/kg | 105 | 349 |
| 206-44-0 | Fluoranthene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 86-73-7 | Fluorene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 118-74-1 | Hexachlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 87-68-3 | Hexachlorobutadiene | U | 349 | ug/kg | 105 | 349 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 349 | ug/kg | 105 | 349 |
| 67-72-1 | Hexachloroethane | U | 349 | ug/kg | 105 | 349 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 78-59-1 | Isophorone | U | 349 | ug/kg | 105 | 349 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 349 | ug/kg | 105 | 349 |
| 621-64-7 | N-Nitrosodipropylamine | U | 349 | ug/kg | 105 | 349 |
| 91-20-3 | Naphthalene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 98-95-3 | Nitrobenzene | U | 349 | ug/kg | 105 | 349 |
| 87-86-5 | Pentachlorophenol | U | 349 | ug/kg | 105 | 349 |
| 85-01-8 | Phenanthrene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 108-95-2 | Phenol | U | 349 | ug/kg | 105 | 349 |
| 129-00-0 | Pyrene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 110-86-1 | Pyridine | U | 349 | ug/kg | 105 | 349 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 349 | ug/kg | 105 | 349 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 349 | ug/kg | 105 | 349 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 349 | ug/kg | 105 | 349 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 349 | ug/kg | 105 | 349 |
| 65794-96-9 | m,p-Cresols | U | 349 | ug/kg | 105 | 349 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 349 | ug/kg | 105 | 349 |
| 95-48-7 | o-Cresol | U | 349 | ug/kg | 105 | 349 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 349 | ug/kg | 115 | 349 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 349 | ug/kg | 105 | 349 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.987 | 564 | ug/kg | 0 | J |
| | unknown | 3.635 | 1810 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **353064003** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **4.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84991** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/28/2014 02:15** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072714.b\s5G2726.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 001792-81-0 | cis-1,2-Cyclohexanediol | 6.192 | 239 | ug/kg | 95 | NJ |
| 000090-01-7 | Salicyl Alcohol | 8.025 | 360 | ug/kg | 94 | NJ |
| | unknown | 12.259 | 225 | ug/kg | 0 | J |
| 000060-33-3 | 9,12-Octadecadienoic acid (Z,Z)- | 13.111 | 195 | ug/kg | 94 | NJ |
| 000295-65-8 | Cyclohexadecane | 13.835 | 210 | ug/kg | 92 | NJ |
| 001560-95-8 | Tetradecane, 2-methyl- | 13.868 | 246 | ug/kg | 87 | NJ |
| | unknown | 14.559 | 236 | ug/kg | 0 | J |
| 001599-67-3 | 1-Docosene | 14.873 | 1950 | ug/kg | 99 | NJ |
| 000112-85-6 | Docosanoic acid | 15.287 | 231 | ug/kg | 91 | NJ |
| | unknown | 15.506 | 440 | ug/kg | 0 | J |
| 000593-49-7 | Heptacosane | 16.22 | 1030 | ug/kg | 91 | NJ |

# Quality Control Summary

**Semi-Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3910**

**Matrix Type: SOLID**

| Sample ID | Client ID | 2FP %REC | PHL %REC | NBZ %REC | FBP %REC | TBP %REC | TPH %REC |
|---|---|---|---|---|---|---|---|
| 1203132846 | MB for batch 1405531 | 62 | 65 | 82 | 74 | 62 | 77 |
| 1203132847 | LCS for batch 1405531 | 81 | 77 | 77 | 76 | 79 | 85 |
| 353064001 | RE57-14-84990 | 65 | 65 | 62 | 62 | 64 | 72 |
| 1203132848 | RE57-14-84990MS | 49 | 55 | 46 | 53 | 63 | 78 |
| 353064002 | RE57-14-85005 | 68 | 69 | 63 | 63 | 67 | 73 |
| 1203132849 | RE57-14-84990MSD | 25 | 26 | 24 | 26 | 38 | 47 |
| 353064003 | RE57-14-84991 | 61 | 59 | 60 | 60 | 48 | 95 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| 2FP | = 2-Fluorophenol | (23%-107%) |
| PHL | = Phenol-d5 | (25%-108%) |
| NBZ | = Nitrobenzene-d5 | (21%-103%) |
| FBP | = 2-Fluorobiphenyl | (25%-100%) |
| TBP | = 2,4,6-Tribromophenol | (20%-122%) |
| TPH | = p-Terphenyl-d14 | (31%-124%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1405531**
**Lab Sample ID** **1203132847**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/23/2014 19:48**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 62-75-9 | LCS | N-Methyl-N-nitrosomethylam | 1660 | 0.0 | 1270 | 76 | 31-84 |
| 110-86-1 | LCS | Pyridine | 1660 | 0.0 | 959 | 58 | 29-85 |
| 62-53-3 | LCS | Aniline | 1660 | 0.0 | 1310 | 79 | 34-101 |
| 108-95-2 | LCS | Phenol | 1660 | 0.0 | 1340 | 81 | 38-98 |
| 111-44-4 | LCS | bis(2-Chloroethyl) ether | 1660 | 0.0 | 1330 | 80 | 35-96 |
| 95-57-8 | LCS | 2-Chlorophenol | 1660 | 0.0 | 1410 | 85 | 38-100 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 1660 | 0.0 | 1250 | 75 | 39-110 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 1660 | 0.0 | 1270 | 76 | 40-110 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 1660 | 0.0 | 1290 | 77 | 39-93 |
| 108-60-1 | LCS | bis(2-Chloro-1-methylethyl)et | 1660 | 0.0 | 1100 | 66 | 27-109 |
| 100-51-6 | LCS | Benzyl alcohol | 1660 | 0.0 | 1270 | 76 | 35-95 |
| 95-48-7 | LCS | o-Cresol | 1660 | 0.0 | 1490 | 90 | 37-97 |
| 65794-96-9 | LCS | m,p-Cresols | 1660 | 0.0 | 1680 | 101 | 39-115 |
| 621-64-7 | LCS | N-Nitrosodipropylamine | 1660 | 0.0 | 1500 | 90 | 34-106 |
| 67-72-1 | LCS | Hexachloroethane | 1660 | 0.0 | 1360 | 82 | 34-98 |
| 98-95-3 | LCS | Nitrobenzene | 1660 | 0.0 | 1320 | 79 | 35-99 |
| 78-59-1 | LCS | Isophorone | 1660 | 0.0 | 1350 | 81 | 36-98 |
| 88-75-5 | LCS | 2-Nitrophenol | 1660 | 0.0 | 1250 | 75 | 35-106 |
| 105-67-9 | LCS | 2,4-Dimethylphenol | 1660 | 0.0 | 1250 | 75 | 35-102 |
| 111-91-1 | LCS | bis(2-Chloroethoxy)methane | 1660 | 0.0 | 1230 | 74 | 37-98 |
| 120-83-2 | LCS | 2,4-Dichlorophenol | 1660 | 0.0 | 1210 | 73 | 35-110 |
| 65-85-0 | LCS | Benzoic acid | 3330 | 0.0 | 2030 | 61 | 27-99 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1405531**
**Lab Sample ID** **1203132847**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/23/2014 19:48**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 106-47-8 | LCS | 4-Chloroaniline | 1660 | 0.0 | 1060 | 64 | 32-106 |
| 87-68-3 | LCS | Hexachlorobutadiene | 1660 | 0.0 | 1210 | 73 | 32-104 |
| 59-50-7 | LCS | 4-Chloro-3-methylphenol | 1660 | 0.0 | 1410 | 85 | 35-104 |
| 91-57-6 | LCS | 2-Methylnaphthalene | 1660 | 0.0 | 1220 | 73 | 36-107 |
| 91-20-3 | LCS | Naphthalene | 1660 | 0.0 | 1250 | 75 | 38-106 |
| 77-47-4 | LCS | Hexachlorocyclopentadiene | 1660 | 0.0 | 871 | 52 | 24-84 |
| 88-06-2 | LCS | 2,4,6-Trichlorophenol | 1660 | 0.0 | 1330 | 80 | 36-98 |
| 95-95-4 | LCS | 2,4,5-Trichlorophenol | 1660 | 0.0 | 1340 | 81 | 41-103 |
| 91-58-7 | LCS | 2-Chloronaphthalene | 1660 | 0.0 | 1340 | 81 | 39-101 |
| 88-74-4 | LCS | 2-Nitroaniline<br>*o-Nitroaniline* | 1660 | 0.0 | 1350 | 81 | 34-116 |
| 99-09-2 | LCS | 3-Nitroaniline<br>*m-Nitroaniline* | 1660 | 0.0 | 1120 | 67 | 32-113 |
| 131-11-3 | LCS | Dimethylphthalate | 1660 | 0.0 | 1410 | 85 | 41-105 |
| 606-20-2 | LCS | 2,6-Dinitrotoluene | 1660 | 0.0 | 1360 | 82 | 41-103 |
| 121-14-2 | LCS | 2,4-Dinitrotoluene | 1660 | 0.0 | 1410 | 85 | 43-109 |
| 208-96-8 | LCS | Acenaphthylene | 1660 | 0.0 | 1340 | 80 | 38-103 |
| 83-32-9 | LCS | Acenaphthene | 1660 | 0.0 | 1300 | 78 | 36-105 |
| 51-28-5 | LCS | 2,4-Dinitrophenol | 1660 | 0.0 | 892 | 54 | 22-83 |
| 132-64-9 | LCS | Dibenzofuran | 1660 | 0.0 | 1320 | 80 | 38-104 |
| 84-66-2 | LCS | Diethylphthalate | 1660 | 0.0 | 1460 | 88 | 42-109 |
| 100-02-7 | LCS | 4-Nitrophenol | 1660 | 0.0 | 1090 | 66 | 23-114 |
| 86-73-7 | LCS | Fluorene | 1660 | 0.0 | 1330 | 80 | 39-102 |
| 7005-72-3 | LCS | 4-Chlorophenylphenylether | 1660 | 0.0 | 1410 | 85 | 41-104 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1405531**
**Lab Sample ID** **1203132847**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/23/2014 19:48**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 100-01-6 | LCS | 4-Nitroaniline<br>*p-Nitroaniline* | 1660 | 0.0 | 1440 | 86 | 35-150 |
| 534-52-1 | LCS | 2-Methyl-4,6-dinitrophenol | 1660 | 0.0 | 1060 | 63 | 33-103 |
| 122-39-4 | LCS | Diphenylamine | 1660 | 0.0 | 1170 | 70 | 40-101 |
| 122-66-7 | LCS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1660 | 0.0 | 1380 | 83 | 33-102 |
| 101-55-3 | LCS | 4-Bromophenylphenylether | 1660 | 0.0 | 1150 | 69 | 42-110 |
| 118-74-1 | LCS | Hexachlorobenzene | 1660 | 0.0 | 1210 | 73 | 41-108 |
| 87-86-5 | LCS | Pentachlorophenol | 1660 | 0.0 | 1150 | 69 | 31-93 |
| 85-01-8 | LCS | Phenanthrene | 1660 | 0.0 | 1220 | 73 | 43-105 |
| 120-12-7 | LCS | Anthracene | 1660 | 0.0 | 1230 | 74 | 43-104 |
| 84-74-2 | LCS | Di-n-butylphthalate | 1660 | 0.0 | 1370 | 83 | 46-112 |
| 206-44-0 | LCS | Fluoranthene | 1660 | 0.0 | 1310 | 79 | 44-106 |
| 129-00-0 | LCS | Pyrene | 1660 | 0.0 | 1330 | 80 | 33-99 |
| 85-68-7 | LCS | Butylbenzylphthalate | 1660 | 0.0 | 1500 | 90 | 37-107 |
| 117-81-7 | LCS | bis(2-Ethylhexyl)phthalate | 1660 | 0.0 | 1390 | 84 | 41-104 |
| 56-55-3 | LCS | Benzo(a)anthracene | 1660 | 0.0 | 1330 | 80 | 46-108 |
| 218-01-9 | LCS | Chrysene | 1660 | 0.0 | 1350 | 81 | 47-107 |
| 117-84-0 | LCS | Di-n-octylphthalate | 1660 | 0.0 | 1390 | 83 | 41-110 |
| 205-99-2 | LCS | Benzo(b)fluoranthene | 1660 | 0.0 | 1200 | 72 | 42-111 |
| 207-08-9 | LCS | Benzo(k)fluoranthene | 1660 | 0.0 | 1180 | 71 | 43-103 |
| 50-32-8 | LCS | Benzo(a)pyrene | 1660 | 0.0 | 1240 | 75 | 45-109 |
| 193-39-5 | LCS | Indeno(1,2,3-cd)pyrene | 1660 | 0.0 | 1430 | 86 | 45-115 |
| 53-70-3 | LCS | Dibenzo(a,h)anthracene | 1660 | 0.0 | 1620 | 97 | 39-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **LCS for batch 1405531**
**Lab Sample ID** **1203132847**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/23/2014 19:48**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 191-24-2 | LCS | Benzo(ghi)perylene | 1660 | 0.0 | 1470 | 89 | 43-115 |
| 91-94-1 | LCS | 3,3'-Dichlorobenzidine | 1660 | 0.0 | 1400 | 84 | 32-111 |
| 120-82-1 | LCS | 1,2,4-Trichlorobenzene | 1660 | 0.0 | 1270 | 77 | 37-98 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84990MS**
**Lab Sample ID** **1203132848**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 04:08**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MS | N-Methyl-N-nitrosomethylam | 1810 | 0.00 | U | 728 | 40 | 24-86 |
| 110-86-1 | MS | Pyridine | 1810 | 0.00 | U | 460 | 26 | 24-87 |
| 62-53-3 | MS | Aniline | 1810 | 0.00 | U | 936 | 52 | 28-91 |
| 108-95-2 | MS | Phenol | 1810 | 0.00 | U | 1050 | 58 | 28-108 |
| 111-44-4 | MS | bis(2-Chloroethyl) ether | 1810 | 0.00 | U | 778 | 43 | 25-102 |
| 95-57-8 | MS | 2-Chlorophenol | 1810 | 0.00 | U | 1030 | 57 | 28-108 |
| 541-73-1 | MS | 1,3-Dichlorobenzene | 1810 | 0.00 | U | 699 | 39 | 24-96 |
| 106-46-7 | MS | 1,4-Dichlorobenzene | 1810 | 0.00 | U | 707 | 39 | 24-97 |
| 95-50-1 | MS | 1,2-Dichlorobenzene | 1810 | 0.00 | U | 755 | 42 | 25-99 |
| 108-60-1 | MS | bis(2-Chloro-1-methylethyl)et | 1810 | 0.00 | U | 703 | 39 | 25-105 |
| 100-51-6 | MS | Benzyl alcohol | 1810 | 0.00 | U | 1040 | 57 | 21-109 |
| 95-48-7 | MS | o-Cresol | 1810 | 0.00 | U | 1210 | 67 | 27-105 |
| 65794-96-9 | MS | m,p-Cresols | 1810 | 0.00 | U | 1490 | 82 | 32-123 |
| 621-64-7 | MS | N-Nitrosodipropylamine | 1810 | 0.00 | U | 1130 | 62 | 23-117 |
| 67-72-1 | MS | Hexachloroethane | 1810 | 0.00 | U | 761 | 42 | 24-102 |
| 98-95-3 | MS | Nitrobenzene | 1810 | 0.00 | U | 944 | 52 | 25-104 |
| 78-59-1 | MS | Isophorone | 1810 | 0.00 | U | 1090 | 60 | 24-108 |
| 88-75-5 | MS | 2-Nitrophenol | 1810 | 0.00 | U | 923 | 51 | 24-106 |
| 105-67-9 | MS | 2,4-Dimethylphenol | 1810 | 0.00 | U | 1120 | 62 | 30-109 |
| 111-91-1 | MS | bis(2-Chloroethoxy)methane | 1810 | 0.00 | U | 947 | 52 | 27-104 |
| 120-83-2 | MS | 2,4-Dichlorophenol | 1810 | 0.00 | U | 1090 | 60 | 31-103 |
| 65-85-0 | MS | Benzoic acid | 3610 | 0.00 | U | 2450 | 68 | 15-115 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84990MS**
**Lab Sample ID** **1203132848**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 04:08**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MS | 4-Chloroaniline | 1810 | 0.00 | U | 955 | 53 | 27-100 |
| 87-68-3 | MS | Hexachlorobutadiene | 1810 | 0.00 | U | 767 | 42 | 24-105 |
| 59-50-7 | MS | 4-Chloro-3-methylphenol | 1810 | 0.00 | U | 1380 | 76 | 32-112 |
| 91-57-6 | MS | 2-Methylnaphthalene | 1810 | 0.00 | U | 965 | 53 | 23-107 |
| 91-20-3 | MS | Naphthalene | 1810 | 0.00 | U | 895 | 50 | 21-107 |
| 77-47-4 | MS | Hexachlorocyclopentadiene | 1810 | 0.00 | U | 555 | 31 | 12-106 |
| 88-06-2 | MS | 2,4,6-Trichlorophenol | 1810 | 0.00 | U | 1220 | 68 | 32-103 |
| 95-95-4 | MS | 2,4,5-Trichlorophenol | 1810 | 0.00 | U | 1290 | 71 | 38-109 |
| 91-58-7 | MS | 2-Chloronaphthalene | 1810 | 0.00 | U | 1130 | 62 | 27-109 |
| 88-74-4 | MS | 2-Nitroaniline<br>*o-Nitroaniline* | 1810 | 0.00 | U | 1300 | 72 | 37-114 |
| 99-09-2 | MS | 3-Nitroaniline<br>*m-Nitroaniline* | 1810 | 0.00 | U | 1010 | 56 | 31-110 |
| 131-11-3 | MS | Dimethylphthalate | 1810 | 0.00 | U | 1340 | 74 | 38-110 |
| 606-20-2 | MS | 2,6-Dinitrotoluene | 1810 | 0.00 | U | 1250 | 69 | 36-107 |
| 121-14-2 | MS | 2,4-Dinitrotoluene | 1810 | 0.00 | U | 1280 | 71 | 36-115 |
| 208-96-8 | MS | Acenaphthylene | 1810 | 0.00 | U | 1160 | 64 | 32-103 |
| 83-32-9 | MS | Acenaphthene | 1810 | 0.00 | U | 1100 | 61 | 28-102 |
| 51-28-5 | MS | 2,4-Dinitrophenol | 1810 | 0.00 | U | 716 | 40 | 19-101 |
| 132-64-9 | MS | Dibenzofuran | 1810 | 0.00 | U | 1140 | 63 | 28-117 |
| 84-66-2 | MS | Diethylphthalate | 1810 | 0.00 | U | 1370 | 76 | 40-113 |
| 100-02-7 | MS | 4-Nitrophenol | 1810 | 0.00 | U | 1210 | 67 | 12-128 |
| 86-73-7 | MS | Fluorene | 1810 | 0.00 | U | 1140 | 63 | 30-115 |
| 7005-72-3 | MS | 4-Chlorophenylphenylether | 1810 | 0.00 | U | 1240 | 69 | 37-110 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84990MS**
**Lab Sample ID** **1203132848**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 04:08**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MS | 4-Nitroaniline<br>*p-Nitroaniline* | 1810 | 0.00 | U | 1300 | 72 | 36-141 |
| 534-52-1 | MS | 2-Methyl-4,6-dinitrophenol | 1810 | 0.00 | U | 929 | 51 | 14-116 |
| 122-39-4 | MS | Diphenylamine | 1810 | 0.00 | U | 1280 | 71 | 34-111 |
| 122-66-7 | MS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1810 | 0.00 | U | 1480 | 82 | 35-105 |
| 101-55-3 | MS | 4-Bromophenylphenylether | 1810 | 0.00 | U | 1240 | 68 | 37-112 |
| 118-74-1 | MS | Hexachlorobenzene | 1810 | 0.00 | U | 1240 | 69 | 34-111 |
| 87-86-5 | MS | Pentachlorophenol | 1810 | 0.00 | U | 1350 | 75 | 22-108 |
| 85-01-8 | MS | Phenanthrene | 1810 | 0.00 | U | 1270 | 70 | 28-119 |
| 120-12-7 | MS | Anthracene | 1810 | 0.00 | U | 1280 | 71 | 36-104 |
| 84-74-2 | MS | Di-n-butylphthalate | 1810 | 0.00 | U | 1550 | 86 | 42-119 |
| 206-44-0 | MS | Fluoranthene | 1810 | 0.00 | U | 1430 | 79 | 32-115 |
| 129-00-0 | MS | Pyrene | 1810 | 0.00 | U | 1320 | 73 | 25-119 |
| 85-68-7 | MS | Butylbenzylphthalate | 1810 | 0.00 | U | 1730 | 96 | 33-121 |
| 117-81-7 | MS | bis(2-Ethylhexyl)phthalate | 1810 | 0.00 | U | 1750 | 97 | 33-124 |
| 56-55-3 | MS | Benzo(a)anthracene | 1810 | 0.00 | U | 1420 | 79 | 27-120 |
| 218-01-9 | MS | Chrysene | 1810 | 0.00 | U | 1470 | 81 | 33-114 |
| 117-84-0 | MS | Di-n-octylphthalate | 1810 | 0.00 | U | 1760 | 98 | 36-115 |
| 205-99-2 | MS | Benzo(b)fluoranthene | 1810 | 0.00 | U | 1610 | 89 | 30-119 |
| 207-08-9 | MS | Benzo(k)fluoranthene | 1810 | 0.00 | U | 1620 | 89 | 31-125 |
| 50-32-8 | MS | Benzo(a)pyrene | 1810 | 0.00 | U | 1430 | 79 | 31-116 |
| 193-39-5 | MS | Indeno(1,2,3-cd)pyrene | 1810 | 0.00 | U | 1010 | 56 | 29-117 |
| 53-70-3 | MS | Dibenzo(a,h)anthracene | 1810 | 0.00 | U | 1200 | 66 | 26-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | | |
|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Sample Type:** | **Matrix Spike** | |
| **Client ID:** | **RE57-14-84990MS** | **Matrix:** | **SO** | |
| **Lab Sample ID** | **1203132848** | **%Moisture:** | **8** | |
| **Instrument:** | **MSD5.I** | **Analysis Date:** | **07/24/2014 04:08** | **Dilution: 1** |
| **Analyst:** | **RMB** | **Prep Batch ID:** | **1405531** | |
| **Inj. Vol:** | **1 uL** | **Batch ID:** | **1405532** | |

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MS | Benzo(ghi)perylene | 1810 | 0.00 | U | 918 | 51 | 30-109 |
| 91-94-1 | MS | 3,3'-Dichlorobenzidine | 1810 | 0.00 | U | 964 | 53 | 28-105 |
| 120-82-1 | MS | 1,2,4-Trichlorobenzene | 1810 | 0.00 | U | 864 | 48 | 25-102 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84990MSD**
**Lab Sample ID** **1203132849**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 21:54**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MSD | N-Methyl-N-nitrosomethylam | 1800 | 0.00 | U | 400 | 22 * | 24-86 | 58 * | 0-30 |
| 110-86-1 | MSD | Pyridine | 1800 | 0.00 | U | 290 | 16 * | 24-87 | 46 * | 0-30 |
| 62-53-3 | MSD | Aniline | 1800 | 0.00 | U | 441 | 24 * | 28-91 | 72 * | 0-30 |
| 108-95-2 | MSD | Phenol | 1800 | 0.00 | U | 505 | 28 | 28-108 | 70 * | 0-30 |
| 111-44-4 | MSD | bis(2-Chloroethyl) ether | 1800 | 0.00 | U | 412 | 23 * | 25-102 | 62 * | 0-30 |
| 95-57-8 | MSD | 2-Chlorophenol | 1800 | 0.00 | U | 508 | 28 | 28-108 | 68 * | 0-30 |
| 541-73-1 | MSD | 1,3-Dichlorobenzene | 1800 | 0.00 | U | 378 | 21 * | 24-96 | 60 * | 0-30 |
| 106-46-7 | MSD | 1,4-Dichlorobenzene | 1800 | 0.00 | U | 391 | 22 * | 24-97 | 58 * | 0-30 |
| 95-50-1 | MSD | 1,2-Dichlorobenzene | 1800 | 0.00 | U | 409 | 23 * | 25-99 | 59 * | 0-30 |
| 108-60-1 | MSD | bis(2-Chloro-1-methylethyl)et | 1800 | 0.00 | U | 362 | 20 * | 25-105 | 64 * | 0-30 |
| 100-51-6 | MSD | Benzyl alcohol | 1800 | 0.00 | U | 500 | 28 | 21-109 | 70 * | 0-30 |
| 95-48-7 | MSD | o-Cresol | 1800 | 0.00 | U | 575 | 32 | 27-105 | 71 * | 0-30 |
| 65794-96-9 | MSD | m,p-Cresols | 1800 | 0.00 | U | 691 | 38 | 32-123 | 73 * | 0-30 |
| 621-64-7 | MSD | N-Nitrosodipropylamine | 1800 | 0.00 | U | 514 | 28 | 23-117 | 75 * | 0-30 |
| 67-72-1 | MSD | Hexachloroethane | 1800 | 0.00 | U | 415 | 23 * | 24-102 | 59 * | 0-30 |
| 98-95-3 | MSD | Nitrobenzene | 1800 | 0.00 | U | 455 | 25 | 25-104 | 70 * | 0-30 |
| 78-59-1 | MSD | Isophorone | 1800 | 0.00 | U | 496 | 27 | 24-108 | 75 * | 0-30 |
| 88-75-5 | MSD | 2-Nitrophenol | 1800 | 0.00 | U | 426 | 24 | 24-106 | 74 * | 0-30 |
| 105-67-9 | MSD | 2,4-Dimethylphenol | 1800 | 0.00 | U | 478 | 26 * | 30-109 | 81 * | 0-30 |
| 111-91-1 | MSD | bis(2-Chloroethoxy)methane | 1800 | 0.00 | U | 419 | 23 * | 27-104 | 77 * | 0-30 |
| 120-83-2 | MSD | 2,4-Dichlorophenol | 1800 | 0.00 | U | 494 | 27 * | 31-103 | 75 * | 0-30 |
| 65-85-0 | MSD | Benzoic acid | 3610 | 0.00 | U | 1320 | 36 | 15-115 | 60 * | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84990MSD**
**Lab Sample ID** **1203132849**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 21:54**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MSD 4-Chloroaniline | 1800 | 0.00 U | 468 | 26 * | 27-100 | 68 * | 0-30 |
| 87-68-3 | MSD Hexachlorobutadiene | 1800 | 0.00 U | 389 | 22 * | 24-105 | 65 * | 0-30 |
| 59-50-7 | MSD 4-Chloro-3-methylphenol | 1800 | 0.00 U | 713 | 39 | 32-112 | 64 * | 0-30 |
| 91-57-6 | MSD 2-Methylnaphthalene | 1800 | 0.00 U | 448 | 25 | 23-107 | 73 * | 0-30 |
| 91-20-3 | MSD Naphthalene | 1800 | 0.00 U | 423 | 23 | 21-107 | 72 * | 0-30 |
| 77-47-4 | MSD Hexachlorocyclopentadiene | 1800 | 0.00 U | 257 | 14 | 12-106 | 73 * | 0-30 |
| 88-06-2 | MSD 2,4,6-Trichlorophenol | 1800 | 0.00 U | 617 | 34 | 32-103 | 66 * | 0-30 |
| 95-95-4 | MSD 2,4,5-Trichlorophenol | 1800 | 0.00 U | 691 | 38 | 38-109 | 60 * | 0-30 |
| 91-58-7 | MSD 2-Chloronaphthalene | 1800 | 0.00 U | 537 | 30 | 27-109 | 71 * | 0-30 |
| 88-74-4 | MSD 2-Nitroaniline *o-Nitroaniline* | 1800 | 0.00 U | 720 | 40 | 37-114 | 58 * | 0-30 |
| 99-09-2 | MSD 3-Nitroaniline *m-Nitroaniline* | 1800 | 0.00 U | 662 | 37 | 31-110 | 42 * | 0-30 |
| 131-11-3 | MSD Dimethylphthalate | 1800 | 0.00 U | 710 | 39 | 38-110 | 62 * | 0-30 |
| 606-20-2 | MSD 2,6-Dinitrotoluene | 1800 | 0.00 U | 683 | 38 | 36-107 | 58 * | 0-30 |
| 121-14-2 | MSD 2,4-Dinitrotoluene | 1800 | 0.00 U | 766 | 42 | 36-115 | 50 * | 0-30 |
| 208-96-8 | MSD Acenaphthylene | 1800 | 0.00 U | 560 | 31 * | 32-103 | 70 * | 0-30 |
| 83-32-9 | MSD Acenaphthene | 1800 | 0.00 U | 536 | 30 | 28-102 | 69 * | 0-30 |
| 51-28-5 | MSD 2,4-Dinitrophenol | 1800 | 0.00 U | 325 | 18 * | 19-101 | 75 * | 0-30 |
| 132-64-9 | MSD Dibenzofuran | 1800 | 0.00 U | 604 | 33 | 28-117 | 62 * | 0-30 |
| 84-66-2 | MSD Diethylphthalate | 1800 | 0.00 U | 785 | 44 | 40-113 | 54 * | 0-30 |
| 100-02-7 | MSD 4-Nitrophenol | 1800 | 0.00 U | 719 | 40 | 12-128 | 51 * | 0-30 |
| 86-73-7 | MSD Fluorene | 1800 | 0.00 U | 622 | 34 | 30-115 | 59 * | 0-30 |
| 7005-72-3 | MSD 4-Chlorophenylphenylether | 1800 | 0.00 U | 660 | 37 | 37-110 | 61 * | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3910**
**Client ID:** **RE57-14-84990MSD**
**Lab Sample ID** **1203132849**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 21:54**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MSD | 4-Nitroaniline<br>*p-Nitroaniline* | 1800 | 0.00 | U | 792 | 44 | 36-141 | 49 * | 0-30 |
| 534-52-1 | MSD | 2-Methyl-4,6-dinitrophenol | 1800 | 0.00 | U | 492 | 27 | 14-116 | 62 * | 0-30 |
| 122-39-4 | MSD | Diphenylamine | 1800 | 0.00 | U | 704 | 39 | 34-111 | 58 * | 0-30 |
| 122-66-7 | MSD | Azobenzene<br>*1,2-Diphenylhydrazine* | 1800 | 0.00 | U | 784 | 43 | 35-105 | 61 * | 0-30 |
| 101-55-3 | MSD | 4-Bromophenylphenylether | 1800 | 0.00 | U | 688 | 38 | 37-112 | 57 * | 0-30 |
| 118-74-1 | MSD | Hexachlorobenzene | 1800 | 0.00 | U | 674 | 37 | 34-111 | 59 * | 0-30 |
| 87-86-5 | MSD | Pentachlorophenol | 1800 | 0.00 | U | 675 | 37 | 22-108 | 67 * | 0-30 |
| 85-01-8 | MSD | Phenanthrene | 1800 | 0.00 | U | 720 | 40 | 28-119 | 55 * | 0-30 |
| 120-12-7 | MSD | Anthracene | 1800 | 0.00 | U | 745 | 41 | 36-104 | 53 * | 0-30 |
| 84-74-2 | MSD | Di-n-butylphthalate | 1800 | 0.00 | U | 898 | 50 | 42-119 | 53 * | 0-30 |
| 206-44-0 | MSD | Fluoranthene | 1800 | 0.00 | U | 821 | 46 | 32-115 | 54 * | 0-30 |
| 129-00-0 | MSD | Pyrene | 1800 | 0.00 | U | 800 | 44 | 25-119 | 49 * | 0-30 |
| 85-68-7 | MSD | Butylbenzylphthalate | 1800 | 0.00 | U | 977 | 54 | 33-121 | 56 * | 0-30 |
| 117-81-7 | MSD | bis(2-Ethylhexyl)phthalate | 1800 | 0.00 | U | 1010 | 56 | 33-124 | 54 * | 0-30 |
| 56-55-3 | MSD | Benzo(a)anthracene | 1800 | 0.00 | U | 829 | 46 | 27-120 | 53 * | 0-30 |
| 218-01-9 | MSD | Chrysene | 1800 | 0.00 | U | 822 | 46 | 33-114 | 56 * | 0-30 |
| 117-84-0 | MSD | Di-n-octylphthalate | 1800 | 0.00 | U | 1010 | 56 | 36-115 | 54 * | 0-30 |
| 205-99-2 | MSD | Benzo(b)fluoranthene | 1800 | 0.00 | U | 829 | 46 | 30-119 | 64 * | 0-30 |
| 207-08-9 | MSD | Benzo(k)fluoranthene | 1800 | 0.00 | U | 862 | 48 | 31-125 | 61 * | 0-30 |
| 50-32-8 | MSD | Benzo(a)pyrene | 1800 | 0.00 | U | 840 | 47 | 31-116 | 52 * | 0-30 |
| 193-39-5 | MSD | Indeno(1,2,3-cd)pyrene | 1800 | 0.00 | U | 703 | 39 | 29-117 | 36 * | 0-30 |
| 53-70-3 | MSD | Dibenzo(a,h)anthracene | 1800 | 0.00 | U | 794 | 44 | 26-128 | 41 * | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Sample Type:** | **Matrix Spike Duplicate** |
| **Client ID:** | **RE57-14-84990MSD** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203132849** | **%Moisture:** | **8** |
| **Instrument:** | **MSD5.I** | **Analysis Date:** | **07/24/2014 21:54** |
| **Analyst:** | **RMB** | **Prep Batch ID:** | **1405531** |
| **Inj. Vol:** | **1 uL** | **Batch ID:** | **1405532** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MSD | Benzo(ghi)perylene | 1800 | 0.00 | U | 686 | 38 | 30-109 | 29 | 0-30 |
| 91-94-1 | MSD | 3,3'-Dichlorobenzidine | 1800 | 0.00 | U | 638 | 35 | 28-105 | 41 * | 0-30 |
| 120-82-1 | MSD | 1,2,4-Trichlorobenzene | 1800 | 0.00 | U | 431 | 24 * | 25-102 | 67 * | 0-30 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1405531** | **Instrument ID:** | **MSD5.I** | **Data File:** | **s072314.b\s5G2314.D** |
| **Lab Sample ID:** | **1203132846** | **Prep Date:** | **07/23/2014 10:03** | **Analyzed:** | **07/23/14 19:16** |
| **Column:** | **DB-5ms** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1405531 | 1203132847 | s072314.b\s5G2315.D | 07/23/14 | 1948 |
| 02 | RE57-14-84990 | 353064001 | s072314.b\s5G2330.D | 07/24/14 | 0337 |
| 03 | RE57-14-84990MS | 1203132848 | s072314.b\s5G2331.D | 07/24/14 | 0408 |
| 04 | RE57-14-85005 | 353064002 | s072314.b\s5G2333.D | 07/24/14 | 0511 |
| 05 | RE57-14-84990MSD | 1203132849 | s072414.b\s5G2418.D | 07/24/14 | 2154 |
| 06 | RE57-14-84991 | 353064003 | s072714.b\s5G2726.D | 07/28/14 | 0215 |

# Quality Control Data

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132846** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2314.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 122-66-7 | Azobenzene | U | 333 | ug/kg | 99.9 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | U | 333 | ug/kg | 99.9 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | U | 666 | ug/kg | 99.9 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 333 | ug/kg | 99.9 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 333 | ug/kg | 99.9 | 333 |
| 91-58-7 | 2-Chloronaphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 95-57-8 | 2-Chlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 91-57-6 | 2-Methylnaphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 88-75-5 | 2-Nitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 333 | ug/kg | 99.9 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | U | 333 | ug/kg | 99.9 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 333 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | U | 333 | ug/kg | 99.9 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 333 | ug/kg | 99.9 | 333 |
| 100-02-7 | 4-Nitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 83-32-9 | Acenaphthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 208-96-8 | Acenaphthylene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 62-53-3 | Aniline | U | 333 | ug/kg | 99.9 | 333 |
| 120-12-7 | Anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 65-85-0 | Benzoic acid | U | 666 | ug/kg | 166 | 666 |
| 100-51-6 | Benzyl alcohol | U | 333 | ug/kg | 99.9 | 333 |
| 85-68-7 | Butylbenzylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 218-01-9 | Chrysene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 117-84-0 | Di-n-octylphthalate | U | 333 | ug/kg | 99.9 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132846** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2314.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 132-64-9 | Dibenzofuran | U | 333 | ug/kg | 99.9 | 333 |
| 84-66-2 | Diethylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 131-11-3 | Dimethylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 122-39-4 | Diphenylamine | U | 333 | ug/kg | 99.9 | 333 |
| 206-44-0 | Fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 86-73-7 | Fluorene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 118-74-1 | Hexachlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 87-68-3 | Hexachlorobutadiene | U | 333 | ug/kg | 99.9 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 333 | ug/kg | 99.9 | 333 |
| 67-72-1 | Hexachloroethane | U | 333 | ug/kg | 99.9 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 78-59-1 | Isophorone | U | 333 | ug/kg | 99.9 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 333 | ug/kg | 99.9 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | U | 333 | ug/kg | 99.9 | 333 |
| 91-20-3 | Naphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 98-95-3 | Nitrobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 87-86-5 | Pentachlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 85-01-8 | Phenanthrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 108-95-2 | Phenol | U | 333 | ug/kg | 99.9 | 333 |
| 129-00-0 | Pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 110-86-1 | Pyridine | U | 333 | ug/kg | 99.9 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 333 | ug/kg | 99.9 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 333 | ug/kg | 99.9 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 333 | ug/kg | 99.9 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 333 | ug/kg | 99.9 | 333 |
| 65794-96-9 | m,p-Cresols | U | 333 | ug/kg | 99.9 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 333 | ug/kg | 99.9 | 333 |
| 95-48-7 | o-Cresol | U | 333 | ug/kg | 99.9 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 333 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 333 | ug/kg | 99.9 | 333 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.911 | 362 | ug/kg | 0 | J |
| | unknown | 3.615 | 933 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132846** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2314.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.72 | 2220 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.32 | 144 | ug/kg | 96 | NJ |
| | unknown | 18.149 | 345 | ug/kg | 0 | J |
| | unknown | 22.792 | 1310 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132847** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:48** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2315.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1270 | ug/kg | 99.8 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1290 | ug/kg | 99.8 | 333 |
| 122-66-7 | Azobenzene | | 1380 | ug/kg | 99.8 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 1250 | ug/kg | 99.8 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1270 | ug/kg | 99.8 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1340 | ug/kg | 99.8 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1330 | ug/kg | 99.8 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | | 1210 | ug/kg | 99.8 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | | 1250 | ug/kg | 99.8 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | | 892 | ug/kg | 99.8 | 665 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1410 | ug/kg | 99.8 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1360 | ug/kg | 99.8 | 333 |
| 91-58-7 | 2-Chloronaphthalene | | 1340 | ug/kg | 9.98 | 33.3 |
| 95-57-8 | 2-Chlorophenol | | 1410 | ug/kg | 99.8 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 1060 | ug/kg | 99.8 | 333 |
| 91-57-6 | 2-Methylnaphthalene | | 1220 | ug/kg | 9.98 | 33.3 |
| 88-75-5 | 2-Nitrophenol | | 1250 | ug/kg | 99.8 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1400 | ug/kg | 99.8 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | | 1150 | ug/kg | 99.8 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1410 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | | 1060 | ug/kg | 99.8 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1410 | ug/kg | 99.8 | 333 |
| 100-02-7 | 4-Nitrophenol | | 1090 | ug/kg | 99.8 | 333 |
| 83-32-9 | Acenaphthene | | 1300 | ug/kg | 9.98 | 33.3 |
| 208-96-8 | Acenaphthylene | | 1340 | ug/kg | 9.98 | 33.3 |
| 62-53-3 | Aniline | | 1310 | ug/kg | 99.8 | 333 |
| 120-12-7 | Anthracene | | 1230 | ug/kg | 9.98 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | | 1330 | ug/kg | 9.98 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | | 1240 | ug/kg | 9.98 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | | 1200 | ug/kg | 9.98 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | | 1470 | ug/kg | 9.98 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | | 1180 | ug/kg | 9.98 | 33.3 |
| 65-85-0 | Benzoic acid | | 2030 | ug/kg | 166 | 665 |
| 100-51-6 | Benzyl alcohol | | 1270 | ug/kg | 99.8 | 333 |
| 85-68-7 | Butylbenzylphthalate | | 1500 | ug/kg | 99.8 | 333 |
| 218-01-9 | Chrysene | | 1350 | ug/kg | 9.98 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | | 1370 | ug/kg | 99.8 | 333 |
| 117-84-0 | Di-n-octylphthalate | | 1390 | ug/kg | 99.8 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132847** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:48** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2315.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1620 | ug/kg | 9.98 | 33.3 |
| 132-64-9 | Dibenzofuran | | 1320 | ug/kg | 99.8 | 333 |
| 84-66-2 | Diethylphthalate | | 1460 | ug/kg | 99.8 | 333 |
| 131-11-3 | Dimethylphthalate | | 1410 | ug/kg | 99.8 | 333 |
| 122-39-4 | Diphenylamine | | 1170 | ug/kg | 99.8 | 333 |
| 206-44-0 | Fluoranthene | | 1310 | ug/kg | 9.98 | 33.3 |
| 86-73-7 | Fluorene | | 1330 | ug/kg | 9.98 | 33.3 |
| 118-74-1 | Hexachlorobenzene | | 1210 | ug/kg | 99.8 | 333 |
| 87-68-3 | Hexachlorobutadiene | | 1210 | ug/kg | 99.8 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | | 871 | ug/kg | 99.8 | 333 |
| 67-72-1 | Hexachloroethane | | 1360 | ug/kg | 99.8 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1430 | ug/kg | 9.98 | 33.3 |
| 78-59-1 | Isophorone | | 1350 | ug/kg | 99.8 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1270 | ug/kg | 99.8 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | | 1500 | ug/kg | 99.8 | 333 |
| 91-20-3 | Naphthalene | | 1250 | ug/kg | 9.98 | 33.3 |
| 98-95-3 | Nitrobenzene | | 1320 | ug/kg | 99.8 | 333 |
| 87-86-5 | Pentachlorophenol | | 1150 | ug/kg | 99.8 | 333 |
| 85-01-8 | Phenanthrene | | 1220 | ug/kg | 9.98 | 33.3 |
| 108-95-2 | Phenol | | 1340 | ug/kg | 99.8 | 333 |
| 129-00-0 | Pyrene | | 1330 | ug/kg | 9.98 | 33.3 |
| 110-86-1 | Pyridine | | 959 | ug/kg | 99.8 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 1100 | ug/kg | 99.8 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1230 | ug/kg | 99.8 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1330 | ug/kg | 99.8 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1390 | ug/kg | 99.8 | 333 |
| 65794-96-9 | m,p-Cresols | | 1680 | ug/kg | 99.8 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1120 | ug/kg | 99.8 | 333 |
| 95-48-7 | o-Cresol | | 1490 | ug/kg | 99.8 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1350 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1440 | ug/kg | 99.8 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203132848** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84990MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 04:08** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.09 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2331.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 864 | ug/kg | 108 | 361 |
| 95-50-1 | 1,2-Dichlorobenzene | | 755 | ug/kg | 108 | 361 |
| 122-66-7 | Azobenzene | | 1480 | ug/kg | 108 | 361 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 699 | ug/kg | 108 | 361 |
| 106-46-7 | 1,4-Dichlorobenzene | | 707 | ug/kg | 108 | 361 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1290 | ug/kg | 108 | 361 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1220 | ug/kg | 108 | 361 |
| 120-83-2 | 2,4-Dichlorophenol | | 1090 | ug/kg | 108 | 361 |
| 105-67-9 | 2,4-Dimethylphenol | | 1120 | ug/kg | 108 | 361 |
| 51-28-5 | 2,4-Dinitrophenol | J | 716 | ug/kg | 108 | 722 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1280 | ug/kg | 108 | 361 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1250 | ug/kg | 108 | 361 |
| 91-58-7 | 2-Chloronaphthalene | | 1130 | ug/kg | 10.8 | 36.1 |
| 95-57-8 | 2-Chlorophenol | | 1030 | ug/kg | 108 | 361 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 929 | ug/kg | 108 | 361 |
| 91-57-6 | 2-Methylnaphthalene | | 965 | ug/kg | 10.8 | 36.1 |
| 88-75-5 | 2-Nitrophenol | | 923 | ug/kg | 108 | 361 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 964 | ug/kg | 108 | 361 |
| 101-55-3 | 4-Bromophenylphenylether | | 1240 | ug/kg | 108 | 361 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1380 | ug/kg | 144 | 361 |
| 106-47-8 | 4-Chloroaniline | | 955 | ug/kg | 108 | 361 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1240 | ug/kg | 108 | 361 |
| 100-02-7 | 4-Nitrophenol | | 1210 | ug/kg | 108 | 361 |
| 83-32-9 | Acenaphthene | | 1100 | ug/kg | 10.8 | 36.1 |
| 208-96-8 | Acenaphthylene | | 1160 | ug/kg | 10.8 | 36.1 |
| 62-53-3 | Aniline | | 936 | ug/kg | 108 | 361 |
| 120-12-7 | Anthracene | | 1280 | ug/kg | 10.8 | 36.1 |
| 56-55-3 | Benzo(a)anthracene | | 1420 | ug/kg | 10.8 | 36.1 |
| 50-32-8 | Benzo(a)pyrene | | 1430 | ug/kg | 10.8 | 36.1 |
| 205-99-2 | Benzo(b)fluoranthene | | 1610 | ug/kg | 10.8 | 36.1 |
| 191-24-2 | Benzo(ghi)perylene | | 918 | ug/kg | 10.8 | 36.1 |
| 207-08-9 | Benzo(k)fluoranthene | | 1620 | ug/kg | 10.8 | 36.1 |
| 65-85-0 | Benzoic acid | | 2450 | ug/kg | 181 | 722 |
| 100-51-6 | Benzyl alcohol | | 1040 | ug/kg | 108 | 361 |
| 85-68-7 | Butylbenzylphthalate | | 1730 | ug/kg | 108 | 361 |
| 218-01-9 | Chrysene | | 1470 | ug/kg | 10.8 | 36.1 |
| 84-74-2 | Di-n-butylphthalate | | 1550 | ug/kg | 108 | 361 |
| 117-84-0 | Di-n-octylphthalate | | 1760 | ug/kg | 108 | 361 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203132848** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84990MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 04:08** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.09 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2331.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1200 | ug/kg | 10.8 | 36.1 |
| 132-64-9 | Dibenzofuran | | 1140 | ug/kg | 108 | 361 |
| 84-66-2 | Diethylphthalate | | 1370 | ug/kg | 108 | 361 |
| 131-11-3 | Dimethylphthalate | | 1340 | ug/kg | 108 | 361 |
| 122-39-4 | Diphenylamine | | 1280 | ug/kg | 108 | 361 |
| 206-44-0 | Fluoranthene | | 1430 | ug/kg | 10.8 | 36.1 |
| 86-73-7 | Fluorene | | 1140 | ug/kg | 10.8 | 36.1 |
| 118-74-1 | Hexachlorobenzene | | 1240 | ug/kg | 108 | 361 |
| 87-68-3 | Hexachlorobutadiene | | 767 | ug/kg | 108 | 361 |
| 77-47-4 | Hexachlorocyclopentadiene | | 555 | ug/kg | 108 | 361 |
| 67-72-1 | Hexachloroethane | | 761 | ug/kg | 108 | 361 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1010 | ug/kg | 10.8 | 36.1 |
| 78-59-1 | Isophorone | | 1090 | ug/kg | 108 | 361 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 728 | ug/kg | 108 | 361 |
| 621-64-7 | N-Nitrosodipropylamine | | 1130 | ug/kg | 108 | 361 |
| 91-20-3 | Naphthalene | | 895 | ug/kg | 10.8 | 36.1 |
| 98-95-3 | Nitrobenzene | | 944 | ug/kg | 108 | 361 |
| 87-86-5 | Pentachlorophenol | | 1350 | ug/kg | 108 | 361 |
| 85-01-8 | Phenanthrene | | 1270 | ug/kg | 10.8 | 36.1 |
| 108-95-2 | Phenol | | 1050 | ug/kg | 108 | 361 |
| 129-00-0 | Pyrene | | 1320 | ug/kg | 10.8 | 36.1 |
| 110-86-1 | Pyridine | | 460 | ug/kg | 108 | 361 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 703 | ug/kg | 108 | 361 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 947 | ug/kg | 108 | 361 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 778 | ug/kg | 108 | 361 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1750 | ug/kg | 108 | 361 |
| 65794-96-9 | m,p-Cresols | | 1490 | ug/kg | 108 | 361 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1010 | ug/kg | 108 | 361 |
| 95-48-7 | o-Cresol | | 1210 | ug/kg | 108 | 361 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1300 | ug/kg | 119 | 361 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1300 | ug/kg | 108 | 361 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203132849** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84990MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 21:54** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2418.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 431 | ug/kg | 108 | 361 |
| 95-50-1 | 1,2-Dichlorobenzene | | 409 | ug/kg | 108 | 361 |
| 122-66-7 | Azobenzene | | 784 | ug/kg | 108 | 361 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 378 | ug/kg | 108 | 361 |
| 106-46-7 | 1,4-Dichlorobenzene | | 391 | ug/kg | 108 | 361 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 691 | ug/kg | 108 | 361 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 617 | ug/kg | 108 | 361 |
| 120-83-2 | 2,4-Dichlorophenol | | 494 | ug/kg | 108 | 361 |
| 105-67-9 | 2,4-Dimethylphenol | | 478 | ug/kg | 108 | 361 |
| 51-28-5 | 2,4-Dinitrophenol | J | 325 | ug/kg | 108 | 722 |
| 121-14-2 | 2,4-Dinitrotoluene | | 766 | ug/kg | 108 | 361 |
| 606-20-2 | 2,6-Dinitrotoluene | | 683 | ug/kg | 108 | 361 |
| 91-58-7 | 2-Chloronaphthalene | | 537 | ug/kg | 10.8 | 36.1 |
| 95-57-8 | 2-Chlorophenol | | 508 | ug/kg | 108 | 361 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 492 | ug/kg | 108 | 361 |
| 91-57-6 | 2-Methylnaphthalene | | 448 | ug/kg | 10.8 | 36.1 |
| 88-75-5 | 2-Nitrophenol | | 426 | ug/kg | 108 | 361 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 638 | ug/kg | 108 | 361 |
| 101-55-3 | 4-Bromophenylphenylether | | 688 | ug/kg | 108 | 361 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 713 | ug/kg | 144 | 361 |
| 106-47-8 | 4-Chloroaniline | | 468 | ug/kg | 108 | 361 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 660 | ug/kg | 108 | 361 |
| 100-02-7 | 4-Nitrophenol | | 719 | ug/kg | 108 | 361 |
| 83-32-9 | Acenaphthene | | 536 | ug/kg | 10.8 | 36.1 |
| 208-96-8 | Acenaphthylene | | 560 | ug/kg | 10.8 | 36.1 |
| 62-53-3 | Aniline | | 441 | ug/kg | 108 | 361 |
| 120-12-7 | Anthracene | | 745 | ug/kg | 10.8 | 36.1 |
| 56-55-3 | Benzo(a)anthracene | | 829 | ug/kg | 10.8 | 36.1 |
| 50-32-8 | Benzo(a)pyrene | | 840 | ug/kg | 10.8 | 36.1 |
| 205-99-2 | Benzo(b)fluoranthene | | 829 | ug/kg | 10.8 | 36.1 |
| 191-24-2 | Benzo(ghi)perylene | | 686 | ug/kg | 10.8 | 36.1 |
| 207-08-9 | Benzo(k)fluoranthene | | 862 | ug/kg | 10.8 | 36.1 |
| 65-85-0 | Benzoic acid | | 1320 | ug/kg | 180 | 722 |
| 100-51-6 | Benzyl alcohol | | 500 | ug/kg | 108 | 361 |
| 85-68-7 | Butylbenzylphthalate | | 977 | ug/kg | 108 | 361 |
| 218-01-9 | Chrysene | | 822 | ug/kg | 10.8 | 36.1 |
| 84-74-2 | Di-n-butylphthalate | | 898 | ug/kg | 108 | 361 |
| 117-84-0 | Di-n-octylphthalate | | 1010 | ug/kg | 108 | 361 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3910** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203132849** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84990MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 21:54** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2418.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 794 | ug/kg | 10.8 | 36.1 |
| 132-64-9 | Dibenzofuran | | 604 | ug/kg | 108 | 361 |
| 84-66-2 | Diethylphthalate | | 785 | ug/kg | 108 | 361 |
| 131-11-3 | Dimethylphthalate | | 710 | ug/kg | 108 | 361 |
| 122-39-4 | Diphenylamine | | 704 | ug/kg | 108 | 361 |
| 206-44-0 | Fluoranthene | | 821 | ug/kg | 10.8 | 36.1 |
| 86-73-7 | Fluorene | | 622 | ug/kg | 10.8 | 36.1 |
| 118-74-1 | Hexachlorobenzene | | 674 | ug/kg | 108 | 361 |
| 87-68-3 | Hexachlorobutadiene | | 389 | ug/kg | 108 | 361 |
| 77-47-4 | Hexachlorocyclopentadiene | J | 257 | ug/kg | 108 | 361 |
| 67-72-1 | Hexachloroethane | | 415 | ug/kg | 108 | 361 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 703 | ug/kg | 10.8 | 36.1 |
| 78-59-1 | Isophorone | | 496 | ug/kg | 108 | 361 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 400 | ug/kg | 108 | 361 |
| 621-64-7 | N-Nitrosodipropylamine | | 514 | ug/kg | 108 | 361 |
| 91-20-3 | Naphthalene | | 423 | ug/kg | 10.8 | 36.1 |
| 98-95-3 | Nitrobenzene | | 455 | ug/kg | 108 | 361 |
| 87-86-5 | Pentachlorophenol | | 675 | ug/kg | 108 | 361 |
| 85-01-8 | Phenanthrene | | 720 | ug/kg | 10.8 | 36.1 |
| 108-95-2 | Phenol | | 505 | ug/kg | 108 | 361 |
| 129-00-0 | Pyrene | | 800 | ug/kg | 10.8 | 36.1 |
| 110-86-1 | Pyridine | J | 290 | ug/kg | 108 | 361 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 362 | ug/kg | 108 | 361 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 419 | ug/kg | 108 | 361 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 412 | ug/kg | 108 | 361 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1010 | ug/kg | 108 | 361 |
| 65794-96-9 | m,p-Cresols | | 691 | ug/kg | 108 | 361 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 662 | ug/kg | 108 | 361 |
| 95-48-7 | o-Cresol | | 575 | ug/kg | 108 | 361 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 720 | ug/kg | 119 | 361 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 792 | ug/kg | 108 | 361 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 28-JUL-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| SEMIVOA GC/MS | SW846 3541/8270D | Solid | ARSL (LANL) |
| **Batch ID:** | **Sample Numbers:** | | |
| 1405532 | See Below | | |

**Potentially affected work order(s)(SDG): 352623(2014-3795),353064(2014-3910)**

**Application Issues:**

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. The 1203132849MSD failed spike recovery for multiple analytes. Please see the QC Summary/Spike Recovery Report for the specific analytes and associated recoveries.<br><br>2. Multiple RPD values between the 1203132848MS and 1203132849MSD were not within the 0-30% limits. Please see the QC Summary/Spike Recovery Report for the specific analyte pairs and associated RPD values. | 1. The MS and LCS passed recoveries. The data are reported.<br><br>2. These RPD failures are attributed to the large difference in the recovery values between analyte pairs in the MS and MSD. The MS and LCS passed recovery for all analytes. The data are reported. |

**Originator's Name:**

Richard Bomar 29-JUL-14

**Data Validator/Group Leader:**

Herbert Maier 29-JUL-14

# Perchlorates by LCMSMS Analysis

# Case Narrative

**Perchlorate by LC-MS/MS**
**ARS International, LLC (ARSL)**
**SDG 2014-3910**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography-Mass Spectrometry/Mass Spectrometry (LC-MS/MS) by EPA Method 6850 Modified (6850M)** |
| Analytical Method: | SW846 6850 Modified |
| Prep Method: | SW846 6850 Modified |
| Analytical Batch Number: | 1404629 |
| Prep Batch Number: | 1404628 |

## Sample Analysis

| Sample ID | Client ID |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 1203130460 | Interference Check Sample (ICS) |
| 1203130456 | Method Blank (MB) |
| 1203130457 | Laboratory Control Sample (LCS) |
| 1203130458 | 352623001(RE57-14-84140) Matrix Spike (MS) |
| 1203130459 | 352623001(RE57-14-84140) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP).

The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 11.

## Calibration Information

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

**ICV Requirements**
The initial calibration verification standard (ICV) met the acceptance criteria.

**CCB Requirements**
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

**CCV Requirements**
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

**Low Level Standard (CRI) Requirements**
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Interference Check Sample (ICS)**
The ICS spike recoveries met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Client sample 352623001 (RE57-14-84140) from SDG 2014-3795 was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
The RPDs between the MS and MSD met the acceptance limits.

**Retention Time Standard Area Acceptance**
The retention time standard areas were within the required acceptance criteria for all samples and QC.

**Retention Time**
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard.

The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used.

In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

## Technical Information

**Holding Time Specifications**
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-extractions or re-analyses were not required in this SDG.

## Miscellaneous Information

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents.

A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

**Method Comments**
The samples in this SDG were not originally analyzed using EPA Method 314.0.

**Additional Comments**
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred.

Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

**Perchlorate Isotope Ratio**
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples.

Please see the isotope ratio criteria in the Miscellaneous Section.

## System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for Perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1 and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for Perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package.

Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

## Chromatographic Columns

Chromatographic separation of Perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

## Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3910  GEL Work Order: 353064

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Michael A. Penny Jr.  **Name: Michael Penny**

**Date: 24 JUL 2014**  **Title: Group Leader**

# Sample Data Summary

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84990

**Date Received:** 19-JUL-14

**GEL Job No (SDG):** 2014-3910

**GEL Sample ID:** 353064001

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .538 | 2.15 | 2.15 | ug/kg | U | 1 | 22-JUL-14 23:09 | per0722034a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 23:09 | per0722034a |
| 14797-73-0 | Perchlorate-101 | .538 | 2.15 | 2.15 | ug/kg | U | 1 | 22-JUL-14 23:09 | per0722034a |
| | Perchlorate-O(18) | | | 5.09 | ug/kg | | 1 | 22-JUL-14 23:09 | per0722034a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-85005

**Date Received:** 19-JUL-14

**GEL Job No (SDG):** 2014-3910

**GEL Sample ID:** 353064002

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 96.5

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .51 | 2.04 | 2.04 | ug/kg | U | 1 | 22-JUL-14 23:43 | per0722038a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 23:43 | per0722038a |
| 14797-73-0 | Perchlorate-101 | .51 | 2.04 | 2.04 | ug/kg | U | 1 | 22-JUL-14 23:43 | per0722038a |
| | Perchlorate-O(18) | | | 4.83 | ug/kg | | 1 | 22-JUL-14 23:43 | per0722038a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84991

**Date Received:** 19-JUL-14

**GEL Job No (SDG):** 2014-3910

**GEL Sample ID:** 353064003

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 95.4

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .521 | 2.09 | 2.09 | ug/kg | U | 1 | 22-JUL-14 23:52 | per0722039a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 23:52 | per0722039a |
| 14797-73-0 | Perchlorate-101 | .521 | 2.09 | 0.571 | ug/kg | J | 1 | 22-JUL-14 23:52 | per0722039a |
| | Perchlorate-O(18) | | | 4.86 | ug/kg | | 1 | 22-JUL-14 23:52 | per0722039a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Quality Control Summary

## Perchlorate Laboratory Control Sample

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No. (SDG):** 2014-3910

**Extract Batch Code:** 1404628

**Date Filtered:** 22-JUL-14

**Matrix:** SOIL

**Sample ID:** 1203130457

| Analyte^ | True | Found | Units | %Rec | Q | Control Limits |
|---|---|---|---|---|---|---|
| Perchlorate | 1.97 | 1.87 | ug/kg | 95.0 | | 70 - 130 |
| Perchlorate Isotope Ratio | | 2.91 | | | | - |
| Perchlorate-101 | 1.97 | 1.95 | ug/kg | 99.2 | | 70 - 130 |
| Perchlorate-O(18) | | 4.78 | ug/kg | | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

## Perchlorate Spike/Spike Duplicate Summary

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No (SDG):** 2014-3910

**Extract Batch Code:** 1404628

**Date Extracted:** 22-JUL-14

**GEL MS/PS ID:** 1203130458

**Client ID:** RE57-14-84140

**GEL MSD/PSD ID:** 1203130459

**QC Type:** MS

| Compound^ | Spike Added | Sample Conc | Units | MS Conc | MS Rec # | MSD Conc | MSD Rec # | RPD # | RPD Limit | Recovery Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 2.16 | 0.202 | ug/kg | 2.20 | 92.7 | 2.21 | 92.4 | .155 | 30 | 75 - 125 |
| Perchlorate Isotope Ratio | 0 | 3.18 | | 3.01 | | 2.91 | | 3.5 | | - |
| Perchlorate-101 | 2.16 | 0.193 | ug/kg | 2.22 | 94 | 2.31 | 97.3 | 3.65 | 30 | 75 - 125 |
| Perchlorate-O(18) | 0 | 5.11 | ug/kg | 5.25 | | 5.17 | | 1.37 | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

# Quality Control Data

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
MB

**Date Received:** 22-JUL-14

**GEL Job No (SDG):** 2014-3910

**GEL Sample ID:** 1203130456

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .493 | 1.97 | 1.97 | ug/kg | U | 1 | 22-JUL-14 20:03 | per0722012a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 20:03 | per0722012a |
| 14797-73-0 | Perchlorate-101 | .493 | 1.97 | 1.97 | ug/kg | U | 1 | 22-JUL-14 20:03 | per0722012a |
| | Perchlorate-O(18) | | | 4.69 | ug/kg | | 1 | 22-JUL-14 20:03 | per0722012a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
LCS

**Date Received:** 22-JUL-14

**GEL Job No (SDG):** 2014-3910

**GEL Sample ID:** 1203130457

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .493 | 1.97 | 1.87 | ug/kg | J | 1 | 22-JUL-14 20:12 | per0722013a |
| | Perchlorate Isotope Ratio | | | 2.91 | | | 1 | 22-JUL-14 20:12 | per0722013a |
| 14797-73-0 | Perchlorate-101 | .493 | 1.97 | 1.95 | ug/kg | J | 1 | 22-JUL-14 20:12 | per0722013a |
| | Perchlorate-O(18) | | | 4.78 | ug/kg | | 1 | 22-JUL-14 20:12 | per0722013a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
ICS

**Date Received:**

**GEL Job No (SDG):** 2014-3910

**GEL Sample ID:** 1203130460

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .5 | 2 | 1.86 | ug/kg | J | 1 | 22-JUL-14 20:20 | per0722014a |
| | Perchlorate Isotope Ratio | | | 2.91 | | | 1 | 22-JUL-14 20:20 | per0722014a |
| 14797-73-0 | Perchlorate-101 | .5 | 2 | 1.95 | ug/kg | J | 1 | 22-JUL-14 20:20 | per0722014a |
| | Perchlorate-O(18) | | | 4.96 | ug/kg | | 1 | 22-JUL-14 20:20 | per0722014a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84140MS

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3910

**GEL Sample ID:** 1203130458

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .54 | 2.16 | 2.20 | ug/kg | | 1 | 22-JUL-14 20:37 | per0722016a |
| | Perchlorate Isotope Ratio | | | 3.01 | | | 1 | 22-JUL-14 20:37 | per0722016a |
| 14797-73-0 | Perchlorate-101 | .54 | 2.16 | 2.22 | ug/kg | | 1 | 22-JUL-14 20:37 | per0722016a |
| | Perchlorate-O(18) | | | 5.25 | ug/kg | | 1 | 22-JUL-14 20:37 | per0722016a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84140MSD

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3910

**GEL Sample ID:** 1203130459

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .543 | 2.17 | 2.21 | ug/kg | | 1 | 22-JUL-14 20:45 | per0722017a |
| | Perchlorate Isotope Ratio | | | 2.91 | | | 1 | 22-JUL-14 20:45 | per0722017a |
| 14797-73-0 | Perchlorate-101 | .543 | 2.17 | 2.31 | ug/kg | | 1 | 22-JUL-14 20:45 | per0722017a |
| | Perchlorate-O(18) | | | 5.17 | ug/kg | | 1 | 22-JUL-14 20:45 | per0722017a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Metals Analysis

# Case Narrative

**Metals Fractional Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3910**

**Sample Analysis**

| Sample ID | Client ID |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 1203131593 | Method Blank (MB) **ICP** |
| 1203131594 | Laboratory Control Sample (LCS) |
| 1203131597 | 353064001(RE57-14-84990L) Serial Dilution (SD) |
| 1203131595 | 353064001(RE57-14-84990D) Sample Duplicate (DUP) |
| 1203131596 | 353064001(RE57-14-84990S) Matrix Spike (MS) |
| 1203145125 | 353064001(RE57-14-84990PS) Post Spike (PS) |
| 1203131568 | Method Blank (MB) **ICP-MS** |
| 1203131569 | Laboratory Control Sample (LCS) |
| 1203131572 | 353064001(RE57-14-84990L) Serial Dilution (SD) |
| 1203131570 | 353064001(RE57-14-84990D) Sample Duplicate (DUP) |
| 1203131571 | 353064001(RE57-14-84990S) Matrix Spike (MS) |
| 1203137784 | Method Blank (MB) **CVAA** |
| 1203137785 | Laboratory Control Sample (LCS) |
| 1203137788 | 353481001(WST46-14-85170L) Serial Dilution (SD) |
| 1203137786 | 353481001(WST46-14-85170D) Sample Duplicate (DUP) |
| 1203137787 | 353481001(WST46-14-85170S) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**Method/Analysis Information**

| | |
|---|---|
| **Analytical Batch:** | 1405022, 1405009 and 1407455 |
| **Prep Batch :** | 1405021, 1405008 and 1407454 |

| | |
|---|---|
| **Standard Operating Procedures:** | GL-MA-E-013 REV# 22, GL-MA-E-009 REV# 24, GL-MA-E-014 REV# 25 and GL-MA-E-010 REV# 28 |
| **Analytical Method:** | SW846 3050B/6010C, SW846 3050B/6020A and SW846 7471A |
| **Prep Method :** | SW846 3050B and SW846 7471A Prep |

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**System Configuration**

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with an ESI SC-FAST introduction, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 0.4L/min, argon gas flows of 13 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

**Calibration Information**

**Instrument Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**CRDL/PQL Requirements**
The CRDL/PQL standard recoveries met the referenced advisory control limits.

**ICSA/ICSAB Statement**
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blanks (CCB) Requirements**
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**
The following samples were selected as the quality control (QC) samples for this SDG: 353064001 (RE57-14-84990)-ICP and ICP-MS and 353481001 (WST46-14-85170)-CVAA.

**Matrix Spike (MS) Recovery Statement**
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. Not all the applicable analyte recoveries met the acceptance criteria. Recoveries for magnesium and zinc were not within the acceptance limits in sample 1203131596 (RE57-14-84990)-ICP.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. Not all the applicable analyte RPD values met the acceptance criteria. The RPD values for chromium and manganese were not within the acceptance limits in sample 1203131595 (RE57-14-84990)-ICP.

**Post Spike (PS) Recovery Statement**
The percent recoveries (%R) obtained from the PS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The PS met the recommended quality control acceptance criteria for percent recoveries for all applicable analytes and verifies the absence of matrix interferences in the post-digested sample.

**Serial Dilution % Difference Statement**
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the established acceptance percent difference criteria.

**Technical Information**

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Sample Dilutions**
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times. ICP-MS.

**Preparation Information**
The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. Data exception reports were included behind the Case Narrative or in the Miscellaneous Data section of this data package. The following DER was generated for this SDG: 1323613. ICP. The following DER was generated for this SDG: 1319149. CVAA.

**Additional Comments**
Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:** Pat Steele **Date:** 08/15/2014

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3910  GEL Work Order: 353064

**The Qualifiers in this report are defined as follows:**

* A quality control analyte recovery is outside of specified acceptance criteria

J Value is estimated

N Metals--The Matrix spike sample recovery is not within specified control limits

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Pat Steele 08/15/2014

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3910 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 353064001 **BASIS:** Dry Weight **DATE COLLECTED** 17−JUL−14

**CLIENT ID:** RE57−14−84990 **LEVEL:** Low **DATE RECEIVED** 19−JUL−14

**MATRIX:** SO **%SOLIDS:** 92

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5430000 | ug/kg | | 7020 | 20700 | 20700 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−36−0 | Antimony | 1030 | ug/kg | U | 341 | 1030 | 1030 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−38−2 | Arsenic | 1620 | ug/kg | | 215 | 1070 | 1070 | 2 | MS | BAJ | 08/15/14 09:40 | 140814−3 | 1405009 |
| 7440−39−3 | Barium | 33700 | ug/kg | | 103 | 516 | 516 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−41−7 | Beryllium | 491 | ug/kg | | 21.5 | 107 | 107 | 2 | MS | BAJ | 08/15/14 09:40 | 140814−3 | 1405009 |
| 7440−43−9 | Cadmium | 516 | ug/kg | U | 103 | 516 | 516 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−70−2 | Calcium | 518000 | ug/kg | | 8260 | 25800 | 25800 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−47−3 | Chromium | 3230 | ug/kg | * | 155 | 516 | 516 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−48−4 | Cobalt | 807 | ug/kg | | 155 | 516 | 516 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−50−8 | Copper | 1650 | ug/kg | | 310 | 1030 | 1030 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7439−89−6 | Iron | 7220000 | ug/kg | | 8260 | 25800 | 25800 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7439−92−1 | Lead | 9890 | ug/kg | | 341 | 1030 | 1030 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7439−95−4 | Magnesium | 289000 | ug/kg | N | 8780 | 31000 | 31000 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7439−96−5 | Manganese | 319000 | ug/kg | * | 207 | 1030 | 1030 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7439−97−6 | Mercury | 10.1 | ug/kg | J | 3.85 | 11.5 | 11.5 | 1 | AV | MTM1 | 07/31/14 10:41 | 073114S1−4 | 1407455 |
| 7440−02−0 | Nickel | 2190 | ug/kg | | 107 | 429 | 429 | 2 | MS | BAJ | 08/15/14 09:40 | 140814−3 | 1405009 |
| 7440−09−7 | Potassium | 337000 | ug/kg | | 6610 | 25800 | 25800 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7782−49−2 | Selenium | 1070 | ug/kg | U | 354 | 1070 | 1070 | 2 | MS | BAJ | 08/15/14 09:40 | 140814−3 | 1405009 |
| 7440−22−4 | Silver | 170 | ug/kg | J | 103 | 516 | 516 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−23−5 | Sodium | 97900 | ug/kg | | 7230 | 25800 | 25800 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−28−0 | Thallium | 429 | ug/kg | U | 64.4 | 429 | 429 | 2 | MS | BAJ | 08/15/14 09:40 | 140814−3 | 1405009 |
| 7440−62−2 | Vanadium | 3810 | ug/kg | | 103 | 516 | 516 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |
| 7440−66−6 | Zinc | 44900 | ug/kg | N | 413 | 1030 | 1030 | 1 | P | HSC | 08/08/14 23:32 | 080814−1 | 1405022 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1405009 | 1405008 | SW846 3050B | 0.506 | g | 50 | mL | 07/30/14 | JXO1 |
| 1405022 | 1405021 | SW846 3050B | 0.526 | g | 50 | mL | 07/30/14 | JXO1 |
| 1407455 | 1407454 | SW846 7471A Prep | 0.567 | g | 30 | mL | 07/30/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3910 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 353064002 **BASIS:** Dry Weight **DATE COLLECTED** 17−JUL−14

**CLIENT ID:** RE57−14−85005 **LEVEL:** Low **DATE RECEIVED** 19−JUL−14

**MATRIX:** SO **%SOLIDS:** 96.5

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3300000 | ug/kg | | 5950 | 17500 | 17500 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−36−0 | Antimony | 875 | ug/kg | U | 289 | 875 | 875 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−38−2 | Arsenic | 997 | ug/kg | | 183 | 917 | 917 | 2 | MS | BAJ | 08/15/14 10:02 | 140814−3 | 1405009 |
| 7440−39−3 | Barium | 19600 | ug/kg | | 87.5 | 438 | 438 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−41−7 | Beryllium | 592 | ug/kg | | 18.3 | 91.7 | 91.7 | 2 | MS | BAJ | 08/15/14 10:02 | 140814−3 | 1405009 |
| 7440−43−9 | Cadmium | 438 | ug/kg | U | 87.5 | 438 | 438 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−70−2 | Calcium | 415000 | ug/kg | | 7000 | 21900 | 21900 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−47−3 | Chromium | 10700 | ug/kg | * | 131 | 438 | 438 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−48−4 | Cobalt | 831 | ug/kg | | 131 | 438 | 438 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−50−8 | Copper | 1280 | ug/kg | | 263 | 875 | 875 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7439−89−6 | Iron | 7280000 | ug/kg | | 7000 | 21900 | 21900 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7439−92−1 | Lead | 8020 | ug/kg | | 289 | 875 | 875 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7439−95−4 | Magnesium | 195000 | ug/kg | N | 7440 | 26300 | 26300 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7439−96−5 | Manganese | 279000 | ug/kg | * | 175 | 875 | 875 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7439−97−6 | Mercury | 13.7 | ug/kg | | 4 | 11.9 | 11.9 | 1 | AV | MTM1 | 07/31/14 10:42 | 073114S1−4 | 1407455 |
| 7440−02−0 | Nickel | 1630 | ug/kg | | 91.7 | 367 | 367 | 2 | MS | BAJ | 08/15/14 10:02 | 140814−3 | 1405009 |
| 7440−09−7 | Potassium | 282000 | ug/kg | | 5600 | 21900 | 21900 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7782−49−2 | Selenium | 917 | ug/kg | U | 303 | 917 | 917 | 2 | MS | BAJ | 08/15/14 10:02 | 140814−3 | 1405009 |
| 7440−22−4 | Silver | 438 | ug/kg | U | 87.5 | 438 | 438 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−23−5 | Sodium | 96100 | ug/kg | | 6130 | 21900 | 21900 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−28−0 | Thallium | 367 | ug/kg | U | 55 | 367 | 367 | 2 | MS | BAJ | 08/15/14 10:02 | 140814−3 | 1405009 |
| 7440−62−2 | Vanadium | 2400 | ug/kg | | 87.5 | 438 | 438 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |
| 7440−66−6 | Zinc | 53200 | ug/kg | N | 350 | 875 | 875 | 1 | P | HSC | 08/08/14 23:25 | 080814−1 | 1405022 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1405009 | 1405008 | SW846 3050B | 0.565 | g | 50 | mL | 07/30/14 | JXO1 |
| 1405022 | 1405021 | SW846 3050B | 0.592 | g | 50 | mL | 07/30/14 | JXO1 |
| 1407455 | 1407454 | SW846 7471A Prep | 0.521 | g | 30 | mL | 07/30/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3910 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 353064003 **BASIS:** Dry Weight **DATE COLLECTED** 17−JUL−14

**CLIENT ID:** RE57−14−84991 **LEVEL:** Low **DATE RECEIVED** 19−JUL−14

**MATRIX:** SO **%SOLIDS:** 95.4

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4070000 | ug/kg | | 6540 | 19200 | 19200 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−36−0 | Antimony | 961 | ug/kg | U | 317 | 961 | 961 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−38−2 | Arsenic | 1980 | ug/kg | | 192 | 959 | 959 | 2 | MS | BAJ | 08/15/14 10:06 | 140814−3 | 1405009 |
| 7440−39−3 | Barium | 82100 | ug/kg | | 96.1 | 481 | 481 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−41−7 | Beryllium | 419 | ug/kg | | 19.2 | 95.9 | 95.9 | 2 | MS | BAJ | 08/15/14 10:06 | 140814−3 | 1405009 |
| 7440−43−9 | Cadmium | 481 | ug/kg | U | 96.1 | 481 | 481 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−70−2 | Calcium | 2180000 | ug/kg | | 7690 | 24000 | 24000 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−47−3 | Chromium | 3990 | ug/kg | * | 144 | 481 | 481 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−48−4 | Cobalt | 1640 | ug/kg | | 144 | 481 | 481 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−50−8 | Copper | 3240 | ug/kg | | 288 | 961 | 961 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7439−89−6 | Iron | 8200000 | ug/kg | | 7690 | 24000 | 24000 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7439−92−1 | Lead | 10400 | ug/kg | | 317 | 961 | 961 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7439−95−4 | Magnesium | 685000 | ug/kg | N | 8170 | 28800 | 28800 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7439−96−5 | Manganese | 475000 | ug/kg | * | 192 | 961 | 961 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7439−97−6 | Mercury | 30.2 | ug/kg | | 4.2 | 12.5 | 12.5 | 1 | AV | MTM1 | 07/31/14 10:44 | 073114S1−4 | 1407455 |
| 7440−02−0 | Nickel | 3770 | ug/kg | | 95.9 | 384 | 384 | 2 | MS | BAJ | 08/15/14 10:06 | 140814−3 | 1405009 |
| 7440−09−7 | Potassium | 615000 | ug/kg | | 6150 | 24000 | 24000 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7782−49−2 | Selenium | 959 | ug/kg | U | 317 | 959 | 959 | 2 | MS | BAJ | 08/15/14 10:06 | 140814−3 | 1405009 |
| 7440−22−4 | Silver | 258 | ug/kg | J | 96.1 | 481 | 481 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−23−5 | Sodium | 63000 | ug/kg | | 6730 | 24000 | 24000 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−28−0 | Thallium | 384 | ug/kg | U | 57.6 | 384 | 384 | 2 | MS | BAJ | 08/15/14 10:06 | 140814−3 | 1405009 |
| 7440−62−2 | Vanadium | 7170 | ug/kg | | 96.1 | 481 | 481 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |
| 7440−66−6 | Zinc | 46200 | ug/kg | N | 384 | 961 | 961 | 1 | P | HSC | 08/08/14 23:29 | 080814−1 | 1405022 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1405009 | 1405008 | SW846 3050B | 0.546 | g | 50 | mL | 07/30/14 | JXO1 |
| 1405022 | 1405021 | SW846 3050B | 0.545 | g | 50 | mL | 07/30/14 | JXO1 |
| 1407455 | 1407454 | SW846 7471A Prep | 0.502 | g | 30 | mL | 07/30/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# Quality Control Summary

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3910

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| 1203131568 | | | | | | | | |
| | Arsenic | 197 | ug/kg | +/−984 | U | MS | 197 | 984 |
| | Beryllium | 19.7 | ug/kg | +/−98.4 | U | MS | 19.7 | 98.4 |
| | Nickel | 98.4 | ug/kg | +/−394 | U | MS | 98.4 | 394 |
| | Thallium | 59.1 | ug/kg | +/−394 | U | MS | 59.1 | 394 |
| | Selenium | 325 | ug/kg | +/−984 | U | MS | 325 | 984 |
| 1203131593 | | | | | | | | |
| | Chromium | 142 | ug/kg | +/−472 | U | P | 142 | 472 |
| | Cobalt | 142 | ug/kg | +/−472 | U | P | 142 | 472 |
| | Copper | 283 | ug/kg | +/−943 | U | P | 283 | 943 |
| | Iron | 7550 | ug/kg | +/−23600 | U | P | 7550 | 23600 |
| | Lead | 311 | ug/kg | +/−943 | U | P | 311 | 943 |
| | Magnesium | 8020 | ug/kg | +/−28300 | U | P | 8020 | 28300 |
| | Calcium | 7550 | ug/kg | +/−23600 | U | P | 7550 | 23600 |
| | Cadmium | 94.3 | ug/kg | +/−472 | U | P | 94.3 | 472 |
| | Barium | 94.3 | ug/kg | +/−472 | U | P | 94.3 | 472 |
| | Antimony | 376 | ug/kg | +/−943 | J | P | 311 | 943 |
| | Aluminum | 6420 | ug/kg | +/−18900 | U | P | 6420 | 18900 |
| | Manganese | 189 | ug/kg | +/−943 | U | P | 189 | 943 |
| | Potassium | 6040 | ug/kg | +/−23600 | U | P | 6040 | 23600 |
| | Silver | 94.3 | ug/kg | +/−472 | U | P | 94.3 | 472 |
| | Sodium | 6600 | ug/kg | +/−23600 | U | P | 6600 | 23600 |
| | Vanadium | 94.3 | ug/kg | +/−472 | U | P | 94.3 | 472 |
| | Zinc | 377 | ug/kg | +/−943 | U | P | 377 | 943 |
| 1203137784 | | | | | | | | |
| | Mercury | 4 | ug/kg | +/−11.9 | U | AV | 4 | 11.9 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3910 **Client ID** RE57−14−84990S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 92

**Sample ID:** 353064001 **Spike ID:** 1203131571

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | 75−125 | 6770 | | 1620 | | 5210 | 98.8 | | MS |
| Beryllium | ug/kg | 75−125 | 6240 | | 491 | | 5210 | 110 | | MS |
| Nickel | ug/kg | 75−125 | 7600 | | 2190 | | 5210 | 104 | | MS |
| Selenium | ug/kg | 75−125 | 5580 | | 354 | U | 5210 | 104 | | MS |
| Thallium | ug/kg | 75−125 | 5460 | | 64.4 | U | 5210 | 104 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3910 **Client ID** RE57−14−84990S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 92

**Sample ID:** 353064001 **Spike ID:** 1203131596

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | | 10100000 | | 5430000 | | 513000 | 914 | N/A | P |
| Antimony | ug/kg | 75−125 | 47400 | | 341 | U | 51300 | 92.3 | | P |
| Barium | ug/kg | 75−125 | 78600 | | 33700 | | 51300 | 87.5 | | P |
| Cadmium | ug/kg | 75−125 | 52900 | | 103 | U | 51300 | 103 | | P |
| Calcium | ug/kg | 75−125 | 1150000 | | 518000 | | 513000 | 123 | | P |
| Chromium | ug/kg | 75−125 | 58200 | | 3230 | | 51300 | 107 | | P |
| Cobalt | ug/kg | 75−125 | 53800 | | 807 | | 51300 | 103 | | P |
| Copper | ug/kg | 75−125 | 59600 | | 1650 | | 51300 | 113 | | P |
| Iron | ug/kg | | 10100000 | | 7220000 | | 513000 | 555 | N/A | P |
| Lead | ug/kg | 75−125 | 66100 | | 9890 | | 51300 | 109 | | P |
| Magnesium | ug/kg | 75−125 | 1060000 | | 289000 | | 513000 | 149 | N | P |
| Manganese | ug/kg | | 228000 | | 319000 | | 51300 | −178 | N/A | P |
| Potassium | ug/kg | 75−125 | 962000 | | 337000 | | 513000 | 122 | | P |
| Silver | ug/kg | 75−125 | 52900 | | 170 | J | 51300 | 103 | | P |
| Sodium | ug/kg | 75−125 | 603000 | | 97900 | | 513000 | 98.4 | | P |
| Vanadium | ug/kg | 75−125 | 59900 | | 3810 | | 51300 | 109 | | P |
| Zinc | ug/kg | 75−125 | 111000 | | 44900 | | 51300 | 129 | N | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3910 **Client ID** WST46−14−85170S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 96

**Sample ID:** 353481001 **Spike ID:** 1203137787

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | 80−120 | 147 | | 47.8 | | 119 | 82.7 | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−5a−**

**Spike Summary**

**SDG NO.** 2014−3910 **Client ID** RE57−14−84990PS

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 92

**Sample ID:** 353064001 **Spike ID:** 1203145125

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Magnesium | ug/L | 80−120 | 8090 | | 2790 | | 5000 | 106 | | P |
| Zinc | ug/L | 80−120 | 986 | | 435 | | 500 | 110 | | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3910 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84990D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 353064001 **Duplicate ID:** 1203131570 **Percent Solids for Dup:** 92

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | +/−1080 | 1620 | | 1320 | | 20.3 | | MS |
| Beryllium | ug/kg | +/−108 | 491 | | 431 | | 13 | | MS |
| Nickel | ug/kg | +/−432 | 2190 | | 1830 | | 18.2 | | MS |
| Selenium | ug/kg | | 354 | U | 356 | U | | | MS |
| Thallium | ug/kg | | 64.4 | U | 64.8 | U | | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3910 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84990D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 353064001 **Duplicate ID:** 1203131595 **Percent Solids for Dup:** 92

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | +/−20% | 5430000 | | 5580000 | | 2.65 | | P |
| Antimony | ug/kg | | 341 | U | 338 | U | | | P |
| Barium | ug/kg | +/−20% | 33700 | | 32700 | | 3.15 | | P |
| Cadmium | ug/kg | | 103 | U | 103 | U | | | P |
| Calcium | ug/kg | +/−20% | 518000 | | 534000 | | 3.06 | | P |
| Chromium | ug/kg | +/−20% | 3230 | | 4940 | | 41.8 | * | P |
| Cobalt | ug/kg | +/−513 | 807 | | 757 | | 6.38 | | P |
| Copper | ug/kg | +/−1030 | 1650 | | 1590 | | 3.49 | | P |
| Iron | ug/kg | +/−20% | 7220000 | | 7310000 | | 1.21 | | P |
| Lead | ug/kg | +/−20% | 9890 | | 11000 | | 10.5 | | P |
| Magnesium | ug/kg | +/−20% | 289000 | | 320000 | | 10.2 | | P |
| Manganese | ug/kg | +/−20% | 319000 | | 202000 | | 45.1 | * | P |
| Potassium | ug/kg | +/−20% | 337000 | | 355000 | | 5.29 | | P |
| Silver | ug/kg | +/−513 | 170 | J | 179 | J | 5.09 | | P |
| Sodium | ug/kg | +/−25600 | 97900 | | 99300 | | 1.45 | | P |
| Vanadium | ug/kg | +/−20% | 3810 | | 4070 | | 6.71 | | P |
| Zinc | ug/kg | +/−20% | 44900 | | 44500 | | .896 | | P |

***Analytical Methods:**

**P SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3910 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** WST46−14−85170D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 353481001 **Duplicate ID:** 1203137786 **Percent Solids for Dup:** 96

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | +/−11.6 | 47.8 | | 38.3 | | 22.2 | | AV |

***Analytical Methods:**

**AV SW846 7471A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3910

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203131569 | | | | | | | | |
| | Arsenic | ug/kg | 137000 | 146000 | | 106 | 83.2−117.5 | MS |
| | Beryllium | ug/kg | 138000 | 156000 | | 113 | 84.1−115.9 | MS |
| | Nickel | ug/kg | 159000 | 180000 | | 113 | 84.3−115.7 | MS |
| | Selenium | ug/kg | 43500 | 48300 | | 111 | 77.9−122.3 | MS |
| | Thallium | ug/kg | 146000 | 162000 | | 111 | 81.5−119.2 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3910

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203131594 | | | | | | | | |
| | Aluminum | ug/kg | 8680000 | 6810000 | | 78.5 | 44.9−154.4 | P |
| | Antimony | ug/kg | 166000 | 130000 | | 78.1 | 33.1−167.3 | P |
| | Barium | ug/kg | 290000 | 282000 | | 97.1 | 82.8−117.6 | P |
| | Cadmium | ug/kg | 85000 | 82500 | | 97 | 84−115.9 | P |
| | Calcium | ug/kg | 6120000 | 5980000 | | 97.8 | 83.2−117 | P |
| | Chromium | ug/kg | 168000 | 168000 | | 99.7 | 81.5−117.9 | P |
| | Cobalt | ug/kg | 87000 | 87000 | | 100 | 84.8−114.9 | P |
| | Copper | ug/kg | 187000 | 202000 | | 108 | 84−116.6 | P |
| | Iron | ug/kg | 12500000 | 12700000 | | 102 | 50.5−148.8 | P |
| | Lead | ug/kg | 120000 | 116000 | | 96.5 | 83.3−116.7 | P |
| | Magnesium | ug/kg | 2920000 | 2750000 | | 94.2 | 75−125.3 | P |
| | Manganese | ug/kg | 310000 | 299000 | | 96.6 | 82.6−117.4 | P |
| | Potassium | ug/kg | 2780000 | 2420000 | | 87.1 | 69.1−130.9 | P |
| | Silver | ug/kg | 55200 | 52900 | | 95.8 | 66.3−133.7 | P |
| | Sodium | ug/kg | 504000 | 451000 | | 89.6 | 73.6−126.4 | P |
| | Vanadium | ug/kg | 138000 | 146000 | | 106 | 79.7−120.3 | P |
| | Zinc | ug/kg | 206000 | 200000 | | 97.1 | 82−118 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3910

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203137785 | | | | | | | | |
| | Mercury | ug/kg | 7610 | 8990 | | 118 | 71.4−129 | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3910 **Client ID** RE57−14−84990L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 353064001 **Serial Dilution ID:** 1203131572

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 7.54 | | 7.78 | J | 3.09 | | | MS |
| Beryllium | 2.29 | | 1.76 | J | 23 | | | MS |
| Nickel | 10.2 | | 10.4 | | 1.5 | | | MS |
| Selenium | 1.65 | U | 8.25 | U | | | | MS |
| Thallium | .3 | U | 1.5 | U | | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3910 **Client ID** RE57−14−84990L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 353064001 **Serial Dilution ID:** 1203131597

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 52600 | | 51900 | | 1.27 | | 10 | P |
| Antimony | 3.3 | U | 16.5 | U | | | | P |
| Barium | 326 | | 324 | | .669 | | 10 | P |
| Cadmium | 1 | U | 5 | U | | | | P |
| Calcium | 5020 | | 4950 | | 1.24 | | 10 | P |
| Chromium | 31.3 | | 30.1 | | 3.67 | | | P |
| Cobalt | 7.81 | | 7.98 | J | 2.16 | | | P |
| Copper | 15.9 | | 16.8 | J | 5.6 | | | P |
| Iron | 69900 | | 69800 | | .194 | | 10 | P |
| Lead | 95.8 | | 109 | | 13.3 | | | P |
| Magnesium | 2790 | | 2590 | | 7.19 | | | P |
| Manganese | 3090 | | 3150 | | 1.93 | | 10 | P |
| Potassium | 3260 | | 3100 | | 4.84 | | 10 | P |
| Silver | 1.64 | J | 5 | U | 100 | | | P |
| Sodium | 948 | | 768 | J | 19 | | | P |
| Vanadium | 36.8 | | 36.8 | | .012 | | | P |
| Zinc | 435 | | 420 | | 3.4 | | 10 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3910 **Client ID** WST46−14−85170L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 353481001 **Serial Dilution ID:** 1203137788

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .785 | | 1.54 | | 96.2 | | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 31-JUL-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| MERCURY | SW846 7471A | Solid | JEMZ, LANL, LLNL, OLAB, |
| **Batch ID:** | **Sample Numbers:** | | |
| 1407455 | See Below | | |

**Potentially affected work order(s)(SDG): 353064(2014-3910),353333,353470(2014-4011),353481(2014-4012),353607(X407232)**

**Application Issues:**

Failed RPD for MS/MSD, or PS/PSD

Failed RPD for DUP

Failed Recovery for MSD/PSD

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed RPD for DUP:<br>QC 1203137786DUP<br>2. Failed RPD for MS/MSD, or PS/PSD:<br>QC 1203137795MSD<br>3. Failed Recovery for MSD/PSD:<br>QC 1203137795MSD | 1/2.The matrix spike duplicate and sample duplicate % RPDs failed outside of the control limits for mercury due to possible sample non-homogeneity. The post spike passed the required control limits for all analytes. This verifies the absence of a matrix interference.<br><br>3.The matrix spike duplicate recovery failed outside of the control limits for mercury. The post spike passed the required control limits for all analytes. This verifies the absence of a matrix interference. |

**Originator's Name:**

Monifa Basdeo 31-JUL-14

**Data Validator/Group Leader:**

Jamie Johnson 01-AUG-14

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 13-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| ICP | SW846 3050B/6010C | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1405022 | See Below | | |

**Potentially affected work order(s)(SDG): 353064(2014-3910)**

**Application Issues:**

Failed Recovery for MS/PS

Failed RPD for DUP

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed Recovery for MS/PS:<br><br>QC 1203131596MS<br><br>2. Failed RPD for DUP:<br><br>QC 1203131595DUP | 1. The matrix spike recovery failed outside of the control limits for magnesium and zinc. The post spike passed the required control limits for all analytes. This verifies the absence of a matrix interference.<br><br>2. The sample and sample duplicate % RPD failed outside the control limits for chromium and manganese due to possible sample non-homogeneity and/or matrix interference. |

**Originator's Name:**

Helen Camello 13-AUG-14

**Data Validator/Group Leader:**

Theresa McKelvey 14-AUG-14

# General Chem Analysis

# Case Narrative

**General Chemistry Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3910**

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Cyanide and Total** | | |
| **Analytical Batch:** | 1403585 | **Method:** | SW9012A Cyanide and Total |
| **Prep Batch :** | 1403584 | **Method:** | SSW846 9010B Prep |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| Sample ID | Client ID |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 1203127923 | MB for batch 1403584 |
| 1203127928 | Laboratory Control Sample (LCS) |
| 1203127924 | 352623001(RE57-14-84140) Sample Duplicate (DUP) |
| 1203127926 | 352623001(RE57-14-84140) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 17.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

## Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**

All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following sample was selected for QC analysis: 352623001 (RE57-14-84140).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recovery for this sample set was within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1203127924 (RE57-14-84140).

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**
All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**
The following sample in this sample group was diluted due to high concentration: 1203127928 (LCS).

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Ion Chromatography** | | |
| **Analytical Batch:** | 1408055 | **Method:** | EPA 300.0 Nitrate in Soil |
| **Prep Batch :** | 1408054 | **Method:** | EPA 300.0 PREP |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

| Sample ID | Client ID |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 1203139333 | MB for batch 1408054 |
| 1203139336 | Laboratory Control Sample (LCS) |
| 1203139334 | 353064001(RE57-14-84990) Sample Duplicate (DUP) |
| 1203139335 | 353064001(RE57-14-84990) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 22.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

## Calibration Information

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**

All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following sample was selected for QC analysis: 353064001 (RE57-14-84990).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recovery for this sample set was within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD between the sample and its duplicate met the acceptance limits.

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
Manual integrations were not required for the samples in this SDG.

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:**_____ **Date:**_____15Aug14_____

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis Report
## for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3910  GEL Work Order: 353064

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

**  Analyte is a surrogate compound

B  The target analyte was detected in the associated blank.

H  Analytical holding time was exceeded

J  Value is estimated

N  Metals--The Matrix spike sample recovery is not within specified control limits

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 15, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3910

Client Sample ID: RE57-14-84990
Sample ID: 353064001
Matrix: SO
Collect Date: 17-JUL-14 08:29
Receive Date: 19-JUL-14
Collector: Client
Moisture: 7.96%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 85.6 | 256 | ug/kg | 1 | AXH3 | 07/24/14 | 1047 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.359 | 1.09 | mg/kg | 1 | RXB5 | 07/31/14 | 2129 | 1408055 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/31/14 | 1130 | 1408054 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 15, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3910

Client Sample ID: RE57-14-85005
Sample ID: 353064002
Matrix: SO
Collect Date: 17-JUL-14 08:39
Receive Date: 19-JUL-14
Collector: Client
Moisture: 3.5%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 84.8 | 254 | ug/kg | 1 | AXH3 | 07/24/14 | 1048 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.342 | 1.04 | mg/kg | 1 | RXB5 | 07/31/14 | 2302 | 1408055 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/31/14 | 1130 | 1408054 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 15, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3910

Client Sample ID: RE57-14-84991
Sample ID: 353064003
Matrix: SO
Collect Date: 17-JUL-14 08:45
Receive Date: 19-JUL-14
Collector: Client
Moisture: 4.55%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | J | 142 | 82.5 | 247 | ug/kg | 1 | AXH3 | 07/24/14 | 1053 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.346 | 1.05 | mg/kg | 1 | RXB5 | 07/31/14 | 2333 | 1408055 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/31/14 | 1130 | 1408054 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# Quality Control Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: August 15, 2014**



**Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**
**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **353064**

| Parmname | NOM | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|
| **Flow Injection Analysis** | | | | | | | | | | |
| Batch 1403585 | | | | | | | | | | |
| QC1203127924 352623001 DUP | | | | | | | | | | |
| Cyanide, Total | U | ND | U | ND | ug/kg | N/A | | | AXH3 | 07/24/14 10:30 |
| QC1203127928 LCS | | | | | | | | | | |
| Cyanide, Total | 90600 | | | 91400 | ug/kg | | 101 | (68%-140%) | | 07/24/14 10:28 |
| QC1203127923 MB | | | | | | | | | | |
| Cyanide, Total | | | U | 250 | ug/kg | | | | | 07/24/14 10:28 |
| QC1203127926 352623001 MS | | | | | | | | | | |
| Cyanide, Total | 5220 | U | ND | 4850 | ug/kg | | 91.9 | (55%-125%) | | 07/24/14 10:31 |
| **Ion Chromatography** | | | | | | | | | | |
| Batch 1408055 | | | | | | | | | | |
| QC1203139334 353064001 DUP | | | | | | | | | | |
| Nitrate-N | U | ND | U | ND | mg/kg | N/A | | | RXB5 | 07/31/14 22:00 |
| QC1203139336 LCS | | | | | | | | | | |
| Nitrate-N | 25.0 | | | 24.3 | mg/kg | | 97.2 | (90%-110%) | | 07/31/14 20:58 |
| QC1203139333 MB | | | | | | | | | | |
| Nitrate-N | | | U | 1.00 | mg/kg | | | | | 07/31/14 20:27 |
| QC1203139335 353064001 MS | | | | | | | | | | |
| Nitrate-N | 27.2 | U | ND | 27.1 | mg/kg | | 99.8 | (90%-110%) | | 07/31/14 22:31 |

**Notes:**

| | |
|---|---|
| < | Result is less than value reported |
| > | Result is greater than value reported |
| B | The target analyte was detected in the associated blank. |
| E | General Chemistry--Concentration of the target analyte exceeds the instrument calibration range |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |

## QC Summary

**Workorder:** **353064**



| Parmname | NOM | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| R | Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Z | Paint Filter Test--Particulates passed through the filter, however no free liquids were observed. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| d | 5-day BOD--The 2:1 depletion requirement was not met for this sample |
| e | 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# Radiological Analysis

**Radiochemistry Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3910**
**Work Order 353064**

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **ISOU** |
| Analytical Method: | DOE EML HASL-300, U-02-RC Modified |
| Prep Method: | Dry Soil Prep |
| Analytical Batch Number: | 1404967 |
| Prep Batch Number: | 1404901 |

| **Sample ID** | **Client ID** |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 1203131428 | MB for batch 1404967 |
| 1203131430 | Laboratory Control Sample (LCS) |
| 1203131429 | 353064001(RE57-14-84990) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 25.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244. The initial Calibration was performed in July 2014.

**Standards Information**
Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**
Aliquot for sample 1203131428 (MB) was changed to 1.0 per client request.

**Designated QC**
The following sample was used for QC: 353064001 (RE57-14-84990). The QC was from ARSL work order 353064.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
Sample 353064003 (RE57-14-84991) was recounted due to low tracer yield. The original count is reported.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integration**
No manual integrations were performed on data in this batch.

**Sample-Specific MDA/MDC**
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

**Additional Comments**
The MDCs (and Lc if requested) are calculated using a blank population. Sample 353064003 (RE57-14-84991) did not meet the client's yield requirement. However, there are 400 tracer counts, GEL's standard tracer yield requirements are met, and the client's detection limits are met.

**Blank Decision Level**
The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **Dry Weight-Percent Moisture** |
| Analytical Method: | Dry Soil Prep |
| Analytical Batch Number: | 1404901 |

| Sample ID | Client ID |
|---|---|
| 353064001 | RE57-14-84990 |
| 353064002 | RE57-14-85005 |
| 353064003 | RE57-14-84991 |
| 1203131265 | 353064001(RE57-14-84990) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 10 and GL-RAD-A-021 REV# 20.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Designated QC**
The following sample was used for QC: 353064001 (RE57-14-84990). The QC was from ARSL work order 353064.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
Not applicable. The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this sample set.

**Blank Decision Level**
Not Applicable. The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3910  GEL Work Order: 353064

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Heather M. McCarty  **Name:** **Heather McCarty**

**Date:** **09 AUG 2014**  **Title:** **Analyst II**

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: August 9, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84990
Sample ID: 353064001
Matrix: SO
Collect Date: 17-JUL-14
Receive Date: 19-JUL-14
Collector: Client
Moisture: 7.96%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.35 | +/-0.0727 | 0.0703 | 0.0299 | +/-0.113 | 0.100 | pCi/g | | JXD2 | 07/31/14 | 1406 | 1404967 | 2 |
| Uranium-235/236 | | 0.0861 | +/-0.0214 | 0.0395 | 0.0132 | +/-0.0221 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.34 | +/-0.0725 | 0.0499 | 0.0197 | +/-0.112 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/21/14 | 0609 | 1404901 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1404967 | 90.0 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: August 9, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-85005
Sample ID: 353064002
Matrix: SO
Collect Date: 17-JUL-14
Receive Date: 19-JUL-14
Collector: Client
Moisture: 3.5%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.30 | +/-0.0747 | 0.0771 | 0.0328 | +/-0.112 | 0.100 | pCi/g | | JXD2 | 07/31/14 | 1406 | 1404967 | 2 |
| Uranium-235/236 | | 0.0577 | +/-0.0189 | 0.0433 | 0.0145 | +/-0.0193 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.40 | +/-0.0774 | 0.0547 | 0.0216 | +/-0.119 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/21/14 | 0609 | 1404901 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1404967 | 81.1 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: August 9, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84991
Sample ID: 353064003
Matrix: SO
Collect Date: 17-JUL-14
Receive Date: 19-JUL-14
Collector: Client
Moisture: 4.55%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.18 | +/-0.0927 | 0.127 | 0.0542 | +/-0.124 | 0.100 | pCi/g | | JXD2 | 07/31/14 | 1406 | 1404967 | 2 |
| Uranium-235/236 | U | 0.0433 | +/-0.0229 | 0.0715 | 0.024 | +/-0.0231 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.26 | +/-0.0961 | 0.0903 | 0.0357 | +/-0.130 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/21/14 | 0609 | 1404901 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | | Acceptable Limits |
|---|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1404967 | 48.6 | * | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# Quality Control Data

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: August 9, 2014**


**Client :** **Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**

**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **353064**

| Parmname | NOM | | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Rad Alpha Spec** | | | | | | | | | | | |
| Batch 1404967 | | | | | | | | | | | |
| QC1203131429 353064001 DUP | | | | | | | | | | | |
| Uranium-233/234 | | | 1.35 | | 1.35 | pCi/g | 0.00815 | | (0-1) | JXD2 | 07/31/1414:06 |
| | | TPU: | +/-0.113 | | +/-0.122 | | | | | | |
| Uranium-235/236 | | | 0.0861 | | 0.0988 | pCi/g | 0.130 | | (0-1) | | |
| | | TPU: | +/-0.0221 | | +/-0.027 | | | | | | |
| Uranium-238 | | | 1.34 | | 1.26 | pCi/g | 0.184 | | (0-1) | | |
| | | TPU: | +/-0.112 | | +/-0.115 | | | | | | |
| **Uranium-232 Tracer | 4.37 | | 3.94 | | 3.05 | pCi/g | | 69.9 | (50%-105%) | | |
| | | TPU: | +/-0.308 | | +/-0.324 | | | | | | |
| QC1203131430 LCS | | | | | | | | | | | |
| Uranium-233/234 | | | | | 6.32 | pCi/g | | | | JXD2 | 07/31/1414:06 |
| | | TPU: | | | +/-0.534 | | | | | | |
| Uranium-235/236 | | | | U | 0.159 | pCi/g | | | | | |
| | | TPU: | | | +/-0.0885 | | | | | | |
| Uranium-238 | 5.75 | | | | 5.71 | pCi/g | | 99.3 | (75%-125%) | | |
| | | TPU: | | | +/-0.494 | | | | | | |
| **Uranium-232 Tracer | 19.2 | | | | 16.3 | pCi/g | | 84.9 | (50%-105%) | | |
| | | TPU: | | | +/-1.38 | | | | | | |
| QC1203131428 MB | | | | | | | | | | | |
| Uranium-233/234 | | | | U | -0.00199 | pCi/g | | | | JXD2 | 07/31/1414:06 |
| | | TPU: | | | +/-0.00718 | | | | | | |
| Uranium-235/236 | | | | U | 0.00492 | pCi/g | | | | | |
| | | TPU: | | | +/-0.00697 | | | | | | |
| Uranium-238 | | | | U | 0.00597 | pCi/g | | | | | |
| | | TPU: | | | +/-0.00661 | | | | | | |
| **Uranium-232 Tracer | 2.19 | | | | 1.93 | pCi/g | | 87.8 | (50%-105%) | | |
| | | TPU: | | | +/-0.155 | | | | | | |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

| | |
|---|---|
| ** | Analyte is a Tracer compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| BD | Results are either below the MDC or tracer recovery is low |
| FA | Failed analysis. |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| K | Analyte present. Reported value may be biased high. Actual value is expected to be lower. |
| L | Analyte present. Reported value may be biased low. Actual value is expected to be higher. |

## QC Summary

**Workorder:** **353064**



| Parmname | NOM | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| M | M if above MDC and less than LLD |
| M | REMP Result > MDC/CL and < RDL |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| UI | Gamma Spectroscopy--Uncertain identification |
| UJ | Gamma Spectroscopy--Uncertain identification |
| UL | Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | Other specific qualifiers were required to properly define the results. Consult case narrative. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
** Indicates analyte is a surrogate/tracer compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

COC/Lab Request #: 2014-3795



Client Contact:

Lab Agreement # : 126310011

Project Number :

Site Name: Los Alamos National Laboratory

Analysis Turnaround Time:

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 | Metals(W) |
|---|---|---|---|---|---|---|---|
| RE57-14-84140 | Jul 11 2014 | 07:35 | SO | 1 | 1 | 1 | |
| RE57-14-84151 | Jul 11 2014 | 07:40 | SO | 1 | 1 | 1 | |
| RE57-14-84162 | Jul 11 2014 | 08:30 | SO | 1 | 1 | 1 | |
| RE57-14-84163 | Jul 11 2014 | 09:50 | SO | 1 | 1 | 1 | |
| RE57-14-84142 | Jul 11 2014 | 08:05 | SO | 1 | 1 | 1 | |
| RE57-14-84164 | Jul 11 2014 | 07:45 | SO | 1 | 1 | 1 | |
| RE57-14-84175 | Jul 11 2014 | 09:15 | SO | 1 | 1 | 1 | |
| RE57-14-84154 | Jul 11 2014 | 09:55 | SO | 1 | 1 | 1 | |
| RE57-14-84165 | Jul 11 2014 | 09:40 | SO | 1 | 1 | 1 | |
| RE57-14-84176 | Jul 11 2014 | 11:11 | SO | 1 | 1 | 1 | |
| RE57-14-84144 | Jul 11 2014 | 10:05 | SO | 1 | 1 | 1 | |
| RE57-14-84155 | Jul 11 2014 | 09:35 | SO | 1 | 1 | 1 | |
| RE57-14-84177 | Jul 11 2014 | 11:05 | SO | 1 | 1 | 1 | |
| RE57-14-84121 | Jul 11 2014 | 07:40 | SO | 1 | 1 | 1 | |
| RE57-14-84125 | Jul 11 2014 | 0(;15 | W | | | | 1 |
| RE57-14-84126 | Jul 11 2014 | 11:05 | W | | | | 1 |
| RE57-14-84132 | Jul 11 2014 | 07:35 | SO | 1 | | | |
| RE57-14-84133 | Jul 11 2014 | 09:55 | SO | 1 | | | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| Sherri Sherwood | Sherri Sherwood | 7/14/14 3PM | | | |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84121 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/11/14 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 0740 | MEDIA: | | | All |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | UNK | | 57-1070 | FIELD PREP: | NA | | OK |
| LOCATION TYPE: | | | 57-1070 | FIELD QC TYPE: | FD | | OK |
| TOP DEPTH: | | | 0 ft | SAMPLE USAGE: | QC | | OK |
| BOTTOM DEPTH: | | | 1 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | ~~8260B~~ | 125 ML SEPTUM AMBER GLASS | 1 | ~~ICE~~ | ~~PQL 07/10/2014~~ | |
| NA | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | NA |
| NA | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | NA |

**SAMPLE COMMENTS:** QC of RE57-14-84165

**LOCATION COMMENTS:** 7-10 0-1ft bgs

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 29 dpm

Beta/Gamma 1421 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** TOMMY Sauer

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sanchez, Wayne<br>(Signature) | 7/11/14 1400 | (Printed Name) L. Bruce<br>(Signature) | 7/11/14 2:00 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84125 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/11/14 | FIELD MATRIX: | W | ok |
| TIME COLLECTED (HH:MM): | | 915 | MEDIA: | | NA |
| PRS ID: | 57-007 | MS 7/11/14 ~~57-4017~~ ok | SAMPLE TECH CODE: | DC | ok |
| LOCATION ID: | UNK | 57-4017 | FIELD PREP: | UF | |
| LOCATION TYPE: | | 57-4017 | FIELD QC TYPE: | FR | |
| TOP DEPTH: | | 4' ~~A~~ | SAMPLE USAGE: | QC | ✓ |
| BOTTOM DEPTH: | | 5' ~~A~~ | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| NA | Metals(W) | 1 LITER POLY | 1 | HNO3 | y | pH<2 ~~NA~~ BN 07/11/2014 |

**SAMPLE COMMENTS:** QC of RE57-14-84162 Field rinse Auger bucket & Bowl Along with spade.

**LOCATION COMMENTS:** 7-7 2-3 ft into Tuff.

**FIELD PARAMETERS:** NA

**COLLECTED BY (PRINT)** M. Shendo

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| P. RAPPE Pon a pple | 07/11/14 1400 | K. Green | 7/11/14 2100 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84126 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 07/11/2014 | FIELD MATRIX: | W | | OK |
| TIME COLLECTED (HH:MM): | | | 1105 | MEDIA: | | | NA |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | DC | | OK |
| LOCATION ID: | UNK | | 57-4021 | FIELD PREP: | UF | | |
| LOCATION TYPE: | | | 57-4021 | FIELD QC TYPE: | FR | | |
| TOP DEPTH: | | | 6.5 ft | SAMPLE USAGE: | QC | | |
| BOTTOM DEPTH: | | | 7.5 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | Metals(W) | 1 LITER POLY | 1 | HNO3 | Y | pH<2 |

**SAMPLE COMMENTS:** QC of RE57-14-84177

**LOCATION COMMENTS:** 7-11 2-3 ft into tuff

**FIELD PARAMETERS:**

**COLLECTED BY (PRINT)** B. Rappe / J. Jordan

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| BRAPPE 07/11/14 Brappe | 1400 | K. Gucek | 7/11/14 2:00 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84140 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/11/14 | FIELD MATRIX: | S | ~~07/11/2014~~ ~~Rock~~ S |
| TIME COLLECTED (HH:MM): | | 735 | MEDIA: | | ~~AHA~~ ALLH |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4017 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4017 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 0' ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 1' ft | EXCAVATED: | | ~~YES~~ / NO / (NA) FOR 07/11/14 |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| NA | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | y | NA |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Tuff fill with clay. Brownish grey.

**LOCATION COMMENTS:** 7-7 0-1 Ft bgs no leach Field detected

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 14 dpm

Beta/Gamma 1563 dpm

PID Ambient Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** M. Shendo

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sandoz, Wayne (Signature) Wayne | 7/11/14 1400 | (Printed Name) K. Green (Signature) | 7/11/14 2:00 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84142 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/11/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0805 | MEDIA: | | ALLH |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4019 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4019 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 1.5 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 2.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Native soil; weathered tuff

**LOCATION COMMENTS:** 7-9 light brown to reddish brown (1 ft above tuff)

**FIELD PARAMETERS:** ↳ ~~1.5 ft~~

**FIELD SCREENING/MEASUREMENT RESULTS:** RAN 07/11/2014

Alpha 34 dpm

Beta/Gamma 1597 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** B. Rapp

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sanchez, Wayne | 7/11/14 1400 | (Printed Name) K. Greene | 7/11/14 2100 |
| (Signature) | | (Signature) | |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84144 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7-11-14 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 1005 | MEDIA: | | | Alluvium |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | 57-4021 | | OK | FIELD PREP: | NA | | OK |
| LOCATION TYPE: | 57-4021 | | OK | FIELD QC TYPE: | REG | | OK |
| TOP DEPTH: | | | 4.5 | SAMPLE USAGE: | INV | | OK |
| BOTTOM DEPTH: | | | 5.5 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** Soil, Sandy clay w/ weathered tuff, pinkish-gray, moist, no HC odor

**LOCATION COMMENTS:** 7-11, 1 ft above tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm

Beta/Gamma 1500 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Bobbie Rappe

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Sanchez, Wayne | 7/11/14 1400 | K. Greene | 7/11/14 2100 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84151 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/11/14 | FIELD MATRIX: | S | Soil |
| TIME COLLECTED (HH:MM): | | 740 | MEDIA: | | All |
| PRS ID: | 57-007 | o/c | SAMPLE TECH CODE: | HA | o/c |
| LOCATION ID: | 57-4017 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4017 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 1' ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 2' ft | EXCAVATED: | | YES NO NA for 07/11/14 |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| NA | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | y | NA |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Tuff fill with silty clay, grayish white.

**LOCATION COMMENTS:** 7-7 1' Above Tuff.

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

**Alpha** 13 **dpm** **PID** Ambient Reading = 0.0 / 0-0 **ppm**

**Beta/Gamma** 1530 **dpm**

**COLLECTED BY (PRINT)** M. Shendo

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sanchez, Wayne (Signature) | 7/11/14 1400 | (Printed Name) K. Green (Signature) | 7/11/14 2100 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84154 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/11/14 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 0955 | MEDIA: | | | A1/H |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | 57-4020 | | OK | FIELD PREP: | NA | | OK |
| LOCATION TYPE: | 57-4020 | | OK | FIELD QC TYPE: | REG | | OK |
| TOP DEPTH: | | | 2.5 ft | SAMPLE USAGE: | INV | | OK |
| BOTTOM DEPTH: | | | 3.5 ft | EXCAVATED: | | | YES / NO (NA) |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N1 | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | ↓ |

**SAMPLE COMMENTS:** Brown to lt brown weathered tuff

**LOCATION COMMENTS:** 7-10 1 ft above tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 34 dpm

Beta/Gamma 1542 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Thompson

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sanchez, Wagner<br>(Signature) Wagner Sanchez | 7/11/14 1400 | (Printed Name) K. Brock<br>(Signature) | 7/11/14 2100 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84155 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/11/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0935 | MEDIA: | | ALLH |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4021 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4021 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 0 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 1 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| ~~—~~ | ~~8260B~~ | ~~125 ML SEPTUM AMBER GLASS~~ | ~~1~~ | ~~ICE~~ | ~~BR 07/01/2014~~ | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | NA |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | NA |

**SAMPLE COMMENTS:** Native soil/sediment/weathered tuff moist, light brown to reddish brown; roots; organic matter

**LOCATION COMMENTS:** 7-11 0-1 ft bgs

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 34 dpm

Beta/Gamma 1751 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** B. Rapp

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Thomas Sowa (Signature) | 7/11/14 1400 | (Printed Name) K. Wood (Signature) | 7/11/14 2:00 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84162 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/11/14 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 0830 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4017 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4017 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 4'ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 5'ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Qbt-3, gray to light gray, moderately welded.

**LOCATION COMMENTS:** 7-7 2-3 ft into tuff

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

**Alpha** 14 **dpm** **PID** Ambient / Reading = 0.0 / 0.0 **ppm**

**Beta/Gamma** 1706 **dpm**

**COLLECTED BY (PRINT)** Tommy Sower

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Thomas Sower<br>(Signature) | 7/11/14 1400 | (Printed Name) K. Green<br>(Signature) | 7/11/14 2100 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84163

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/11/14 | FIELD MATRIX: | ~~S~~ | Rock |
| TIME COLLECTED (HH:MM): | | 9:50 AM | MEDIA: | | QBT3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4018 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4018 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 7.4 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 8.4 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Rock QBT3; light grey to white; densely welded

**LOCATION COMMENTS:** 7-8

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

**Alpha** 24 **dpm**

**Beta/Gamma** 1642 **dpm**

**PID** Ambient / Reading = 0.0 / 0.0 **ppm**

**COLLECTED BY (PRINT)** Sanchez, Wayne

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Thomas Sower<br>(Signature) | 7/11/14 1400 | (Printed Name) K. Greene<br>(Signature) | 7/11/14 2100 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84164 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/11/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0745 | MEDIA: | | ALLH |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4019 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4019 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 0 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 1 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| ~~—~~ | ~~8260B~~ | ~~125 ML SEPTUM AMBER GLASS~~ | 1 | ICE | Pon 07/01/2014 | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** Sediment and ~~pr~~ 07/11/14 fragments of weathered tuff; organic matter present.

**LOCATION COMMENTS:** 7-9 0-1 ft bgs

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm

Beta/Gamma 1581 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** B. RAPPE

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Thomas Sower (Signature) | 7/11/14 1400 | (Printed Name) K. Greene (Signature) | 7/11/14 2:06 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84165 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/11/14 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0940 | MEDIA: | | ~~FILTRS~~ ALLA ALLH |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4020 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | 57-4020 | OK | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | | 0 ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | | 1 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| ~~—~~ | ~~8260B~~ | ~~125 ML SEPTUM AMBER GLASS~~ | ~~1~~ | ~~ICE~~ | ~~PQL 07/01/2014~~ | |
| NA | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | NA |
| NA | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | NA |

**SAMPLE COMMENTS:** Brown-lt brown silty clay with weathered tuff

**LOCATION COMMENTS:** 7-10 0-1 ft 695

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 19 dpm

Beta/Gamma 1580 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Tommy Sower

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Thomas Sower<br>(Signature) | 7/11/14 1400 | (Printed Name) K. Green<br>(Signature) | 7/11/14 2100 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84175 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 07/11/2014 | FIELD MATRIX: | S | | ROCK |
| TIME COLLECTED (HH:MM): | | | 0915 | MEDIA: | | | Qbt3 |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | 57-4019 | | | FIELD PREP: | NA | | |
| LOCATION TYPE: | 57-4019 | | | FIELD QC TYPE: | REG | | |
| TOP DEPTH: | | | 02/11/2014 2 ft 4.5 ft | SAMPLE USAGE: | INV | | |
| BOTTOM DEPTH: | | | 5.5 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | | |

**SAMPLE COMMENTS:** Qbt3; light brown to grey; light to moderately welded.

**LOCATION COMMENTS:** 7-9 2-3 ft into tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 29 dpm

Beta/Gamma 1548 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** BRapp

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Thomas Sanc | 7/11/14 1400 | K. Green | 7/11/14 2100 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
| | | | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84176 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/11/14 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 11:11 | MEDIA: | | Qbt-3 |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4020 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4020 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 5.5 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 6.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| NA | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | y | NA |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Qbt-3, Brownish gray, Moderately welded

**LOCATION COMMENTS:** 7-10 2'-3' blow ~~fuff~~ Tuff
MS 7/11/14

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 14 dpm

Beta/Gamma 1615 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** M. Shendo

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Thomas Sowa | 7/11/14 1200 | K. Green | 7/11/14 1:00 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
| | | | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84177 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/11/2014 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 1705 | MEDIA: | | Qbt3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4021 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4021 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 6.5 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 7.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | |

**SAMPLE COMMENTS:** Qbt3; light brown to pinkish grey; quartz and sanidine abundant, moderately/densely welded

**LOCATION COMMENTS:** 7-11 (2-3 ft into tuff)

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 14 dpm

Beta/Gamma 1785 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Bobbie Rappe

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Thomas Sauer<br>(Signature) | 7/11/14 1400 | (Printed Name) K. Green<br>(Signature) | 7/11/14 2100 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84132 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/11/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0735 | MEDIA: | | NA |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | DC | OK |
| LOCATION ID: | UNK | 57-4017 | FIELD PREP: | NA | |
| LOCATION TYPE: | | 57-4017 | FIELD QC TYPE: | FTB | |
| TOP DEPTH: | | 0 ft | SAMPLE USAGE: | QC | |
| BOTTOM DEPTH: | | 1 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |

**SAMPLE COMMENTS:** QC of RE57-14-84140

**LOCATION COMMENTS:** 7-7 0-1 ft bgs

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha _____ dpm PID Ambient Reading = 0.0 / 0.0 ppm

Beta/Gamma _____ dpm

**COLLECTED BY (PRINT)** M. Shendo

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) BRapp (Signature) BRapp | 07/11/2014 1400 | (Printed Name) K. Wilcox (Signature) | 7/11/14 2100 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84133 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 07/11/2014 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 0955 | MEDIA: | | | NA |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | DC | | OK |
| LOCATION ID: | UNK | | 57-4020 | FIELD PREP: | NA | | |
| LOCATION TYPE: | | | 57 4020 | FIELD QC TYPE: | FTB | | |
| TOP DEPTH: | | | 2.5 ft | SAMPLE USAGE: | QC | | |
| BOTTOM DEPTH: | | | 3.5 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |

**SAMPLE COMMENTS:** QC of RE57-14-84154

**LOCATION COMMENTS:** 7-10 1ft ~~above~~ RAL 07/11/2014 tuff above

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha _____ dpm PID Ambient Reading = 0.0 ppm

Beta/Gamma _____ dpm 0.0

**COLLECTED BY (PRINT)** Tommy Sower

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) BRAPPE<br>(Signature) Brapp | 07/11/14 1400 | (Printed Name) K. Green<br>(Signature) | 7/11/14 2:00 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 06/26/2014

# DATA VALIDATION REPORT

Chain Of Custody No. 2014-3795

1. Distribution Of Samples In EDD.

| SDG | Analytical Method | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks |
|---|---|---|---|---|---|---|
| 352623 | EPA:245.2 | | | | | |
| 352623 | EPA:300.0 | 13 | 1 | | | |
| 352623 | HASL-300:ISOU | 13 | 1 | | | |
| 352623 | SW-846:6010C | 13 | 1 | | | |
| 352623 | SW-846:6020 | 13 | 1 | | | |
| 352623 | SW-846:6850 | 13 | 1 | | | |
| 352623 | SW-846:7471A | 13 | 1 | | | |
| 352623 | SW-846:8260B | 13 | 1 | 2 | | |
| 352623 | SW-846:8270D | 13 | 1 | | | |
| 352623 | SW-846:9012A | 13 | 1 | | | |

| SDG | Analytical Method | Analysis Lot ID | Prep Lot ID | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks | Method Blanks | Matrix Spikes | Matrix Spike Dups | Analytical Spikes | Post-Digestion Spikes | Lab Control Samples | Lab Control Sample Dups | Blank Spike | Blank Spike Dups | Lab Duplicates | Storage Blanks | Preparation Blanks | Reagent Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 352623 | EPA:245.2 | 1405304 | 1405303 | | | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352623 | EPA:300.0 | 1404219 | 1404218 | 13 | 1 | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352623 | HASL-300:ISOU | 1403383 | 1403383 | 13 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352623 | SW-846:6010C | 1403624 | 1403622 | | | | | | 1 | | | | | 1 | | | | | | | |
| 352623 | SW-846:6010C | 1403628 | 1403627 | 13 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352623 | SW-846:6020 | 1403634 | 1403633 | | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352623 | SW-846:6020 | 1403639 | 1403638 | 13 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352623 | SW-846:6850 | 1404629 | 1404628 | 13 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352623 | SW-846:7471A | 1405678 | 1405677 | 13 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352623 | SW-846:8260B | 1408354 | 1408351 | 13 | 1 | 2 | | | 2 | | | | | 4 | | | | | | | |
| 352623 | SW-846:8270D | 1405532 | 1405531 | 13 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352623 | SW-846:9012A | 1403585 | 1403584 | 13 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |

2. Distribution Of Analytes In EDD.

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| EPA:245.2 | INORGANIC | LCS | 1203132306 | LCS | 0 | 0 | 1 | 0 |
| EPA:245.2 | INORGANIC | MB | 1203132305 | MB | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84125 | 1203132307 | DUP | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84125 | 352623015 | FR | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84126 | 352623016 | FR | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | WTESR-14-78850 | 1203132310 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | LCS | 1203129429 | LCS | 0 | 0 | 1 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | MB | 1203129424 | MB | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84121 | 1203129426 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84121 | 352623014 | FD | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84140 | 1203129425 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84140 | 352623001 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84142 | 352623005 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84144 | 352623011 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84151 | 352623002 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84154 | 352623008 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84155 | 352623012 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84162 | 352623003 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84163 | 352623004 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84164 | 352623006 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84165 | 352623009 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84175 | 352623007 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84176 | 352623010 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84177 | 352623013 | REG | 1 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | LCS | 1203127445 | LCS | 0 | 0 | 1 | 0 |
| HASL-300:ISOU | RAD | MB | 1203127443 | MB | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84121 | 352623014 | FD | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84140 | 1203127444 | DUP | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84140 | 352623001 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84142 | 352623005 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84144 | 352623011 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84151 | 352623002 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84154 | 352623008 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84155 | 352623012 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84162 | 352623003 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84163 | 352623004 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84164 | 352623006 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84165 | 352623009 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84175 | 352623007 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84176 | 352623010 | REG | 3 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| HASL-300:ISOU | RAD | RE57-14-84177 | 352623013 | REG | 3 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203128050 | LCS | 0 | 0 | 13 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203128061 | LCS | 0 | 0 | 17 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203128049 | MB | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203128060 | MB | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84121 | 352623014 | FD | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84125 | 352623015 | FR | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84126 | 352623016 | FR | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84140 | 1203128062 | DUP | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84140 | 352623001 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84142 | 352623005 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84144 | 352623011 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84151 | 352623002 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84154 | 352623008 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84155 | 352623012 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84162 | 352623003 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84163 | 352623004 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84164 | 352623006 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84165 | 352623009 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84175 | 352623007 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84176 | 352623010 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84177 | 352623013 | REG | 17 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203128076 | LCS | 0 | 0 | 9 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203128094 | LCS | 0 | 0 | 5 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203128075 | MB | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203128093 | MB | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84121 | 352623014 | FD | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84125 | 1203128077 | DUP | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84125 | 352623015 | FR | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84126 | 352623016 | FR | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84140 | 1203128095 | DUP | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84140 | 352623001 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84142 | 352623005 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84144 | 352623011 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84151 | 352623002 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84154 | 352623008 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84155 | 352623012 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84162 | 352623003 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84163 | 352623004 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84164 | 352623006 | REG | 5 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:6020 | INORGANIC | RE57-14-84165 | 352623009 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84175 | 352623007 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84176 | 352623010 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84177 | 352623013 | REG | 5 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | LCS | 1203130457 | LCS | 0 | 0 | 1 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | MB | 1203130456 | MB | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84121 | 352623014 | FD | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84140 | 352623001 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84142 | 352623005 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84144 | 352623011 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84151 | 352623002 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84154 | 352623008 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84155 | 352623012 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84162 | 352623003 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84163 | 352623004 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84164 | 352623006 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84165 | 352623009 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84175 | 352623007 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84176 | 352623010 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84177 | 352623013 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | LCS | 1203133218 | LCS | 0 | 0 | 1 | 0 |
| SW-846:7471A | INORGANIC | MB | 1203133217 | MB | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84121 | 352623014 | FD | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84140 | 1203133219 | DUP | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84140 | 352623001 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84142 | 352623005 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84144 | 352623011 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84151 | 352623002 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84154 | 352623008 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84155 | 352623012 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84162 | 352623003 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84163 | 352623004 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84164 | 352623006 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84165 | 352623009 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84175 | 352623007 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84176 | 352623010 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84177 | 352623013 | REG | 1 | 0 | 0 | 0 |
| SW-846:8260B | VOC | LCS | 1203140185 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203140186 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | LCS | 1203145029 | LCS | 0 | 3 | 61 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:8260B | VOC | LCS | 1203145030 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | MB | 1203140180 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | MB | 1203145028 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84121 | 352623014 | FD | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84132 | 352623017 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84133 | 352623018 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84140 | 352623001 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84142 | 352623005 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84144 | 352623011 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84151 | 352623002 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84154 | 352623008 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84155 | 352623012 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84162 | 352623003 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84163 | 352623004 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84164 | 352623006 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84165 | 352623009 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84175 | 352623007 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84176 | 352623010 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84177 | 352623013 | REG | 62 | 3 | 0 | 0 |
| SW-846:8270D | SVOC | LCS | 1203132847 | LCS | 0 | 6 | 69 | 0 |
| SW-846:8270D | SVOC | MB | 1203132846 | MB | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84121 | 352623014 | FD | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84140 | 352623001 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84142 | 352623005 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84144 | 352623011 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84151 | 352623002 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84154 | 352623008 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84155 | 352623012 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84162 | 352623003 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84163 | 352623004 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84164 | 352623006 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84165 | 352623009 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84175 | 352623007 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84176 | 352623010 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84177 | 352623013 | REG | 69 | 6 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | LCS | 1203127928 | LCS | 0 | 0 | 1 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | MB | 1203127923 | MB | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84121 | 352623014 | FD | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84140 | 1203127924 | DUP | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84140 | 352623001 | REG | 1 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84142 | 352623005 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84144 | 352623011 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84151 | 352623002 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84154 | 352623008 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84155 | 352623012 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84162 | 352623003 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84163 | 352623004 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84164 | 352623006 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84165 | 352623009 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84175 | 352623007 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84176 | 352623010 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84177 | 352623013 | REG | 1 | 0 | 0 | 0 |

3. Are any analytes missing?

No.

4. Were any holding times exceeded?

No.

5. Any contaminants in blanks?

| Blank FS ID | Blank Lab Sample | Blank Type | Analytical Method | Sample | Parameter Name | Blank Lab Result | Lab Qualifier | Blank Lab Units | Blank Lab Detection Limit |
|---|---|---|---|---|---|---|---|---|---|
| MB | 1203128049 | METHOD BLANK | SW-846:6010C | W | Cobalt | -1.17 | J | ug/L | 5.00 |
| MB | 1203128049 | METHOD BLANK | SW-846:6010C | W | Iron | 31.3 | J | ug/L | 100 |
| MB | 1203128049 | METHOD BLANK | SW-846:6010C | W | Potassium | 77 | J | ug/L | 150 |
| MB | 1203128060 | METHOD BLANK | SW-846:6010C | SO | Antimony | 515 | J | ug/kg | 978 |

# DATA VALIDATION REPORT

| Field Sample ID | Blank Lab | Blank Type | Analytical Method | Parameter Name | Blank Lab Result | Blank Lab Units | Lab Result | Lab Qualifier | Lab Detection Limit | Detect Flag | Detect to Nondetect Factor | Detect to Estimated Factor | Use Factors |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84125 | 1203128049 | METHOD BLANK | SW-846:6010C | Cobalt | -1.17 | ug/L | 5.00 | U | 5.00 | N | | | |
| RE57-14-84126 | 1203128049 | METHOD BLANK | SW-846:6010C | Cobalt | -1.17 | ug/L | 5.00 | U | 5.00 | N | | | |

6. Any surrogate recoveries outside the control limits?

| Field Sample ID | Lab Sample ID | Analytical Method | Parameter Name | Analysis Lot ID | Analysis Date | Spike Recovery | Upper Limit | Lower Limit | Rejection Limit |
|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84121 | 352623014 | SW-846:8260B | Bromofluorobenzene[4-] | 1408354 | 08-05-2014 | 123 | 120 | 80 | 10 |
| RE57-14-84140 | 352623001 | SW-846:8260B | Bromofluorobenzene[4-] | 1408354 | 08-01-2014 | 121 | 120 | 80 | 10 |
| RE57-14-84151 | 352623002 | SW-846:8260B | Bromofluorobenzene[4-] | 1408354 | 08-01-2014 | 126 | 120 | 80 | 10 |
| RE57-14-84155 | 352623012 | SW-846:8260B | Bromofluorobenzene[4-] | 1408354 | 08-05-2014 | 131 | 120 | 80 | 10 |
| RE57-14-84165 | 352623009 | SW-846:8260B | Bromofluorobenzene[4-] | 1408354 | 08-05-2014 | 125 | 120 | 80 | 10 |

7. Any MS/MSD recoveries or RPDs outside the control limits?

No.

8. Any LCS/LCSD or BS/BSD recoveries or RPDs outside the control limits?

No.

9. Any Field Duplicate RPDs outside the desired limits?

No.

10. Any Lab Duplicate RPDs outside the desired limits?

| Field Sample ID | Lab Sample ID | LD Lab Sample ID | Analytical Method | Parameter Name | Sample Matrix | Lab Result | LD Lab Result | Lab Units | Detect Flag | LD Detect Flag | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|

# DATA VALIDATION REPORT

| Field Sample ID | Lab Sample ID | LD Lab Sample ID | Analytical Method | Parameter Name | Sample Matrix | Lab Result | LD Lab Result | Lab Units | Detect Flag | LD Detect Flag | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84140 | 352623001 | 1203127444 | HASL-300:ISOU | Uranium-238 | SO | 1.02 | 1.4 | pCi/g | Y | Y | 31.5 | 20 |
| RE57-14-84140 | 352623001 | 1203128095 | SW-846:6020 | Arsenic | SO | 1280 | 1910 | ug/kg | Y | Y | 39.2 | 20 |

11. Any required reporting limits exceeded?

No.

12. Additional Validator's Comments.

13. Display Flagged Data.

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4020 | 2014-3795 | RE57-14-84121 | FD | INIT | VOC | SW-846:8260B | Trichloroethene | H | J+ | V3b | Y | 2.32 | ug/kg | 0.00232 | mg/kg | | | SD | 07/11/2014 | | 1408354 | VAL | Y |
| 57-4020 | 2014-3795 | RE57-14-84121 | FD | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0558 | pCi/g | .0558 | pCi/g | 0.0814 | 0.0209 | SD | 07/11/2014 | | 1403383 | VAL | Y |
| 57-4017 | 2014-3795 | RE57-14-84140 | REG | INIT | INORGANIC | SW-846:6020 | Arsenic | | J | I10a | Y | 1280 | ug/kg | 1.28 | mg/kg | | | SD | 07/11/2014 | | 1403639 | VAL | Y |
| 57-4017 | 2014-3795 | RE57-14-84140 | REG | INIT | VOC | SW-846:8260B | Methylene Chloride | HJ | J+ | V3b | Y | 2.77 | ug/kg | 0.00277 | mg/kg | | | SD | 07/11/2014 | | 1408354 | VAL | Y |
| 57-4017 | 2014-3795 | RE57-14-84140 | REG | INIT | RAD | HASL-300:ISOU | Uranium-238 | | J | R10 | Y | 1.02 | pCi/g | 1.02 | pCi/g | 0.0716 | 0.0685 | SD | 07/11/2014 | | 1403383 | VAL | Y |
| 57-4021 | 2014-3795 | RE57-14-84144 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0799 | pCi/g | .0799 | pCi/g | 0.0832 | 0.0242 | SD | 07/11/2014 | | 1403383 | VAL | Y |
| 57-4017 | 2014-3795 | RE57-14-84151 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0512 | pCi/g | .0512 | pCi/g | 0.107 | 0.0284 | SD | 07/11/2014 | | 1403383 | VAL | Y |
| 57-4020 | 2014-3795 | RE57-14-84154 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0608 | pCi/g | .0608 | pCi/g | 0.0985 | 0.0224 | SD | 07/11/2014 | | 1403383 | VAL | Y |
| 57-4021 | 2014-3795 | RE57-14-84155 | REG | INIT | VOC | SW-846:8260B | Trichloroethene | H | J+ | V3b | Y | 2.94 | ug/kg | 0.00294 | mg/kg | | | SD | 07/11/2014 | | 1408354 | VAL | Y |
| 57-4021 | 2014-3795 | RE57-14-84155 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .083 | pCi/g | .083 | pCi/g | 0.101 | 0.0259 | SD | 07/11/2014 | | 1403383 | VAL | Y |
| 57-4018 | 2014-3795 | RE57-14-84163 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0437 | pCi/g | .0437 | pCi/g | 0.0797 | 0.0173 | SD | 07/11/2014 | | 1403383 | VAL | Y |
| 57-4019 | 2014-3795 | RE57-14-84164 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0637 | pCi/g | .0637 | pCi/g | 0.116 | 0.0276 | SD | 07/11/2014 | | 1403383 | VAL | Y |
| 57-4020 | 2014-3795 | RE57-14-84165 | REG | INIT | VOC | SW-846:8260B | Trichloroethene | H | J+ | V3b | Y | 1.35 | ug/kg | 0.00135 | mg/kg | | | SD | 07/11/2014 | | 1408354 | VAL | Y |

| Reason Code | Description |
|---|---|
| I10a | The sample and the duplicate sample results were >=5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples. |
| J_LAB | The analytical laboratory qualified the detected result as estimated (J) because the result was less the PQL but greater than the MDL |
| NQ | The analytical laboratory did not qualifiy the analyte as not detected and/or any other standard qualifire. The analyte is detected in the sample. |

# DATA VALIDATION REPORT

| Reason Code | Description |
|---|---|
| R10 | Associated duplicate sample has DER or RER> the analytical laboratory's acceptance limits. |
| R5 | Analyte is not detected because the amount reported is less than the MDC. |
| U_LAB | The analytical laboratory qualified the analyte as not detected. |
| V3b | The surrogate is less than 10%R and the result is a detect, which indicates the potential for a severely low bias in the results. |

14. Usable Result Count.

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84121 | 57-4020 | FD | EPA:300.0 | 0 | 1 |
| RE57-14-84121 | 57-4020 | FD | HASL-300:ISOU | 0 | 3 |
| RE57-14-84121 | 57-4020 | FD | SW-846:6010C | 0 | 17 |
| RE57-14-84121 | 57-4020 | FD | SW-846:6020 | 0 | 5 |
| RE57-14-84121 | 57-4020 | FD | SW-846:6850 | 0 | 1 |
| RE57-14-84121 | 57-4020 | FD | SW-846:7471A | 0 | 1 |
| RE57-14-84121 | 57-4020 | FD | SW-846:8260B | 0 | 62 |
| RE57-14-84121 | 57-4020 | FD | SW-846:8270D | 0 | 69 |
| RE57-14-84121 | 57-4020 | FD | SW-846:9012A | 0 | 1 |
| RE57-14-84125 | 57-4017 | FR | EPA:245.2 | 0 | 1 |
| RE57-14-84125 | 57-4017 | FR | SW-846:6010C | 0 | 13 |
| RE57-14-84125 | 57-4017 | FR | SW-846:6020 | 0 | 9 |
| RE57-14-84126 | 57-4021 | FR | EPA:245.2 | 0 | 1 |
| RE57-14-84126 | 57-4021 | FR | SW-846:6010C | 0 | 13 |
| RE57-14-84126 | 57-4021 | FR | SW-846:6020 | 0 | 9 |
| RE57-14-84132 | 57-4017 | FTB | SW-846:8260B | 0 | 62 |
| RE57-14-84133 | 57-4020 | FTB | SW-846:8260B | 0 | 62 |
| RE57-14-84140 | 57-4017 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84140 | 57-4017 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84140 | 57-4017 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84140 | 57-4017 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84140 | 57-4017 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84140 | 57-4017 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84140 | 57-4017 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84140 | 57-4017 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84140 | 57-4017 | REG | SW-846:9012A | 0 | 1 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84142 | 57-4019 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84142 | 57-4019 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84142 | 57-4019 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84142 | 57-4019 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84142 | 57-4019 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84142 | 57-4019 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84142 | 57-4019 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84142 | 57-4019 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84142 | 57-4019 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84144 | 57-4021 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84144 | 57-4021 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84144 | 57-4021 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84144 | 57-4021 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84144 | 57-4021 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84144 | 57-4021 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84144 | 57-4021 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84144 | 57-4021 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84144 | 57-4021 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84151 | 57-4017 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84151 | 57-4017 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84151 | 57-4017 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84151 | 57-4017 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84151 | 57-4017 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84151 | 57-4017 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84151 | 57-4017 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84151 | 57-4017 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84151 | 57-4017 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84154 | 57-4020 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84154 | 57-4020 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84154 | 57-4020 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84154 | 57-4020 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84154 | 57-4020 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84154 | 57-4020 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84154 | 57-4020 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84154 | 57-4020 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84154 | 57-4020 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84155 | 57-4021 | REG | EPA:300.0 | 0 | 1 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84155 | 57-4021 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84155 | 57-4021 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84155 | 57-4021 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84155 | 57-4021 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84155 | 57-4021 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84155 | 57-4021 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84155 | 57-4021 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84155 | 57-4021 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84162 | 57-4017 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84162 | 57-4017 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84162 | 57-4017 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84162 | 57-4017 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84162 | 57-4017 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84162 | 57-4017 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84162 | 57-4017 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84162 | 57-4017 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84162 | 57-4017 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84163 | 57-4018 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84163 | 57-4018 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84163 | 57-4018 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84163 | 57-4018 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84163 | 57-4018 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84163 | 57-4018 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84163 | 57-4018 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84163 | 57-4018 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84163 | 57-4018 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84164 | 57-4019 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84164 | 57-4019 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84164 | 57-4019 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84164 | 57-4019 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84164 | 57-4019 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84164 | 57-4019 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84164 | 57-4019 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84164 | 57-4019 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84164 | 57-4019 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84165 | 57-4020 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84165 | 57-4020 | REG | HASL-300:ISOU | 0 | 3 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84165 | 57-4020 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84165 | 57-4020 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84165 | 57-4020 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84165 | 57-4020 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84165 | 57-4020 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84165 | 57-4020 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84165 | 57-4020 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84175 | 57-4019 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84175 | 57-4019 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84175 | 57-4019 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84175 | 57-4019 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84175 | 57-4019 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84175 | 57-4019 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84175 | 57-4019 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84175 | 57-4019 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84175 | 57-4019 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84176 | 57-4020 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84176 | 57-4020 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84176 | 57-4020 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84176 | 57-4020 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84176 | 57-4020 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84176 | 57-4020 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84176 | 57-4020 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84176 | 57-4020 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84176 | 57-4020 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84177 | 57-4021 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84177 | 57-4021 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84177 | 57-4021 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84177 | 57-4021 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84177 | 57-4021 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84177 | 57-4021 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84177 | 57-4021 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84177 | 57-4021 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84177 | 57-4021 | REG | SW-846:9012A | 0 | 1 |

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

August 11, 2014

Mr. Keith Greene
Los Alamos National Laboratory
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER
Work Order: 352623
SDG: 2014-3795

Dear Mr. Greene:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on July 15, 2014, and analyzed for GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Hope Taylor for
Valerie Davis
Project Manager

Chain of Custody: 2014-3795
Enclosures

**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Work Order #: 352623**
**SDG: 2014-3795**

Table of Contents

Case Narrative.....1

Chain of Custody and Supporting Documentation.....5

Data Review Qualifier Flag Definition Sheet.....15

Volatile Analysis.....18

Case Narrative.....19

Sample Data Summary.....25

Quality Control Summary.....58

Quality Control Data.....79

Miscellaneous.....100

Semi-Volatile Analysis.....102

Case Narrative.....103

Sample Data Summary.....109

Quality Control Summary.....152

Quality Control Data.....167

Miscellaneous.....177

Perchlorates by LCMSMS Analysis.....179

Case Narrative.....180

Sample Data Summary.....186

Quality Control Summary.....201

Quality Control Data.....204

Metals Analysis.....210
Case Narrative.....211
Sample Data Summary.....217
Quality Control Summary.....237
Miscellaneous.....267
General Chem Analysis.....270
Case Narrative.....271
Sample Data Summary.....279
Quality Control Summary.....295
Miscellaneous.....298
Radiological Analysis.....300
Sample Data Summary.....306
Quality Control Data.....321

# Case Narrative

**Case Narrative for**
**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Workorder #: 352623**
**SDG # : 2014-3795**

**August 11, 2014**

**Laboratory Identification:**

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on July 15, 2014 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C). Shipping container temperatures were checked, documented, and within specifications. There are no additional comments concerning sample receipt.

**Sample Identification** The laboratory received the following samples:

| Laboratory ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 352623015 | RE57-14-84125 |
| 352623016 | RE57-14-84126 |
| 352623017 | RE57-14-84132 |
| 352623018 | RE57-14-84133 |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package**

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Hope Taylor for
Valerie Davis
Project Manager

**List of current GEL Certifications as of 11 August 2014**

| State | Certification |
|---|---|
| Alaska | UST−110 |
| Arkansas | 88−0651 |
| CLIA | 42D0904046 |
| California NELAP | 01151CA |
| Colorado | SC00012 |
| Connecticut | PH−0169 |
| Delaware | SC000122013−10 |
| DoD ELAP/ ISO17025 A2LA | 2567.01 |
| Florida NELAP | E87156 |
| Foreign Soils Permit | P330−12−00283, P330−12−00284 |
| Georgia | SC00012 |
| Georgia SDWA | 967 |
| Hawaii | SC000122013−10 |
| Idaho Chemistry | SC00012 |
| Idaho Radiochemistry | SC00012 |
| Illinois NELAP | 200029 |
| Indiana | C−SC−01 |
| Kansas NELAP | E−10332 |
| Kentucky | 90129 |
| Louisiana NELAP | 03046 (AI33904) |
| Louisiana SDWA | LA130005 |
| Maryland | 270 |
| Massachusetts | M−SC012 |
| Michigan | 9976 |
| Mississippi | SC000122013−10 |
| Nebraska | NE−OS−26−13 |
| Nevada | SC000122014−1 |
| New Hampshire NELAP | 2054 |
| New Jersey NELAP | SC002 |
| New Mexico | SC00012 |
| New York NELAP | 11501 |
| North Carolina | 233 |
| North Carolina SDWA | 45709 |
| Oklahoma | 9904 |
| Pennsylvania NELAP | 68−00485 |
| Plant Material Permit | PDEP−12−00260 |
| South Carolina Chemistry | 10120001 |
| South Carolina GVL | 23611001 |
| South Carolina Radiochemi | 10120002 |
| Tennessee | TN 02934 |
| Texas NELAP | T104704235−14−9 |
| Utah NELAP | SC000122014−14 |
| Vermont | VT87156 |
| Virginia NELAP | 460202 |
| Washington | C780−12 |
| Wisconsin | 999887790 |

# Chain of Custody and Supporting Documentation

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

352623

COC/Lab Request #: 2014-3795



Client Contact:

Lab Agreement # : 126310011

Project Number :

Site Name: Los Alamos National Laboratory

Analysis Turnaround Time:
24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 | Metals(W) |
|---|---|---|---|---|---|---|---|
| RE57-14-84140 | Jul 11 2014 | 07:35 | SO | 1 | 1 | 1 | |
| RE57-14-84151 | Jul 11 2014 | 07:40 | SO | 1 | 1 | 1 | |
| RE57-14-84162 | Jul 11 2014 | 08:30 | SO | 1 | 1 | 1 | |
| RE57-14-84163 | Jul 11 2014 | 09:50 | SO | 1 | 1 | 1 | |
| RE57-14-84142 | Jul 11 2014 | 08:05 | SO | 1 | 1 | 1 | |
| RE57-14-84164 | Jul 11 2014 | 07:45 | SO | 1 | 1 | 1 | |
| RE57-14-84175 | Jul 11 2014 | 09:15 | SO | 1 | 1 | 1 | |
| RE57-14-84154 | Jul 11 2014 | 09:55 | SO | 1 | 1 | 1 | |
| RE57-14-84165 | Jul 11 2014 | 09:40 | SO | 1 | 1 | 1 | |
| RE57-14-84176 | Jul 11 2014 | 11:11 | SO | 1 | 1 | 1 | |
| RE57-14-84144 | Jul 11 2014 | 10:05 | SO | 1 | 1 | 1 | |
| RE57-14-84155 | Jul 11 2014 | 09:35 | SO | 1 | 1 | 1 | |
| RE57-14-84177 | Jul 11 2014 | 11:05 | SO | 1 | 1 | 1 | |
| RE57-14-84121 | Jul 11 2014 | 07:40 | SO | 1 | 1 | 1 | |
| RE57-14-84125 | Jul 11 2014 | 0(;15 | W | | | | 1 |
| RE57-14-84126 | Jul 11 2014 | 11:05 | W | | | | 1 |
| RE57-14-84132 | Jul 11 2014 | 07:35 | SO | 1 | | | |
| RE57-14-84133 | Jul 11 2014 | 09:55 | SO | 1 | | | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| Sherri Sherwood | Sherri Sherwood | 7/14/14 8:00 | P. Nlent | Patricia Dent | 7-15-14 0655 |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

GEL Laboratories LLC

# SAMPLE RECEIPT & REVIEW FORM

| | |
|---|---|
| Client: LANL | SDG/AR/COC/Work Order: 352623 |
| Received By: P. Wlent | Date Received: 7/15/14 |

| Suspected Hazard Information | Yes | No | *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. |
|---|---|---|---|
| COC/Samples marked as radioactive? | | X | Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0CPM |
| Classified Radioactive II or III by RSO? | | X | If yes, Were swipes taken of sample contatiners < action levels? |
| ~~COC/Samples marked containing PCBs?~~ | | X | |
| Package, COC, and/or Samples marked as beryllium or asbestos containing? | | X | If yes, samples are to be segregeated as Safety Controlled Samples, and opened by the GEL Safety Group. |
| ~~Shipped as a DOT Hazardous?~~ | | X | ~~Hazard Class Shipped: UN#:~~ |
| Samples identified as Foreign Soil? | | X | |

| | Sample Receipt Criteria | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items) |
|---|---|---|---|---|---|
| 1 | Shipping containers received intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 2 | Samples requiring cold preservation within (0 ≤ 6 deg. C)?* | X | | | Preservation Method: Ice bags Blue ice Dry ice None Other (describe) 4-6,22c *all temperatures are recorded in Celsius |
| 2a | Daily check performed and passed on IR temperature gun? | X | | | Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 130462966 |
| 3 | Chain of custody documents included with shipment? | X | | | |
| 4 | Sample containers intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 5 | Samples requiring chemical preservation at proper pH? | X | | | Sample ID's, containers affected and observed pH: If Preservation added, Lot#: |
| 6 | VOA vials free of headspace (defined as < 6mm bubble)? | X | | | Sample ID's and containers affected: |
| 7 | Are Encore containers present? | | | X | (If yes, immediately deliver to Volatiles laboratory) |
| 8 | Samples received within holding time? | | | X | ID's and tests affected: WST72-14-84424 BOD collected on 7-11-14 |
| 9 | Sample ID's on COC match ID's on bottles? | X | | | Sample ID's and containers affected: |
| 10 | Date & time on COC match date & time on bottles? | X | | | Sample ID's affected: |
| 11 | Number of containers received match number indicated on COC? | | | X | Sample ID's affected: PLEASE SEE Continuation Sheet |
| 12 | Are sample containers identifiable as GEL provided? | | | X | |
| 13 | COC form is properly signed in relinquished/received sections? | X | | | |
| 14 | Carrier and tracking number. | X | | | Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other<br>5908 1777 2946 3037 >4 2979 3006 >5 2990 2980 >4<br>5908 1777 2957-5 2968-6 3004-6 3015-22 |

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials gp Date 7-16-14 Page 1 of 2

GEL Laboratories LLC **SAMPLE RECEIPT & REVIEW CONTINUATION FORM**

Client: LANL Received By: P. Went Date Received: 7-15-14 SDG/AR/COC/Work Order: 352623

CAMO-14-81466 rec'd (1) 8260b Container, Chain indicates (2).

WST54-14-84679 rec'd (1) 8260b Container, Chain indicates (2).

WST54-14-84555 rec'd (2) containers each for SVOA, Pest, Herb + PCB chain indicates (3) each.

WST54-14-81461 Lab rec'd (1) 8260b, (1) 8270, (1) container with multiple labels, Chain indicates (9) Containers.

WST15-14-84683 Lab rec'd (1) 8260b Container, chain indicates (2).

WST15-14-84682 Lab rec'd (2) containers each for SVOA, PCB, Hexp + O&G Chain Indicates (3) each.

~~WS~~ PD 7-15-14

RES7-14-84121, 84155, 84164 & 84165 Lab did not receive 8260b Containers.

PM (or PMA) review: Initials JP Date 7-16-14 Page 2 of 2

**Subject:** Sample receipt issue from 07/15/14
**From:** Pat Dent <Pat.Dent@gel.com>
**Date:** 7/16/2014 8:05 AM
**To:** "Keith R. Greene" <kgreene@lanl.gov>
**CC:** "team.davis" <team.davis@gel.com>, LANL@amrad.com, npatel@lanl.gov

RN#2014-3788
CAMO-14-81466 lab received 1-8260b container, chain indicates 2.

RN#2014-3791
WST54-14-84679 lab received 1-8260b container, chain indicates 2.
WST54-14-84555 lab receive 2-containers each for the following test, PCB,SVOA,HERB, PEST chain indicates 3-each.

RN#2014-3492
WST54-14-81461 lab received 3-containers, 1-8260b,1-8270c,1-1000ml poly with multiple labels,
chain indicates 9.

RN#2014-3793
WST15-14-84682 lab received 2-cotainers each for PCB, HEXP, SVOA &O&G chain indicates 3-each
WST15-14-84683 lab received 1-8260b container chain indicates 2.

RN#2014-3795
RE57-14-84155, 84165, 84121, 84164 lab did not received 8260b containers.

Thanks!!

--
Patricia Dent
Project Manager Assistant
GEL Laboratories, LLC
2040 Savage Rd.
Charleston, S.C. 29407
Main: 843-556-8171 Ext 4264
Fax: 843-766-1178
Email: pad@gel.com
Web: www.gel.com

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 34.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991155W300

6

521C2/ED4F/6F03

FedEx Express

J141214052201uv

4 of 4
MPS# 0263 5908 1777 3004
Mstr# 5908 1777 2979 0201

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11 ##

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 26.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWK0

22c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

1 of 3
TRK# 0201 5908 1777 3015
## MASTER ##

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11 ##

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

5

521C2/ED4F/6F03

FedEx Express

J141214052201uv

2 of 3
MPS# 0263 5908 1777 2957
Mstr# 5908 1777 2946

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

0201

XX CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

6

521C2/ED4F/6F03

FedEx Express

J141214052201uv

3 of 3
MPS# 0263 5908 1777 2968
Mstr# 5908 1777 2946

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

0201

XX CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 7.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991155W300

4c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

3 of 4

MPS# 0263 5908 1777 2990

Mstr# 5908 1777 2979

0201

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

2940 7
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991155W300

4

521C2/ED4F/6F03

FedEx Express

J141214052201uv

2 of 4

MPS# 0263 5908 1777 2980

Mstr# 5908 1777 2979

0201

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

4

521C2/E34F/2F03

FedEx Express

J1412140522010v

1 of 3

TRK# 0201 5908 1777 2946

## MASTER ##

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWK0

4o

521C2/ED4F/2F03

FedEx Express

J1412140522010v

3 of 3

MPS# 0263 5908 1777 3037

Mstr# 5908 1777 3015 0201

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US CHS

Part # 156148-434 RITZ 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

5

CHARLESTON SC 29407
(843) 556-8171
REF: WE991155W300

FedEx Express

1 of 4

TRK# 0201 5908 1777 2979

## MASTER ##

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 14JUL14
ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

5

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWK0

FedEx Express

2 of 3

MPS# 0263 5908 1777 3026

Mstr# 5908 1777 3015

0201

TUE - 15 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

# Data Review Qualifier Flag Definition Sheet

## Data Review Qualifier Definitions

| Qualifier | Explanation |
|---|---|
| * | A quality control analyte recovery is outside of specified acceptance criteria |
| ** | Analyte is a surrogate compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL |
| A | The TIC is a suspected aldol-condensation product |
| B | Target analyte was detected in the associated blank |
| B | Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL |
| BD | Results are either below the MDC or tracer recovery is low |
| C | Analyte has been confirmed by GC/MS analysis |
| D | Results are reported from a diluted aliquot of the sample |
| d | 5-day BOD-The 2:1 depletion requirement was not met for this sample |
| E | Organics-Concentration of the target analyte exceeds the instrument calibration range |
| E | Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria |
| H | Analytical holding time was exceeded |
| h | Preparation or preservation holding time was exceeded |
| J | Value is estimated |
| N | Metals-The Matrix spike sample recovery is not within specified control limits |
| N | Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more |
| ND | Analyte concentration is not detected above the reporting limit |
| UI | Gamma Spectroscopy-Uncertain identification |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | QC Samples were not spiked with this compound |
| Z | Paint Filter Test-Particulates passed through the filter, however no free liquids were observed. |

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

# Volatile Analysis

# Case Narrative

**ChemStation Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3795**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer** |
| Analytical Method: | SW846 8260B |
| Prep Method: | SW846 5030 |
| Analytical Batch Number: | 1408354 |
| Prep Batch Number: | 1408351 |

## Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

| Sample ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 352623017 | RE57-14-84132 |
| 352623018 | RE57-14-84133 |
| 1203140180 | Method Blank (MB) |
| 1203140181 | 352623001(RE57-14-84140) Post Spike (PS) |
| 1203140182 | 352623001(RE57-14-84140) Post Spike (PS) |
| 1203140183 | 352623001(RE57-14-84140) Post Spike Duplicate (PSD) |
| 1203140184 | 352623001(RE57-14-84140) Post Spike Duplicate (PSD) |
| 1203140185 | Laboratory Control Sample (LCS) |
| 1203140186 | Laboratory Control Sample (LCS) |
| 1203145028 | Method Blank (MB) |
| 1203145029 | Laboratory Control Sample (LCS) |
| 1203145030 | Laboratory Control Sample (LCS) |

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 352623 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013 and 014 in this SDG were analyzed on an "dry weight" basis. Samples 352623 017 and 018 in this SDG were analyzed on a "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 21.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

**Calibration Information**

A complete list of the initial calibration data files with the correct dates and times of analysis are shown in the Calibration History report located in the Standard Data section of the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L or 20 ug/L for low level analyses. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

**Initial Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**Continuing Calibration Verification Requirements**
All associated calibration verification standard(s) (CCV) met the acceptance criteria.

**Quality Control (QC) Information**

**Blank (MB) Statement**
The blanks analyzed with this SDG met the acceptance criteria.

**Surrogate Recoveries**
Surrogate recoveries, in samples 352623001 (RE57-14-84140), 352623002 (RE57-14-84151), 352623009 (RE57-14-84165), 352623012 (RE57-14-84155) and 352623014 (RE57-14-84121), were outside the acceptance limits. Sample re-analysis confirmed matrix interference. See the Data Exception Report in the miscellaneous section of the deliverable.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Sample 352623001 (RE57-14-84140) was designated for spike analysis.

**Matrix Spike (PS) Recovery Statement**
The spike recoveries were within the required acceptance limits.

**Matrix Spike Duplicate (PSD) Recovery Statement**
The spike duplicate recoveries were within the required acceptance limits.

**Relative Percent Difference (RPD) Statement**
The RPDs between the matrix spike pair met the acceptance limits.

**Internal Standard (ISTD) Acceptance**
In sample 352623012 (RE57-14-84155), internal standard response were outside the required acceptance criteria. Sample re-analysis confirmed matrix interference. See the Data Exception Report in the miscellaneous section of the deliverable.

**Technical Information**

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. Samples were not analyzed within the recommended holding. However, the samples were analyzed within two times the holding period. This satisfies the client criteria.

**Sample Preservation and Integrity**
All samples met the sample preservation and integrity requirements.

**Sample Dilutions/Methanol Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Samples 352623001 (RE57-14-84140), 352623002 (RE57-14-84151), 352623009 (RE57-14-84165), 352623012 (RE57-14-84155) and 352623014 (RE57-14-84121) were re-analyzed due to unacceptable surrogate or internal standard recoveries in the initial analysis.

**Miscellaneous Information**

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
The following DER was generated for this SDG: 1322630.

**Manual Integrations**
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

**TIC Comment**
Tentatively identified compounds (TIC) were requested for this sample delivery group/work order. Please note that non-requested target analytes that are reported on the quantitation reports will be present on the Form I. These detected analytes are included in the calibrated method and as a result will be reported on the Sample Data Summary (Form I) or Certificate of Analysis (C of A). TIC data are included on the Sample Data Summary (Form I).

**Additional Comments**
The following samples were not stored in the VOA cooler prior to analysis: 352623006 (RE57-14-84164), 352623009 (RE57-14-84165), 352623012 (RE57-14-84155) and 352623014 (RE57-14-84121).

**Residual Chlorine**
Residual Chlorine was not detected in any of the samples in this SDG.

**System Configuration**

The Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description | P & T Trap |
|---|---|---|---|---|---|
| VOA4.I | Agilent 6890/5973 GC/MS w/ OI 4560/Archon Autosampler | HP6890/HP5973 | DB-624 | J&W, 60m x 0.25mm x 1.4um | Trap 10 |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 − (843) 556−8171 − www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS−LANS−MTOA6−25093−GEL)

Client SDG: 2014−3795  GEL Work Order: 352623

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

H  Analytical holding time was exceeded

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

DL  Indicates that sample is diluted.
RA  Indicates that sample is re−analyzed without re−extraction.
RE  Indicates that sample is re−extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP−like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Erin Haubert  **Name:** **Erin Haubert**

**Date:** **11 AUG 2014**  **Title:** **Data Validator**

# Sample Data Summary

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623001** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84140** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 14:25** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W511.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.09 | ug/kg | 0.543 | 1.09 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-93-3 | 2-Butanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 591-78-6 | 2-Hexanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 67-64-1 | Acetone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 71-43-2 | Benzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-86-1 | Bromobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-97-5 | Bromochloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-27-4 | Bromodichloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-25-2 | Bromoform | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-83-9 | Bromomethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-15-0 | Carbon disulfide | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-90-7 | Chlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-00-3 | Chloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 67-66-3 | Chloroform | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-87-3 | Chloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623001** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84140** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 14:25** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W511.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-95-3 | Dibromomethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 100-41-4 | Ethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-88-4 | Iodomethane | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 98-82-8 | Isopropylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-09-2 | Methylene chloride | HJh | 2.77 | ug/kg | 1.81 | 5.43 |
| 100-42-5 | Styrene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-88-3 | Toluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-01-6 | Trichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 75-01-4 | Vinyl chloride | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.17 | ug/kg | 0.724 | 2.17 |
| 104-51-8 | n-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 103-65-1 | n-Propylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-47-6 | o-Xylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623002** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84151** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 14:54** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W512.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.05 | ug/kg | 0.523 | 1.05 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 78-93-3 | 2-Butanone | HUh | 5.23 | ug/kg | 1.74 | 5.23 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 591-78-6 | 2-Hexanone | HUh | 5.23 | ug/kg | 1.74 | 5.23 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.23 | ug/kg | 1.74 | 5.23 |
| 67-64-1 | Acetone | HUh | 5.23 | ug/kg | 1.74 | 5.23 |
| 71-43-2 | Benzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-86-1 | Bromobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-97-5 | Bromochloromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-27-4 | Bromodichloromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-25-2 | Bromoform | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-83-9 | Bromomethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-15-0 | Carbon disulfide | HUh | 5.23 | ug/kg | 1.74 | 5.23 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-90-7 | Chlorobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-00-3 | Chloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 67-66-3 | Chloroform | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-87-3 | Chloromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623002** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84151** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 14:54** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W512.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-95-3 | Dibromomethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 100-41-4 | Ethylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-88-4 | Iodomethane | HUh | 5.23 | ug/kg | 1.74 | 5.23 |
| 98-82-8 | Isopropylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-09-2 | Methylene chloride | HUh | 5.23 | ug/kg | 1.74 | 5.23 |
| 100-42-5 | Styrene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-88-3 | Toluene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-01-6 | Trichloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.23 | ug/kg | 1.74 | 5.23 |
| 75-01-4 | Vinyl chloride | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.09 | ug/kg | 0.698 | 2.09 |
| 104-51-8 | n-Butylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 103-65-1 | n-Propylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-47-6 | o-Xylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:30** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623003** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84162** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 15:22** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:31** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W513.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.04 | ug/kg | 0.522 | 1.04 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 78-93-3 | 2-Butanone | HUh | 5.22 | ug/kg | 1.74 | 5.22 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 591-78-6 | 2-Hexanone | HUh | 5.22 | ug/kg | 1.74 | 5.22 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.22 | ug/kg | 1.74 | 5.22 |
| 67-64-1 | Acetone | HUh | 5.22 | ug/kg | 1.74 | 5.22 |
| 71-43-2 | Benzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 108-86-1 | Bromobenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 74-97-5 | Bromochloromethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-27-4 | Bromodichloromethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-25-2 | Bromoform | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 74-83-9 | Bromomethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-15-0 | Carbon disulfide | HUh | 5.22 | ug/kg | 1.74 | 5.22 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 108-90-7 | Chlorobenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-00-3 | Chloroethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 67-66-3 | Chloroform | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 74-87-3 | Chloromethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:30** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623003** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84162** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 15:22** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:31** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W513.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 74-95-3 | Dibromomethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 100-41-4 | Ethylbenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 74-88-4 | Iodomethane | HUh | 5.22 | ug/kg | 1.74 | 5.22 |
| 98-82-8 | Isopropylbenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-09-2 | Methylene chloride | HUh | 5.22 | ug/kg | 1.74 | 5.22 |
| 100-42-5 | Styrene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 108-88-3 | Toluene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 79-01-6 | Trichloroethylene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.22 | ug/kg | 1.74 | 5.22 |
| 75-01-4 | Vinyl chloride | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.09 | ug/kg | 0.697 | 2.09 |
| 104-51-8 | n-Butylbenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 103-65-1 | n-Propylbenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 95-47-6 | o-Xylene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.348 | 1.04 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:50** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623004** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84163** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 15:50** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:32** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W514.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.04 | ug/kg | 0.518 | 1.04 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 78-93-3 | 2-Butanone | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 591-78-6 | 2-Hexanone | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 67-64-1 | Acetone | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 71-43-2 | Benzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-86-1 | Bromobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-97-5 | Bromochloromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-27-4 | Bromodichloromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-25-2 | Bromoform | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-83-9 | Bromomethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-15-0 | Carbon disulfide | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-90-7 | Chlorobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-00-3 | Chloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 67-66-3 | Chloroform | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-87-3 | Chloromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:50** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623004** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84163** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 15:50** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:32** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W514.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-95-3 | Dibromomethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 100-41-4 | Ethylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-88-4 | Iodomethane | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 98-82-8 | Isopropylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-09-2 | Methylene chloride | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 100-42-5 | Styrene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-88-3 | Toluene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-01-6 | Trichloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 75-01-4 | Vinyl chloride | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.07 | ug/kg | 0.690 | 2.07 |
| 104-51-8 | n-Butylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 103-65-1 | n-Propylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-47-6 | o-Xylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623005** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84142** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 16:19** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:33** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W515.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.09 | ug/kg | 0.543 | 1.09 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-93-3 | 2-Butanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 591-78-6 | 2-Hexanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 67-64-1 | Acetone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 71-43-2 | Benzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-86-1 | Bromobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-97-5 | Bromochloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-27-4 | Bromodichloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-25-2 | Bromoform | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-83-9 | Bromomethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-15-0 | Carbon disulfide | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-90-7 | Chlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-00-3 | Chloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 67-66-3 | Chloroform | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-87-3 | Chloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623005** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84142** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 16:19** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:33** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W515.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-95-3 | Dibromomethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 100-41-4 | Ethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-88-4 | Iodomethane | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 98-82-8 | Isopropylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-09-2 | Methylene chloride | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 100-42-5 | Styrene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-88-3 | Toluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-01-6 | Trichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 75-01-4 | Vinyl chloride | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.17 | ug/kg | 0.725 | 2.17 |
| 104-51-8 | n-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 103-65-1 | n-Propylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-47-6 | o-Xylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:45** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623006** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84164** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 15:14** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:05** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U212.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.11 | ug/kg | 0.556 | 1.11 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 78-93-3 | 2-Butanone | HUh | 5.56 | ug/kg | 1.85 | 5.56 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 591-78-6 | 2-Hexanone | HUh | 5.56 | ug/kg | 1.85 | 5.56 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.56 | ug/kg | 1.85 | 5.56 |
| 67-64-1 | Acetone | HUh | 5.56 | ug/kg | 1.85 | 5.56 |
| 71-43-2 | Benzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-86-1 | Bromobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-97-5 | Bromochloromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-27-4 | Bromodichloromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-25-2 | Bromoform | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-83-9 | Bromomethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-15-0 | Carbon disulfide | HUh | 5.56 | ug/kg | 1.85 | 5.56 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-90-7 | Chlorobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-00-3 | Chloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 67-66-3 | Chloroform | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-87-3 | Chloromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:45** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623006** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84164** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 15:14** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:05** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U212.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-95-3 | Dibromomethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 100-41-4 | Ethylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-88-4 | Iodomethane | HUh | 5.56 | ug/kg | 1.85 | 5.56 |
| 98-82-8 | Isopropylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-09-2 | Methylene chloride | HUh | 5.56 | ug/kg | 1.85 | 5.56 |
| 100-42-5 | Styrene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-88-3 | Toluene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 79-01-6 | Trichloroethylene | HJh | 1.08 | ug/kg | 0.370 | 1.11 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.56 | ug/kg | 1.85 | 5.56 |
| 75-01-4 | Vinyl chloride | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.22 | ug/kg | 0.742 | 2.22 |
| 104-51-8 | n-Butylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 103-65-1 | n-Propylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 95-47-6 | o-Xylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:15** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623007** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84175** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 16:47** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:34** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W516.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.11 | ug/kg | 0.557 | 1.11 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 78-93-3 | 2-Butanone | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 591-78-6 | 2-Hexanone | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 67-64-1 | Acetone | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 71-43-2 | Benzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-86-1 | Bromobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-97-5 | Bromochloromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-27-4 | Bromodichloromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-25-2 | Bromoform | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-83-9 | Bromomethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-15-0 | Carbon disulfide | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-90-7 | Chlorobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-00-3 | Chloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 67-66-3 | Chloroform | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-87-3 | Chloromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:15** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623007** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84175** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 16:47** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 14:34** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W516.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-95-3 | Dibromomethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 100-41-4 | Ethylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-88-4 | Iodomethane | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 98-82-8 | Isopropylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-09-2 | Methylene chloride | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 100-42-5 | Styrene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-88-3 | Toluene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 79-01-6 | Trichloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 75-01-4 | Vinyl chloride | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.23 | ug/kg | 0.743 | 2.23 |
| 104-51-8 | n-Butylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 103-65-1 | n-Propylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 95-47-6 | o-Xylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:55** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623008** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **12.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84154** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 17:15** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 16:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W517.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.15 | ug/kg | 0.574 | 1.15 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 78-93-3 | 2-Butanone | HUh | 5.74 | ug/kg | 1.91 | 5.74 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 591-78-6 | 2-Hexanone | HUh | 5.74 | ug/kg | 1.91 | 5.74 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.74 | ug/kg | 1.91 | 5.74 |
| 67-64-1 | Acetone | HUh | 5.74 | ug/kg | 1.91 | 5.74 |
| 71-43-2 | Benzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 108-86-1 | Bromobenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 74-97-5 | Bromochloromethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-27-4 | Bromodichloromethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-25-2 | Bromoform | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 74-83-9 | Bromomethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-15-0 | Carbon disulfide | HUh | 5.74 | ug/kg | 1.91 | 5.74 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 108-90-7 | Chlorobenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-00-3 | Chloroethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 67-66-3 | Chloroform | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 74-87-3 | Chloromethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:55** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623008** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **12.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84154** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 17:15** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 16:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W517.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 74-95-3 | Dibromomethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 100-41-4 | Ethylbenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 74-88-4 | Iodomethane | HUh | 5.74 | ug/kg | 1.91 | 5.74 |
| 98-82-8 | Isopropylbenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-09-2 | Methylene chloride | HUh | 5.74 | ug/kg | 1.91 | 5.74 |
| 100-42-5 | Styrene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 108-88-3 | Toluene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 79-01-6 | Trichloroethylene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.74 | ug/kg | 1.91 | 5.74 |
| 75-01-4 | Vinyl chloride | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.30 | ug/kg | 0.766 | 2.30 |
| 104-51-8 | n-Butylbenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 103-65-1 | n-Propylbenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 95-47-6 | o-Xylene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.15 | ug/kg | 0.382 | 1.15 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623009** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84165** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 15:42** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:06** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U213.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.10 | ug/kg | 0.549 | 1.10 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 78-93-3 | 2-Butanone | HUh | 5.49 | ug/kg | 1.83 | 5.49 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 591-78-6 | 2-Hexanone | HUh | 5.49 | ug/kg | 1.83 | 5.49 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.49 | ug/kg | 1.83 | 5.49 |
| 67-64-1 | Acetone | HUh | 5.49 | ug/kg | 1.83 | 5.49 |
| 71-43-2 | Benzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-86-1 | Bromobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-97-5 | Bromochloromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-27-4 | Bromodichloromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-25-2 | Bromoform | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-83-9 | Bromomethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-15-0 | Carbon disulfide | HUh | 5.49 | ug/kg | 1.83 | 5.49 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-90-7 | Chlorobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-00-3 | Chloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 67-66-3 | Chloroform | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-87-3 | Chloromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623009** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84165** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 15:42** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:06** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U213.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-95-3 | Dibromomethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 100-41-4 | Ethylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-88-4 | Iodomethane | HUh | 5.49 | ug/kg | 1.83 | 5.49 |
| 98-82-8 | Isopropylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-09-2 | Methylene chloride | HUh | 5.49 | ug/kg | 1.83 | 5.49 |
| 100-42-5 | Styrene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-88-3 | Toluene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 79-01-6 | Trichloroethylene | Hh | 1.35 | ug/kg | 0.366 | 1.10 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.49 | ug/kg | 1.83 | 5.49 |
| 75-01-4 | Vinyl chloride | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.20 | ug/kg | 0.733 | 2.20 |
| 104-51-8 | n-Butylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 103-65-1 | n-Propylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 95-47-6 | o-Xylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:11** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623010** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84176** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 17:43** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 16:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W518.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.11 | ug/kg | 0.555 | 1.11 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 78-93-3 | 2-Butanone | HUh | 5.55 | ug/kg | 1.85 | 5.55 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 591-78-6 | 2-Hexanone | HUh | 5.55 | ug/kg | 1.85 | 5.55 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.55 | ug/kg | 1.85 | 5.55 |
| 67-64-1 | Acetone | HUh | 5.55 | ug/kg | 1.85 | 5.55 |
| 71-43-2 | Benzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-86-1 | Bromobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-97-5 | Bromochloromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-27-4 | Bromodichloromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-25-2 | Bromoform | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-83-9 | Bromomethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-15-0 | Carbon disulfide | HUh | 5.55 | ug/kg | 1.85 | 5.55 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-90-7 | Chlorobenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-00-3 | Chloroethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 67-66-3 | Chloroform | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-87-3 | Chloromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:11** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623010** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84176** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 17:43** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 16:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W518.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-95-3 | Dibromomethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 100-41-4 | Ethylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 74-88-4 | Iodomethane | HUh | 5.55 | ug/kg | 1.85 | 5.55 |
| 98-82-8 | Isopropylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-09-2 | Methylene chloride | HUh | 5.55 | ug/kg | 1.85 | 5.55 |
| 100-42-5 | Styrene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 108-88-3 | Toluene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 79-01-6 | Trichloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.55 | ug/kg | 1.85 | 5.55 |
| 75-01-4 | Vinyl chloride | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.22 | ug/kg | 0.741 | 2.22 |
| 104-51-8 | n-Butylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 103-65-1 | n-Propylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 95-47-6 | o-Xylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.11 | ug/kg | 0.370 | 1.11 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 10:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623011** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84144** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 16:10** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:07** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U214.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.534 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 67-64-1 | Acetone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 10:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623011** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84144** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 16:10** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:07** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U214.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.14 | ug/kg | 0.713 | 2.14 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623012** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84155** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 16:38** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:08** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U215.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.12 | ug/kg | 0.561 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 78-93-3 | 2-Butanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 591-78-6 | 2-Hexanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 67-64-1 | Acetone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 71-43-2 | Benzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-86-1 | Bromobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-97-5 | Bromochloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-27-4 | Bromodichloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-25-2 | Bromoform | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-83-9 | Bromomethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-15-0 | Carbon disulfide | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-90-7 | Chlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-00-3 | Chloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 67-66-3 | Chloroform | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-87-3 | Chloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623012** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84155** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 16:38** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:08** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U215.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-95-3 | Dibromomethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 100-41-4 | Ethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-88-4 | Iodomethane | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 98-82-8 | Isopropylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-09-2 | Methylene chloride | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 100-42-5 | Styrene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-88-3 | Toluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-01-6 | Trichloroethylene | Hh | 2.94 | ug/kg | 0.374 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 75-01-4 | Vinyl chloride | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.25 | ug/kg | 0.749 | 2.25 |
| 104-51-8 | n-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 103-65-1 | n-Propylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-47-6 | o-Xylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623013** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84177** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 17:06** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:09** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U216.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623013** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84177** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 17:06** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:09** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U216.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.711 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623014** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84121** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 17:34** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:10** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U217.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.12 | ug/kg | 0.561 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 78-93-3 | 2-Butanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 591-78-6 | 2-Hexanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 67-64-1 | Acetone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 71-43-2 | Benzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-86-1 | Bromobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-97-5 | Bromochloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-27-4 | Bromodichloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-25-2 | Bromoform | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-83-9 | Bromomethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-15-0 | Carbon disulfide | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-90-7 | Chlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-00-3 | Chloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 67-66-3 | Chloroform | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-87-3 | Chloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623014** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84121** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 17:34** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 14:10** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U217.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-95-3 | Dibromomethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 100-41-4 | Ethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-88-4 | Iodomethane | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 98-82-8 | Isopropylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-09-2 | Methylene chloride | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 100-42-5 | Styrene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-88-3 | Toluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-01-6 | Trichloroethylene | Hh | 2.32 | ug/kg | 0.374 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 75-01-4 | Vinyl chloride | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.24 | ug/kg | 0.748 | 2.24 |
| 104-51-8 | n-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 103-65-1 | n-Propylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-47-6 | o-Xylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623017** | **Date Received:** | **07/15/2014 08:55** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84132** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 12:49** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 11:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W508.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623017** | **Date Received:** | **07/15/2014 08:55** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84132** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 12:49** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 11:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W508.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:55** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623018** | **Date Received:** | **07/15/2014 08:55** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84133** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 13:17** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 11:16** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W509.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:55** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623018** | **Date Received:** | **07/15/2014 08:55** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84133** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 13:17** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 11:16** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W509.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Quality Control Summary

**Volatile**

**Surrogate Recovery Report**

**SDG Number: 2014-3795**

**Matrix Type: SOLID**

| Sample ID | Client ID | DCED4 %REC | TOL %REC | BFB %REC |
|---|---|---|---|---|
| 1203140185 | LCS for batch 1408351 | 97 | 96 | 98 |
| 1203140186 | LCS for batch 1408351 | 100 | 98 | 101 |
| 1203140180 | MB for batch 1408351 | 102 | 101 | 101 |
| 352623017 | RE57-14-84132 | 105 | 102 | 100 |
| 352623018 | RE57-14-84133 | 105 | 99 | 102 |
| 352623001 | RE57-14-84140 | 106 | 109 | 121 * |
| 352623002 | RE57-14-84151 | 110 | 107 | 126 * |
| 352623003 | RE57-14-84162 | 106 | 101 | 103 |
| 352623004 | RE57-14-84163 | 108 | 106 | 113 |
| 352623005 | RE57-14-84142 | 107 | 105 | 117 |
| 352623007 | RE57-14-84175 | 106 | 104 | 110 |
| 352623008 | RE57-14-84154 | 106 | 102 | 109 |
| 352623010 | RE57-14-84176 | 109 | 101 | 105 |
| 1203145029 | LCS for batch 1408351 | 102 | 104 | 103 |
| 1203145030 | LCS for batch 1408351 | 103 | 103 | 100 |
| 1203145028 | MB for batch 1408351 | 105 | 104 | 105 |
| 352623006 | RE57-14-84164 | 104 | 110 | 109 |
| 352623009 | RE57-14-84165 | 110 | 115 | 125 * |
| 352623011 | RE57-14-84144 | 108 | 107 | 108 |
| 352623012 | RE57-14-84155 | 111 | 119 | 131 * |
| 352623013 | RE57-14-84177 | 114 | 112 | 113 |
| 352623014 | RE57-14-84121 | 110 | 111 | 123 * |
| 1203140181 | RE57-14-84140PS | 103 | 108 | 110 |
| 1203140183 | RE57-14-84140PSD | 102 | 111 | 116 |

DCED4 = 1,2-Dichloroethane-d4 (76%-122%)
TOL = Toluene-d8 (80%-120%)
BFB = Bromofluorobenzene (80%-120%)

* Recovery outside Acceptance Limits
\# Column to be used to flag recovery values
D Sample Diluted

**Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3795**

**Matrix Type: SOLID**

| Sample ID | Client ID | DCED4 %REC | TOL %REC | BFB %REC |
|---|---|---|---|---|
| 1203140182 | RE57-14-84140PS | 102 | 108 | 105 |
| 1203140184 | RE57-14-84140PSD | 105 | 104 | 104 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| DCED4 | = 1,2-Dichloroethane-d4 | (76%-122%) |
| TOL | = Toluene-d8 | (80%-120%) |
| BFB | = Bromofluorobenzene | (80%-120%) |

* Recovery outside Acceptance Limits
\# Column to be used to flag recovery values
D Sample Diluted

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84140PS**
**Lab Sample ID** **1203140181**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **S**
**%Moisture:** **7.9**
**Analysis Date:** **08/05/2014 19:55**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PS | m,p-Xylenes | 100 | 0.00 | HUh | 91.1 | 91 | 62-124 |
| 67-64-1 | PS | Acetone | 250 | 0.00 | HUh | 149 | 60 | 42-147 |
| 74-88-4 | PS | Iodomethane | 250 | 0.00 | HUh | 234 | 94 | 68-121 |
| 75-15-0 | PS | Carbon disulfide | 250 | 0.00 | HUh | 257 | 103 | 64-147 |
| 78-93-3 | PS | 2-Butanone | 250 | 0.00 | HUh | 161 | 64 | 44-145 |
| 108-10-1 | PS | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 250 | 100 | 71-133 |
| 591-78-6 | PS | 2-Hexanone | 250 | 0.00 | HUh | 153 | 61 | 47-147 |
| 75-09-2 | PS | Methylene chloride | 50.0 | 2.55 | HJh | 49.0 | 93 | 68-123 |
| 75-71-8 | PS | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 36.6 | 73 | 46-134 |
| 74-87-3 | PS | Chloromethane | 50.0 | 0.00 | HUh | 40.3 | 81 | 54-139 |
| 75-01-4 | PS | Vinyl chloride | 50.0 | 0.00 | HUh | 48.2 | 96 | 47-141 |
| 74-83-9 | PS | Bromomethane | 50.0 | 0.00 | HUh | 39.3 | 79 | 47-135 |
| 75-00-3 | PS | Chloroethane | 50.0 | 0.00 | HUh | 45.2 | 90 | 52-129 |
| 75-69-4 | PS | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 43.6 | 87 | 61-126 |
| 75-35-4 | PS | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 48.7 | 97 | 67-135 |
| 156-60-5 | PS | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 47.1 | 94 | 67-129 |
| 75-34-3 | PS | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 49.2 | 98 | 70-125 |
| 156-59-2 | PS | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 49.2 | 98 | 70-125 |
| 594-20-7 | PS | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.8 | 98 | 67-129 |
| 74-97-5 | PS | Bromochloromethane | 50.0 | 0.00 | HUh | 51.5 | 103 | 73-123 |
| 67-66-3 | PS | Chloroform | 50.0 | 0.00 | HUh | 48.6 | 97 | 70-123 |
| 71-55-6 | PS | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 48.3 | 97 | 71-128 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84140PS**
**Lab Sample ID** **1203140181**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **S**
**%Moisture:** **7.9**
**Analysis Date:** **08/05/2014 19:55**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PS | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 45.8 | 92 | 68-129 |
| 56-23-5 | PS | Carbon tetrachloride | 50.0 | 0.00 | HUh | 47.9 | 96 | 70-129 |
| 107-06-2 | PS | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 48.1 | 96 | 67-119 |
| 71-43-2 | PS | Benzene | 50.0 | 0.00 | HUh | 47.7 | 95 | 67-124 |
| 79-01-6 | PS | Trichloroethylene | 50.0 | 0.00 | HUh | 47.2 | 94 | 68-130 |
| 78-87-5 | PS | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.5 | 97 | 69-122 |
| 74-95-3 | PS | Dibromomethane | 50.0 | 0.00 | HUh | 49.8 | 100 | 73-120 |
| 75-27-4 | PS | Bromodichloromethane | 50.0 | 0.00 | HUh | 50.1 | 100 | 67-124 |
| 10061-01-5 | PS | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 46.2 | 92 | 67-127 |
| 108-88-3 | PS | Toluene | 50.0 | 0.00 | HUh | 47.7 | 95 | 64-124 |
| 10061-02-6 | PS | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 47.7 | 95 | 68-122 |
| 79-00-5 | PS | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 50.7 | 101 | 73-121 |
| 142-28-9 | PS | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 48.2 | 96 | 69-119 |
| 127-18-4 | PS | Tetrachloroethylene | 50.0 | 0.00 | HUh | 46.5 | 93 | 64-123 |
| 124-48-1 | PS | Dibromochloromethane | 50.0 | 0.00 | HUh | 55.1 | 110 | 66-122 |
| 106-93-4 | PS | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 50.2 | 100 | 73-125 |
| 108-90-7 | PS | Chlorobenzene | 50.0 | 0.00 | HUh | 44.0 | 88 | 68-120 |
| 100-41-4 | PS | Ethylbenzene | 50.0 | 0.00 | HUh | 46.4 | 93 | 63-122 |
| 95-47-6 | PS | o-Xylene | 50.0 | 0.00 | HUh | 46.5 | 93 | 64-122 |
| 100-42-5 | PS | Styrene | 50.0 | 0.00 | HUh | 45.0 | 90 | 70-126 |
| 75-25-2 | PS | Bromoform | 50.0 | 0.00 | HUh | 59.9 | 120 | 54-131 |
| 98-82-8 | PS | Isopropylbenzene | 50.0 | 0.00 | HUh | 51.5 | 103 | 64-132 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84140PS**
**Lab Sample ID** **1203140181**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **S**
**%Moisture:** **7.9**
**Analysis Date:** **08/05/2014 19:55**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 52.7 | 105 | 68-132 |
| 96-18-4 | PS | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 53.4 | 107 | 66-131 |
| 108-86-1 | PS | Bromobenzene | 50.0 | 0.00 | HUh | 46.1 | 92 | 67-124 |
| 103-65-1 | PS | n-Propylbenzene | 50.0 | 0.00 | HUh | 46.1 | 92 | 60-127 |
| 108-67-8 | PS | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 49.0 | 98 | 62-129 |
| 95-49-8 | PS | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 45.3 | 91 | 63-125 |
| 106-43-4 | PS | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 44.4 | 89 | 63-124 |
| 98-06-6 | PS | tert-Butylbenzene | 50.0 | 0.00 | HUh | 50.6 | 101 | 64-131 |
| 95-63-6 | PS | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 45.9 | 92 | 63-126 |
| 135-98-8 | PS | sec-Butylbenzene | 50.0 | 0.00 | HUh | 48.1 | 96 | 59-133 |
| 99-87-6 | PS | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 44.5 | 89 | 58-130 |
| 541-73-1 | PS | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 40.4 | 81 | 62-125 |
| 106-46-7 | PS | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 39.3 | 79 | 62-122 |
| 104-51-8 | PS | n-Butylbenzene | 50.0 | 0.00 | HUh | 42.2 | 84 | 55-133 |
| 96-12-8 | PS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 51.7 | 103 | 54-133 |
| 630-20-6 | PS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 50.5 | 101 | 72-126 |
| 95-50-1 | PS | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 40.3 | 81 | 63-123 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84140PSD**
**Lab Sample ID** **1203140183**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **S**
**%Moisture:** **7.9**
**Analysis Date:** **08/05/2014 20:23**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PSD | m,p-Xylenes | 100 | 0.00 | HUh | 91.5 | 91 | 62-124 | 0 | 0-20 |
| 67-64-1 | PSD | Acetone | 250 | 0.00 | HUh | 134 | 54 | 42-147 | 10 | 0-20 |
| 74-88-4 | PSD | Iodomethane | 250 | 0.00 | HUh | 232 | 93 | 68-121 | 1 | 0-20 |
| 75-15-0 | PSD | Carbon disulfide | 250 | 0.00 | HUh | 260 | 104 | 64-147 | 1 | 0-20 |
| 78-93-3 | PSD | 2-Butanone | 250 | 0.00 | HUh | 148 | 59 | 44-145 | 9 | 0-20 |
| 108-10-1 | PSD | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 238 | 95 | 71-133 | 5 | 0-20 |
| 591-78-6 | PSD | 2-Hexanone | 250 | 0.00 | HUh | 136 | 54 | 47-147 | 12 | 0-20 |
| 75-09-2 | PSD | Methylene chloride | 50.0 | 2.55 | HJh | 49.3 | 93 | 68-123 | 1 | 0-20 |
| 75-71-8 | PSD | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 36.1 | 72 | 46-134 | 1 | 0-20 |
| 74-87-3 | PSD | Chloromethane | 50.0 | 0.00 | HUh | 39.8 | 80 | 54-139 | 1 | 0-20 |
| 75-01-4 | PSD | Vinyl chloride | 50.0 | 0.00 | HUh | 48.1 | 96 | 47-141 | 0 | 0-20 |
| 74-83-9 | PSD | Bromomethane | 50.0 | 0.00 | HUh | 36.7 | 73 | 47-135 | 7 | 0-20 |
| 75-00-3 | PSD | Chloroethane | 50.0 | 0.00 | HUh | 44.3 | 89 | 52-129 | 2 | 0-20 |
| 75-69-4 | PSD | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 44.1 | 88 | 61-126 | 1 | 0-20 |
| 75-35-4 | PSD | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 49.6 | 99 | 67-135 | 2 | 0-20 |
| 156-60-5 | PSD | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 47.4 | 95 | 67-129 | 1 | 0-20 |
| 75-34-3 | PSD | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 50.3 | 101 | 70-125 | 2 | 0-20 |
| 156-59-2 | PSD | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 49.5 | 99 | 70-125 | 1 | 0-20 |
| 594-20-7 | PSD | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 49.4 | 99 | 67-129 | 1 | 0-20 |
| 74-97-5 | PSD | Bromochloromethane | 50.0 | 0.00 | HUh | 51.0 | 102 | 73-123 | 1 | 0-20 |
| 67-66-3 | PSD | Chloroform | 50.0 | 0.00 | HUh | 48.8 | 98 | 70-123 | 0 | 0-20 |
| 71-55-6 | PSD | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 48.8 | 98 | 71-128 | 1 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84140PSD**
**Lab Sample ID** **1203140183**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **S**
**%Moisture:** **7.9**
**Analysis Date:** **08/05/2014 20:23**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PSD | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 46.0 | 92 | 68-129 | 0 | 0-20 |
| 56-23-5 | PSD | Carbon tetrachloride | 50.0 | 0.00 | HUh | 48.1 | 96 | 70-129 | 0 | 0-20 |
| 107-06-2 | PSD | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 47.8 | 96 | 67-119 | 1 | 0-20 |
| 71-43-2 | PSD | Benzene | 50.0 | 0.00 | HUh | 48.4 | 97 | 67-124 | 1 | 0-20 |
| 79-01-6 | PSD | Trichloroethylene | 50.0 | 0.00 | HUh | 46.9 | 94 | 68-130 | 1 | 0-20 |
| 78-87-5 | PSD | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.7 | 97 | 69-122 | 0 | 0-20 |
| 74-95-3 | PSD | Dibromomethane | 50.0 | 0.00 | HUh | 49.7 | 99 | 73-120 | 0 | 0-20 |
| 75-27-4 | PSD | Bromodichloromethane | 50.0 | 0.00 | HUh | 50.0 | 100 | 67-124 | 0 | 0-20 |
| 10061-01-5 | PSD | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 45.5 | 91 | 67-127 | 1 | 0-20 |
| 108-88-3 | PSD | Toluene | 50.0 | 0.00 | HUh | 48.9 | 98 | 64-124 | 3 | 0-20 |
| 10061-02-6 | PSD | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 47.4 | 95 | 68-122 | 1 | 0-20 |
| 79-00-5 | PSD | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 50.4 | 101 | 73-121 | 1 | 0-20 |
| 142-28-9 | PSD | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 49.1 | 98 | 69-119 | 2 | 0-20 |
| 127-18-4 | PSD | Tetrachloroethylene | 50.0 | 0.00 | HUh | 47.8 | 96 | 64-123 | 3 | 0-20 |
| 124-48-1 | PSD | Dibromochloromethane | 50.0 | 0.00 | HUh | 55.7 | 111 | 66-122 | 1 | 0-20 |
| 106-93-4 | PSD | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 50.0 | 100 | 73-125 | 0 | 0-20 |
| 108-90-7 | PSD | Chlorobenzene | 50.0 | 0.00 | HUh | 44.0 | 88 | 68-120 | 0 | 0-20 |
| 100-41-4 | PSD | Ethylbenzene | 50.0 | 0.00 | HUh | 46.8 | 94 | 63-122 | 1 | 0-20 |
| 95-47-6 | PSD | o-Xylene | 50.0 | 0.00 | HUh | 46.7 | 93 | 64-122 | 0 | 0-20 |
| 100-42-5 | PSD | Styrene | 50.0 | 0.00 | HUh | 43.6 | 87 | 70-126 | 3 | 0-20 |
| 75-25-2 | PSD | Bromoform | 50.0 | 0.00 | HUh | 65.3 | 131 | 54-131 | 9 | 0-20 |
| 98-82-8 | PSD | Isopropylbenzene | 50.0 | 0.00 | HUh | 57.4 | 115 | 64-132 | 11 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84140PSD**
**Lab Sample ID** **1203140183**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **S**
**%Moisture:** **7.9**
**Analysis Date:** **08/05/2014 20:23**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PSD | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 57.6 | 115 | 68-132 | 9 | 0-20 |
| 96-18-4 | PSD | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 57.8 | 116 | 66-131 | 8 | 0-20 |
| 108-86-1 | PSD | Bromobenzene | 50.0 | 0.00 | HUh | 49.5 | 99 | 67-124 | 7 | 0-20 |
| 103-65-1 | PSD | n-Propylbenzene | 50.0 | 0.00 | HUh | 50.3 | 101 | 60-127 | 9 | 0-20 |
| 108-67-8 | PSD | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 53.9 | 108 | 62-129 | 9 | 0-20 |
| 95-49-8 | PSD | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 49.9 | 100 | 63-125 | 10 | 0-20 |
| 106-43-4 | PSD | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 47.6 | 95 | 63-124 | 7 | 0-20 |
| 98-06-6 | PSD | tert-Butylbenzene | 50.0 | 0.00 | HUh | 57.1 | 114 | 64-131 | 12 | 0-20 |
| 95-63-6 | PSD | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 49.7 | 99 | 63-126 | 8 | 0-20 |
| 135-98-8 | PSD | sec-Butylbenzene | 50.0 | 0.00 | HUh | 52.9 | 106 | 59-133 | 10 | 0-20 |
| 99-87-6 | PSD | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 47.7 | 95 | 58-130 | 7 | 0-20 |
| 541-73-1 | PSD | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 42.6 | 85 | 62-125 | 5 | 0-20 |
| 106-46-7 | PSD | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 41.1 | 82 | 62-122 | 5 | 0-20 |
| 104-51-8 | PSD | n-Butylbenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 55-133 | 5 | 0-20 |
| 96-12-8 | PSD | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 54.8 | 110 | 54-133 | 6 | 0-20 |
| 630-20-6 | PSD | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 51.3 | 103 | 72-126 | 2 | 0-20 |
| 95-50-1 | PSD | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 42.6 | 85 | 63-123 | 6 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84140PS**
**Lab Sample ID** **1203140182**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **S**
**%Moisture:** **7.9**
**Analysis Date:** **08/05/2014 20:52**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PS | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 206 | 82 | 68-146 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84140PSD**
**Lab Sample ID** **1203140184**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **S**
**%Moisture:** **7.9**
**Analysis Date:** **08/05/2014 21:20**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PSD | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 213 | 85 | 68-146 | 3 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1408351**
**Lab Sample ID** **1203140185**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/01/2014 11:25**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 95.4 | 95 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 263 | 105 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 249 | 99 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 256 | 102 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 243 | 97 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 244 | 98 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 241 | 96 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 36.2 | 72 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 38.1 | 76 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 46.3 | 93 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 41.5 | 83 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 46.6 | 93 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 49.0 | 98 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 49.2 | 98 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 44.3 | 89 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 50.6 | 101 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 49.3 | 99 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 49.3 | 99 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 54.4 | 109 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 51.3 | 103 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 50.2 | 100 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 53.4 | 107 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1408351**
**Lab Sample ID** **1203140185**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/01/2014 11:25**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 50.7 | 101 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 55.4 | 111 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 47.7 | 95 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 49.0 | 98 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 51.5 | 103 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 49.2 | 98 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 49.1 | 98 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 53.1 | 106 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 53.0 | 106 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 47.3 | 95 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 50.9 | 102 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 46.4 | 93 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 45.3 | 91 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 49.4 | 99 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 56.4 | 113 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 48.7 | 97 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 47.4 | 95 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 48.3 | 97 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 48.8 | 98 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 49.4 | 99 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 57.2 | 114 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 49.4 | 99 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1408351**
**Lab Sample ID** **1203140185**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/01/2014 11:25**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 47.6 | 95 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 48.9 | 98 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 47.9 | 96 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 46.9 | 94 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 49.4 | 99 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 46.0 | 92 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 47.2 | 94 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 50.7 | 101 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 47.3 | 95 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 49.1 | 98 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 49.7 | 99 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 47.2 | 94 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 45.9 | 92 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 48.2 | 96 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 52.3 | 105 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 51.2 | 102 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 47.0 | 94 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1408351**
**Lab Sample ID** **1203140186**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/01/2014 11:53**
**Dilution: 1**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 200 | 80 | 76-130 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1408351**
**Lab Sample ID** **1203145029**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 11:57**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 101 | 101 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 255 | 102 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 260 | 104 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 273 | 109 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 248 | 99 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 259 | 103 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 248 | 99 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 38.4 | 77 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 41.8 | 84 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 50.6 | 101 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 41.2 | 82 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 46.1 | 92 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 45.5 | 91 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 50.7 | 101 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 50.5 | 101 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 50.7 | 101 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 51.3 | 103 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 52.3 | 105 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 52.9 | 106 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 53.2 | 106 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 51.0 | 102 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 52.5 | 105 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1408351**
**Lab Sample ID** **1203145029**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 11:57**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 50.3 | 101 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 53.1 | 106 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 50.1 | 100 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 50.6 | 101 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 51.4 | 103 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 51.0 | 102 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 52.7 | 105 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 54.4 | 109 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 55.6 | 111 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 50.5 | 101 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 56.2 | 112 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 50.9 | 102 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 50.3 | 101 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 50.2 | 100 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 59.6 | 119 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 54.2 | 108 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 49.4 | 99 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 50.5 | 101 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 50.8 | 102 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 54.5 | 109 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 63.6 | 127 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 51.8 | 104 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1408351**
**Lab Sample ID** **1203145029**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 11:57**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 51.5 | 103 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 51.1 | 102 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 51.5 | 103 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 48.7 | 97 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 52.0 | 104 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 49.4 | 99 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 50.4 | 101 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 53.1 | 106 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 49.9 | 100 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 51.3 | 103 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 51.0 | 102 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 49.4 | 99 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 48.6 | 97 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 48.9 | 98 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 59.5 | 119 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 54.1 | 108 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 50.2 | 100 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1408351**
**Lab Sample ID** **1203145030**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 12:53**
**Dilution: 1**
**Prep Batch ID:** **1408351**
**Batch ID:** **1408354**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 235 | 94 | 76-130 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1408351** | **Instrument ID:** | **VOA4.I** | **Data File:** | **080114V4\4W507BX.D** |
| **Lab Sample ID:** | **1203140180** | **Prep Date:** | **08/01/2014 08:30** | **Analyzed:** | **08/01/14 12:21** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1408351 | 1203140185 | 080114V4\4W505LX.D | 08/01/14 | 1125 |
| 02 | LCS for batch 1408351 | 1203140186 | 080114V4\4W506SX.D | 08/01/14 | 1153 |
| 03 | RE57-14-84132 | 352623017 | 080114V4\4W508.D | 08/01/14 | 1249 |
| 04 | RE57-14-84133 | 352623018 | 080114V4\4W509.D | 08/01/14 | 1317 |
| 05 | RE57-14-84140 | 352623001 | 080114V4\4W511.D | 08/01/14 | 1425 |
| 06 | RE57-14-84151 | 352623002 | 080114V4\4W512.D | 08/01/14 | 1454 |
| 07 | RE57-14-84162 | 352623003 | 080114V4\4W513.D | 08/01/14 | 1522 |
| 08 | RE57-14-84163 | 352623004 | 080114V4\4W514.D | 08/01/14 | 1550 |
| 09 | RE57-14-84142 | 352623005 | 080114V4\4W515.D | 08/01/14 | 1619 |
| 10 | RE57-14-84175 | 352623007 | 080114V4\4W516.D | 08/01/14 | 1647 |
| 11 | RE57-14-84154 | 352623008 | 080114V4\4W517.D | 08/01/14 | 1715 |
| 12 | RE57-14-84176 | 352623010 | 080114V4\4W518.D | 08/01/14 | 1743 |

## Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1408351** | **Instrument ID:** | **VOA4.I** | **Data File:** | **080514V4\4U208BA.D** |
| **Lab Sample ID:** | **1203145028** | **Prep Date:** | **08/05/2014 08:30** | **Analyzed:** | **08/05/14 13:22** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 14 | LCS for batch 1408351 | 1203145029 | 080514V4\4U205LA.D | 08/05/14 | 1157 |
| 15 | LCS for batch 1408351 | 1203145030 | 080514V4\4U207SA.D | 08/05/14 | 1253 |
| 16 | RE57-14-84164 | 352623006 | 080514V4\4U212.D | 08/05/14 | 1514 |
| 17 | RE57-14-84165 | 352623009 | 080514V4\4U213.D | 08/05/14 | 1542 |
| 18 | RE57-14-84144 | 352623011 | 080514V4\4U214.D | 08/05/14 | 1610 |
| 19 | RE57-14-84155 | 352623012 | 080514V4\4U215.D | 08/05/14 | 1638 |
| 20 | RE57-14-84177 | 352623013 | 080514V4\4U216.D | 08/05/14 | 1706 |
| 21 | RE57-14-84121 | 352623014 | 080514V4\4U217.D | 08/05/14 | 1734 |
| 22 | RE57-14-84140PS | 1203140181 | 080514V4\4U222.D | 08/05/14 | 1955 |
| 23 | RE57-14-84140PSD | 1203140183 | 080514V4\4U223.D | 08/05/14 | 2023 |
| 24 | RE57-14-84140PS | 1203140182 | 080514V4\4U224.D | 08/05/14 | 2052 |
| 25 | RE57-14-84140PSD | 1203140184 | 080514V4\4U225.D | 08/05/14 | 2120 |

# Quality Control Data

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203140180** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 12:21** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W507BX.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203140180** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 12:21** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W507BX.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **1203140181** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84140PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 19:55** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 15:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U222.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 54.8 | ug/kg | 0.362 | 1.09 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 52.5 | ug/kg | 0.362 | 1.09 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 57.2 | ug/kg | 0.362 | 1.09 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 55.1 | ug/kg | 0.362 | 1.09 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 53.4 | ug/kg | 0.362 | 1.09 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 52.8 | ug/kg | 0.362 | 1.09 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 49.7 | ug/kg | 0.362 | 1.09 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 58.0 | ug/kg | 0.362 | 1.09 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 49.9 | ug/kg | 0.362 | 1.09 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 56.2 | ug/kg | 0.543 | 1.09 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 54.6 | ug/kg | 0.362 | 1.09 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 43.8 | ug/kg | 0.362 | 1.09 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 52.3 | ug/kg | 0.362 | 1.09 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 52.6 | ug/kg | 0.362 | 1.09 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 53.3 | ug/kg | 0.362 | 1.09 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 43.9 | ug/kg | 0.362 | 1.09 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 52.3 | ug/kg | 0.362 | 1.09 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 42.7 | ug/kg | 0.362 | 1.09 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 53.0 | ug/kg | 0.362 | 1.09 |
| 78-93-3 | 2-Butanone | Hh | 175 | ug/kg | 1.81 | 5.43 |
| 95-49-8 | 2-Chlorotoluene | Hh | 49.2 | ug/kg | 0.362 | 1.09 |
| 591-78-6 | 2-Hexanone | Hh | 166 | ug/kg | 1.81 | 5.43 |
| 106-43-4 | 4-Chlorotoluene | Hh | 48.2 | ug/kg | 0.362 | 1.09 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 48.4 | ug/kg | 0.362 | 1.09 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 272 | ug/kg | 1.81 | 5.43 |
| 67-64-1 | Acetone | Hh | 162 | ug/kg | 1.81 | 5.43 |
| 71-43-2 | Benzene | Hh | 51.8 | ug/kg | 0.362 | 1.09 |
| 108-86-1 | Bromobenzene | Hh | 50.0 | ug/kg | 0.362 | 1.09 |
| 74-97-5 | Bromochloromethane | Hh | 55.9 | ug/kg | 0.362 | 1.09 |
| 75-27-4 | Bromodichloromethane | Hh | 54.4 | ug/kg | 0.362 | 1.09 |
| 75-25-2 | Bromoform | Hh | 65.1 | ug/kg | 0.362 | 1.09 |
| 74-83-9 | Bromomethane | Hh | 42.6 | ug/kg | 0.362 | 1.09 |
| 75-15-0 | Carbon disulfide | Hh | 279 | ug/kg | 1.81 | 5.43 |
| 56-23-5 | Carbon tetrachloride | Hh | 52.1 | ug/kg | 0.362 | 1.09 |
| 108-90-7 | Chlorobenzene | Hh | 47.8 | ug/kg | 0.362 | 1.09 |
| 75-00-3 | Chloroethane | Hh | 49.1 | ug/kg | 0.362 | 1.09 |
| 67-66-3 | Chloroform | Hh | 52.7 | ug/kg | 0.362 | 1.09 |
| 74-87-3 | Chloromethane | Hh | 43.8 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **1203140181** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84140PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 19:55** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 15:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U222.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 59.8 | ug/kg | 0.362 | 1.09 |
| 74-95-3 | Dibromomethane | Hh | 54.1 | ug/kg | 0.362 | 1.09 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 39.8 | ug/kg | 0.362 | 1.09 |
| 100-41-4 | Ethylbenzene | Hh | 50.4 | ug/kg | 0.362 | 1.09 |
| 74-88-4 | Iodomethane | Hh | 254 | ug/kg | 1.81 | 5.43 |
| 98-82-8 | Isopropylbenzene | Hh | 55.9 | ug/kg | 0.362 | 1.09 |
| 75-09-2 | Methylene chloride | Hh | 53.2 | ug/kg | 1.81 | 5.43 |
| 100-42-5 | Styrene | Hh | 48.9 | ug/kg | 0.362 | 1.09 |
| 127-18-4 | Tetrachloroethylene | Hh | 50.5 | ug/kg | 0.362 | 1.09 |
| 108-88-3 | Toluene | Hh | 51.8 | ug/kg | 0.362 | 1.09 |
| 79-01-6 | Trichloroethylene | Hh | 51.3 | ug/kg | 0.362 | 1.09 |
| 75-69-4 | Trichlorofluoromethane | Hh | 47.4 | ug/kg | 0.362 | 1.09 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 75-01-4 | Vinyl chloride | Hh | 52.3 | ug/kg | 0.362 | 1.09 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 53.4 | ug/kg | 0.362 | 1.09 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 50.1 | ug/kg | 0.362 | 1.09 |
| 179601-23-1 | m,p-Xylenes | Hh | 99.0 | ug/kg | 0.724 | 2.17 |
| 104-51-8 | n-Butylbenzene | Hh | 45.8 | ug/kg | 0.362 | 1.09 |
| 103-65-1 | n-Propylbenzene | Hh | 50.1 | ug/kg | 0.362 | 1.09 |
| 95-47-6 | o-Xylene | Hh | 50.5 | ug/kg | 0.362 | 1.09 |
| 135-98-8 | sec-Butylbenzene | Hh | 52.2 | ug/kg | 0.362 | 1.09 |
| 98-06-6 | tert-Butylbenzene | Hh | 55.0 | ug/kg | 0.362 | 1.09 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 51.2 | ug/kg | 0.362 | 1.09 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 51.9 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **1203140182** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84140PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 20:52** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 15:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U224.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.09 | ug/kg | 0.543 | 1.09 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-93-3 | 2-Butanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 591-78-6 | 2-Hexanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 67-64-1 | Acetone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 71-43-2 | Benzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-86-1 | Bromobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-97-5 | Bromochloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-27-4 | Bromodichloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-25-2 | Bromoform | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-83-9 | Bromomethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-15-0 | Carbon disulfide | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-90-7 | Chlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-00-3 | Chloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 67-66-3 | Chloroform | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-87-3 | Chloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **1203140182** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84140PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 20:52** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 15:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U224.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-95-3 | Dibromomethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 100-41-4 | Ethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-88-4 | Iodomethane | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 98-82-8 | Isopropylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-09-2 | Methylene chloride | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 100-42-5 | Styrene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-88-3 | Toluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-01-6 | Trichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 224 | ug/kg | 1.81 | 5.43 |
| 75-01-4 | Vinyl chloride | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.17 | ug/kg | 0.724 | 2.17 |
| 104-51-8 | n-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 103-65-1 | n-Propylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-47-6 | o-Xylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **1203140183** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84140PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 20:23** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 15:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U223.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 55.8 | ug/kg | 0.362 | 1.09 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 53.0 | ug/kg | 0.362 | 1.09 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 62.5 | ug/kg | 0.362 | 1.09 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 54.8 | ug/kg | 0.362 | 1.09 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 54.6 | ug/kg | 0.362 | 1.09 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 53.8 | ug/kg | 0.362 | 1.09 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 49.9 | ug/kg | 0.362 | 1.09 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 62.8 | ug/kg | 0.362 | 1.09 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 54.0 | ug/kg | 0.362 | 1.09 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 59.5 | ug/kg | 0.543 | 1.09 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 54.3 | ug/kg | 0.362 | 1.09 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 46.2 | ug/kg | 0.362 | 1.09 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 51.9 | ug/kg | 0.362 | 1.09 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 52.8 | ug/kg | 0.362 | 1.09 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 58.5 | ug/kg | 0.362 | 1.09 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 46.2 | ug/kg | 0.362 | 1.09 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 53.3 | ug/kg | 0.362 | 1.09 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 44.6 | ug/kg | 0.362 | 1.09 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 53.6 | ug/kg | 0.362 | 1.09 |
| 78-93-3 | 2-Butanone | Hh | 161 | ug/kg | 1.81 | 5.43 |
| 95-49-8 | 2-Chlorotoluene | Hh | 54.2 | ug/kg | 0.362 | 1.09 |
| 591-78-6 | 2-Hexanone | Hh | 147 | ug/kg | 1.81 | 5.43 |
| 106-43-4 | 4-Chlorotoluene | Hh | 51.7 | ug/kg | 0.362 | 1.09 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 51.8 | ug/kg | 0.362 | 1.09 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 259 | ug/kg | 1.81 | 5.43 |
| 67-64-1 | Acetone | Hh | 146 | ug/kg | 1.81 | 5.43 |
| 71-43-2 | Benzene | Hh | 52.5 | ug/kg | 0.362 | 1.09 |
| 108-86-1 | Bromobenzene | Hh | 53.7 | ug/kg | 0.362 | 1.09 |
| 74-97-5 | Bromochloromethane | Hh | 55.4 | ug/kg | 0.362 | 1.09 |
| 75-27-4 | Bromodichloromethane | Hh | 54.3 | ug/kg | 0.362 | 1.09 |
| 75-25-2 | Bromoform | Hh | 71.0 | ug/kg | 0.362 | 1.09 |
| 74-83-9 | Bromomethane | Hh | 39.8 | ug/kg | 0.362 | 1.09 |
| 75-15-0 | Carbon disulfide | Hh | 282 | ug/kg | 1.81 | 5.43 |
| 56-23-5 | Carbon tetrachloride | Hh | 52.3 | ug/kg | 0.362 | 1.09 |
| 108-90-7 | Chlorobenzene | Hh | 47.8 | ug/kg | 0.362 | 1.09 |
| 75-00-3 | Chloroethane | Hh | 48.1 | ug/kg | 0.362 | 1.09 |
| 67-66-3 | Chloroform | Hh | 53.0 | ug/kg | 0.362 | 1.09 |
| 74-87-3 | Chloromethane | Hh | 43.2 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **1203140183** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84140PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 20:23** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 15:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U223.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 60.5 | ug/kg | 0.362 | 1.09 |
| 74-95-3 | Dibromomethane | Hh | 54.0 | ug/kg | 0.362 | 1.09 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 39.2 | ug/kg | 0.362 | 1.09 |
| 100-41-4 | Ethylbenzene | Hh | 50.8 | ug/kg | 0.362 | 1.09 |
| 74-88-4 | Iodomethane | Hh | 252 | ug/kg | 1.81 | 5.43 |
| 98-82-8 | Isopropylbenzene | Hh | 62.3 | ug/kg | 0.362 | 1.09 |
| 75-09-2 | Methylene chloride | Hh | 53.5 | ug/kg | 1.81 | 5.43 |
| 100-42-5 | Styrene | Hh | 47.4 | ug/kg | 0.362 | 1.09 |
| 127-18-4 | Tetrachloroethylene | Hh | 51.9 | ug/kg | 0.362 | 1.09 |
| 108-88-3 | Toluene | Hh | 53.1 | ug/kg | 0.362 | 1.09 |
| 79-01-6 | Trichloroethylene | Hh | 50.9 | ug/kg | 0.362 | 1.09 |
| 75-69-4 | Trichlorofluoromethane | Hh | 47.9 | ug/kg | 0.362 | 1.09 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 75-01-4 | Vinyl chloride | Hh | 52.3 | ug/kg | 0.362 | 1.09 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 53.7 | ug/kg | 0.362 | 1.09 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 49.5 | ug/kg | 0.362 | 1.09 |
| 179601-23-1 | m,p-Xylenes | Hh | 99.3 | ug/kg | 0.724 | 2.17 |
| 104-51-8 | n-Butylbenzene | Hh | 48.1 | ug/kg | 0.362 | 1.09 |
| 103-65-1 | n-Propylbenzene | Hh | 54.6 | ug/kg | 0.362 | 1.09 |
| 95-47-6 | o-Xylene | Hh | 50.7 | ug/kg | 0.362 | 1.09 |
| 135-98-8 | sec-Butylbenzene | Hh | 57.4 | ug/kg | 0.362 | 1.09 |
| 98-06-6 | tert-Butylbenzene | Hh | 62.1 | ug/kg | 0.362 | 1.09 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 51.5 | ug/kg | 0.362 | 1.09 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 51.5 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **1203140184** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84140PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 21:20** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 15:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U225.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.09 | ug/kg | 0.543 | 1.09 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 78-93-3 | 2-Butanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 591-78-6 | 2-Hexanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 67-64-1 | Acetone | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 71-43-2 | Benzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-86-1 | Bromobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-97-5 | Bromochloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-27-4 | Bromodichloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-25-2 | Bromoform | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-83-9 | Bromomethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-15-0 | Carbon disulfide | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-90-7 | Chlorobenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-00-3 | Chloroethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 67-66-3 | Chloroform | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-87-3 | Chloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **1203140184** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84140PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 21:20** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 15:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U225.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-95-3 | Dibromomethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 100-41-4 | Ethylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 74-88-4 | Iodomethane | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 98-82-8 | Isopropylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-09-2 | Methylene chloride | HUh | 5.43 | ug/kg | 1.81 | 5.43 |
| 100-42-5 | Styrene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 108-88-3 | Toluene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 79-01-6 | Trichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 231 | ug/kg | 1.81 | 5.43 |
| 75-01-4 | Vinyl chloride | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.17 | ug/kg | 0.724 | 2.17 |
| 104-51-8 | n-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 103-65-1 | n-Propylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 95-47-6 | o-Xylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.362 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203140185** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 11:25** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W505LX.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 51.2 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 53.4 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 47.6 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 46.4 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 49.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 49.2 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 50.7 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 48.9 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 47.3 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 52.3 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 48.7 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 47.0 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 47.7 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 49.2 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 47.2 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 45.3 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 45.9 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 54.4 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 243 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 46.0 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 241 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 47.2 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 49.7 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 244 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | | 263 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 49.0 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 47.9 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 51.3 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 53.1 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 57.2 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 41.5 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 256 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 55.4 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 47.4 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 46.6 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 50.2 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 38.1 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203140185** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 11:25** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W505LX.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 56.4 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 49.1 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 36.2 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 48.3 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 249 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 44.3 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 47.3 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 51.5 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 49.0 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 46.3 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 49.3 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 53.0 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 95.4 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 48.2 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 46.9 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 48.8 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 49.1 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 50.7 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 50.6 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 50.9 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203140186** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 11:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W506SX.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203140186** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 11:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W506SX.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 200 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203145028** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 13:22** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U208BA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203145028** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 13:22** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U208BA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203145029** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:57** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U205LA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 54.1 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 52.5 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 51.5 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 50.9 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 51.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 50.7 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 50.3 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 51.1 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 49.9 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 59.5 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 54.2 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 50.2 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 50.1 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 51.0 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 52.0 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 50.3 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 48.6 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 52.9 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 248 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 248 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 50.4 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 51.0 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 259 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | | 255 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 50.6 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 51.5 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 53.2 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 54.4 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 63.6 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 41.2 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 273 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 53.1 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 46.1 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 51.0 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 41.8 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203145029** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:57** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U205LA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 59.6 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 52.7 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 38.4 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 50.5 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 260 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 51.8 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 50.5 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 54.5 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 50.2 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 50.5 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 51.4 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 45.5 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 50.6 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 52.3 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 55.6 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 101 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 48.9 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 48.7 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 50.8 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 51.3 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 53.1 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 50.7 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 56.2 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203145030** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 12:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U207SA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203145030** | | | | |
| **Client Sample:** | **QC for batch 1408351** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408351** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408354** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 12:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V4\4U207SA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 235 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 11-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| VOA GC/MS | SW846 8260B | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1408354 | See Below | | |

**Potentially affected work order(s)(SDG): 352623(2014-3795)**

**Application Issues:**

Sample Analyzed out of Holding

Sample Logged out of Holding

Other

Sample Prepped out of Holding

Failed Recovery for Surrogate or Tracer

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Sample Analyzed out of Holding:<br><br>352623001,002,003,004,005,006,007,008,009, 010,011,012,013,014,017,018, 1203140181MS,1203140182MS, 1203140183MSD and 1203140184MSD.<br><br>2. The following samples were outside the surrogate recovery acceptance limits for Bromofluorobenzene:<br><br>352623001,002,009,012,014<br><br>3. Sample 352623012 was outside the internal standard response recovery acceptance criteria for 1,4-Dichlorobenzene-d4.<br><br>4. The following samples were not stored in the VOA cooler prior to analysis: 352623006, 352623009 , 352623012 and 352623014. | 1. Narrate and report data. The samples were prepped and analyzed within the client required two times the recommended holding time.<br><br>2,3. Narrate and report data. The samples were analyzed twice with similar results. It is believed matrix interference has been demonstrated.<br><br>4. The results are reported. |

**Originator's Name:**

Amy Jamison 11-AUG-14

**Data Validator/Group Leader:**

Erin Haubert 11-AUG-14

# Semi-Volatile Analysis

# Case Narrative

**Semi-Volatile Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3795**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry** |
| Analytical Method: | SW846 3541/8270D |
| Prep Method: | SW846 3541 |
| Analytical Batch Number: | 1405532 |
| Prep Batch Number: | 1405531 |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3541/8270D:

| Sample ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 1203132846 | MB for batch 1405531 |
| 1203132847 | Laboratory Control Sample (LCS) |
| 1203132848 | 353064001(RE57-14-84990) Matrix Spike (MS) |
| 1203132849 | 353064001(RE57-14-84990) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 32.

Raw data reports are processed and reviewed by the analyst using the data analysis software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP).

**Calibration Information**

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Methodologies referenced N-Nitroso-diphenylamine. However, as stated in EPA Methodology, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, showed that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

**Initial Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG) in this batch. A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

**CCV Requirements**
All Calibration Verification Standards (CCV) did not meet the acceptance criteria as outlined in Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. This SDG satisfied the 8270D outlier acceptance criteria. Detected concentrations of these analytes should be considered as estimated.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG in this batch met the acceptance criteria.

**Surrogate Recoveries**
All the surrogate recoveries were within the established acceptance criteria for this SDG in this batch.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Sample 353064001 (RE57-14-84990) was selected for analysis as the matrix spike and matrix spike duplicate.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD, 1203132849 (RE57-14-84990), failed spike recovery for multiple analytes. Please see the QC Summary/Spike Recovery Report for the specific analytes and associated recoveries. The MS and LCS passed recoveries. The data are reported.

**MS/MSD Relative Percent Difference (RPD) Statement**
Multiple RPD values between the MS and MSD, 1203132848 (RE57-14-84990) and 1203132849 (RE57-14-84990), were not within the 0-30% limits. Please see the QC Summary/Spike Recovery Report for the specific analyte pairs and associated RPD values. These RPD failures are attributed to the large difference in the recovery values between analyte pairs in the MS and MSD. The MS and LCS passed recovery for all analytes. The data are reported.

**Internal Standard (ISTD) Acceptance**
Samples 1203132849 (RE57-14-84990), 352623012 (RE57-14-84155) and 352623014 (RE57-14-84121) failed ISTD acceptance criteria. The samples were re-analyzed and confirmed the failure. The re-analysis data are reported. The initial analysis raw data have been placed in the Miscellaneous Section of the data package.

**Technical Information:**

**Holding Time Specifications**
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. All reported compound mass spectra met the detection specifications in the method.

**Sample Dilutions**
The samples in this SDG in this batch did not require dilutions.

**Sample Re-extraction/Re-analysis**
Samples 1203132849 (RE57-14-84990), 352623012 (RE57-14-84155) and 352623014 (RE57-14-84121) were re-analyzed due to internal standard responses outside of the acceptance criteria.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception report 1317727 was generated for the samples in this batch for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Manual integrations, if any, are included with the raw data.

**TIC Comment**
Tentatively identified compounds (TIC) may be requested for samples 1203132846 (MB), 352623001 (RE57-14-84140), 352623002 (RE57-14-84151), 352623003 (RE57-14-84162), 352623004 (RE57-14-84163), 352623005 (RE57-14-84142), 352623006 (RE57-14-84164), 352623007 (RE57-14-84175), 352623008 (RE57-14-84154), 352623009 (RE57-14-84165), 352623010 (RE57-14-84176), 352623011 (RE57-14-84144), 352623012 (RE57-14-84155), 352623013 (RE57-14-84177) and 352623014 (RE57-14-84121) in this delivery group/work order. Please note that non-requested calibrated analytes detected in a client sample may be reported on the Form 1/Certificate of Analysis as TICs. TIC data, if requested, are included on the Sample Data Summary (Form 1) and are also included with the sample raw data.

**Additional Comments**
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to rounding differences in the calculation, the data reported in the Surrogate Recovery Report may differ slightly from the raw data. Due to software issue, the raw data may not correctly display the updated SPC limits. Please see Sample Data Summary Report and Surrogate Recovery Report for the correct surrogate acceptance limits.

**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the reviewer name associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**System Configuration**

The Semi-Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description |
|---|---|---|---|---|
| MSD5.I | Agilent 6890/5973 GC/MS w/ 7683 Autosampler | HP6890/HP5973 | DB-5MS | 25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane) |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3795  GEL Work Order: 352623

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Barbara Bailey  **Name: Barbara Bailey**

**Date: 08 AUG 2014**  **Title: Data Validator**

# Sample Data Summary

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623001** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84140** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 20:19** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2316.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 122-66-7 | Azobenzene | U | 361 | ug/kg | 108 | 361 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 361 | ug/kg | 108 | 361 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 361 | ug/kg | 108 | 361 |
| 120-83-2 | 2,4-Dichlorophenol | U | 361 | ug/kg | 108 | 361 |
| 105-67-9 | 2,4-Dimethylphenol | U | 361 | ug/kg | 108 | 361 |
| 51-28-5 | 2,4-Dinitrophenol | U | 722 | ug/kg | 108 | 722 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 361 | ug/kg | 108 | 361 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 361 | ug/kg | 108 | 361 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 95-57-8 | 2-Chlorophenol | U | 361 | ug/kg | 108 | 361 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 361 | ug/kg | 108 | 361 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 88-75-5 | 2-Nitrophenol | U | 361 | ug/kg | 108 | 361 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 361 | ug/kg | 108 | 361 |
| 101-55-3 | 4-Bromophenylphenylether | U | 361 | ug/kg | 108 | 361 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 361 | ug/kg | 144 | 361 |
| 106-47-8 | 4-Chloroaniline | U | 361 | ug/kg | 108 | 361 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 361 | ug/kg | 108 | 361 |
| 100-02-7 | 4-Nitrophenol | U | 361 | ug/kg | 108 | 361 |
| 83-32-9 | Acenaphthene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 208-96-8 | Acenaphthylene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 62-53-3 | Aniline | U | 361 | ug/kg | 108 | 361 |
| 120-12-7 | Anthracene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 56-55-3 | Benzo(a)anthracene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 50-32-8 | Benzo(a)pyrene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 65-85-0 | Benzoic acid | U | 722 | ug/kg | 181 | 722 |
| 100-51-6 | Benzyl alcohol | U | 361 | ug/kg | 108 | 361 |
| 85-68-7 | Butylbenzylphthalate | U | 361 | ug/kg | 108 | 361 |
| 218-01-9 | Chrysene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 84-74-2 | Di-n-butylphthalate | U | 361 | ug/kg | 108 | 361 |
| 117-84-0 | Di-n-octylphthalate | U | 361 | ug/kg | 108 | 361 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623001** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84140** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 20:19** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2316.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 132-64-9 | Dibenzofuran | U | 361 | ug/kg | 108 | 361 |
| 84-66-2 | Diethylphthalate | U | 361 | ug/kg | 108 | 361 |
| 131-11-3 | Dimethylphthalate | U | 361 | ug/kg | 108 | 361 |
| 122-39-4 | Diphenylamine | U | 361 | ug/kg | 108 | 361 |
| 206-44-0 | Fluoranthene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 86-73-7 | Fluorene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 118-74-1 | Hexachlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 87-68-3 | Hexachlorobutadiene | U | 361 | ug/kg | 108 | 361 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 361 | ug/kg | 108 | 361 |
| 67-72-1 | Hexachloroethane | U | 361 | ug/kg | 108 | 361 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 78-59-1 | Isophorone | U | 361 | ug/kg | 108 | 361 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 361 | ug/kg | 108 | 361 |
| 621-64-7 | N-Nitrosodipropylamine | U | 361 | ug/kg | 108 | 361 |
| 91-20-3 | Naphthalene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 98-95-3 | Nitrobenzene | U | 361 | ug/kg | 108 | 361 |
| 87-86-5 | Pentachlorophenol | U | 361 | ug/kg | 108 | 361 |
| 85-01-8 | Phenanthrene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 108-95-2 | Phenol | U | 361 | ug/kg | 108 | 361 |
| 129-00-0 | Pyrene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 110-86-1 | Pyridine | U | 361 | ug/kg | 108 | 361 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 361 | ug/kg | 108 | 361 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 361 | ug/kg | 108 | 361 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 361 | ug/kg | 108 | 361 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 361 | ug/kg | 108 | 361 |
| 65794-96-9 | m,p-Cresols | U | 361 | ug/kg | 108 | 361 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 361 | ug/kg | 108 | 361 |
| 95-48-7 | o-Cresol | U | 361 | ug/kg | 108 | 361 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 361 | ug/kg | 119 | 361 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 361 | ug/kg | 108 | 361 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 1.925 | 506 | ug/kg | 94 | NJ |
| | unknown | 2.063 | 656 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623001** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **7.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84140** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 20:19** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2316.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.739 | 2940 | ug/kg | | AJ |
| | unknown | 5.125 | 145 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.325 | 368 | ug/kg | 98 | NJ |
| | unknown | 12.539 | 152 | ug/kg | 0 | J |
| | unknown | 17.177 | 535 | ug/kg | 0 | J |
| | unknown | 18.159 | 152 | ug/kg | 0 | J |
| | unknown | 22.749 | 1440 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623002** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84151** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 20:50** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2317.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 122-66-7 | Azobenzene | U | 348 | ug/kg | 105 | 348 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 348 | ug/kg | 105 | 348 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 348 | ug/kg | 105 | 348 |
| 120-83-2 | 2,4-Dichlorophenol | U | 348 | ug/kg | 105 | 348 |
| 105-67-9 | 2,4-Dimethylphenol | U | 348 | ug/kg | 105 | 348 |
| 51-28-5 | 2,4-Dinitrophenol | U | 697 | ug/kg | 105 | 697 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 348 | ug/kg | 105 | 348 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 348 | ug/kg | 105 | 348 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 95-57-8 | 2-Chlorophenol | U | 348 | ug/kg | 105 | 348 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 348 | ug/kg | 105 | 348 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 88-75-5 | 2-Nitrophenol | U | 348 | ug/kg | 105 | 348 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 348 | ug/kg | 105 | 348 |
| 101-55-3 | 4-Bromophenylphenylether | U | 348 | ug/kg | 105 | 348 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 348 | ug/kg | 139 | 348 |
| 106-47-8 | 4-Chloroaniline | U | 348 | ug/kg | 105 | 348 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 348 | ug/kg | 105 | 348 |
| 100-02-7 | 4-Nitrophenol | U | 348 | ug/kg | 105 | 348 |
| 83-32-9 | Acenaphthene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 208-96-8 | Acenaphthylene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 62-53-3 | Aniline | U | 348 | ug/kg | 105 | 348 |
| 120-12-7 | Anthracene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 56-55-3 | Benzo(a)anthracene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 50-32-8 | Benzo(a)pyrene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 65-85-0 | Benzoic acid | U | 697 | ug/kg | 174 | 697 |
| 100-51-6 | Benzyl alcohol | U | 348 | ug/kg | 105 | 348 |
| 85-68-7 | Butylbenzylphthalate | U | 348 | ug/kg | 105 | 348 |
| 218-01-9 | Chrysene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 84-74-2 | Di-n-butylphthalate | U | 348 | ug/kg | 105 | 348 |
| 117-84-0 | Di-n-octylphthalate | U | 348 | ug/kg | 105 | 348 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623002** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84151** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 20:50** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2317.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 132-64-9 | Dibenzofuran | U | 348 | ug/kg | 105 | 348 |
| 84-66-2 | Diethylphthalate | U | 348 | ug/kg | 105 | 348 |
| 131-11-3 | Dimethylphthalate | U | 348 | ug/kg | 105 | 348 |
| 122-39-4 | Diphenylamine | U | 348 | ug/kg | 105 | 348 |
| 206-44-0 | Fluoranthene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 86-73-7 | Fluorene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 118-74-1 | Hexachlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 87-68-3 | Hexachlorobutadiene | U | 348 | ug/kg | 105 | 348 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 348 | ug/kg | 105 | 348 |
| 67-72-1 | Hexachloroethane | U | 348 | ug/kg | 105 | 348 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 78-59-1 | Isophorone | U | 348 | ug/kg | 105 | 348 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 348 | ug/kg | 105 | 348 |
| 621-64-7 | N-Nitrosodipropylamine | U | 348 | ug/kg | 105 | 348 |
| 91-20-3 | Naphthalene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 98-95-3 | Nitrobenzene | U | 348 | ug/kg | 105 | 348 |
| 87-86-5 | Pentachlorophenol | U | 348 | ug/kg | 105 | 348 |
| 85-01-8 | Phenanthrene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 108-95-2 | Phenol | U | 348 | ug/kg | 105 | 348 |
| 129-00-0 | Pyrene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 110-86-1 | Pyridine | U | 348 | ug/kg | 105 | 348 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 348 | ug/kg | 105 | 348 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 348 | ug/kg | 105 | 348 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 348 | ug/kg | 105 | 348 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 348 | ug/kg | 105 | 348 |
| 65794-96-9 | m,p-Cresols | U | 348 | ug/kg | 105 | 348 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 348 | ug/kg | 105 | 348 |
| 95-48-7 | o-Cresol | U | 348 | ug/kg | 105 | 348 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 348 | ug/kg | 115 | 348 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 348 | ug/kg | 105 | 348 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.934 | 435 | ug/kg | 0 | J |
| | unknown | 2.068 | 930 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623002** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84151** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 20:50** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2317.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.715 | 3230 | ug/kg | | AJ |
| | unknown | 5.13 | 334 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.325 | 483 | ug/kg | 99 | NJ |
| | unknown | 12.539 | 300 | ug/kg | 0 | J |
| | unknown | 13.201 | 231 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.301 | 358 | ug/kg | 98 | NJ |
| 002050-77-3 | Decane, 1-iodo- | 13.939 | 353 | ug/kg | 90 | NJ |
| | unknown | 14.301 | 212 | ug/kg | 0 | J |
| | unknown | 14.606 | 193 | ug/kg | 0 | J |
| 000629-62-9 | Pentadecane | 14.982 | 235 | ug/kg | 87 | NJ |
| 000112-85-6 | Docosanoic acid | 15.382 | 563 | ug/kg | 90 | NJ |
| 000112-95-8 | Eicosane | 16.339 | 234 | ug/kg | 97 | NJ |
| | unknown | 16.911 | 485 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:30** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623003** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84162** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 21:22** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2318.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 347 | ug/kg | 104 | 347 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 347 | ug/kg | 104 | 347 |
| 122-66-7 | Azobenzene | U | 347 | ug/kg | 104 | 347 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 347 | ug/kg | 104 | 347 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 347 | ug/kg | 104 | 347 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 347 | ug/kg | 104 | 347 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 347 | ug/kg | 104 | 347 |
| 120-83-2 | 2,4-Dichlorophenol | U | 347 | ug/kg | 104 | 347 |
| 105-67-9 | 2,4-Dimethylphenol | U | 347 | ug/kg | 104 | 347 |
| 51-28-5 | 2,4-Dinitrophenol | U | 695 | ug/kg | 104 | 695 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 347 | ug/kg | 104 | 347 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 347 | ug/kg | 104 | 347 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 95-57-8 | 2-Chlorophenol | U | 347 | ug/kg | 104 | 347 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 347 | ug/kg | 104 | 347 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 88-75-5 | 2-Nitrophenol | U | 347 | ug/kg | 104 | 347 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 347 | ug/kg | 104 | 347 |
| 101-55-3 | 4-Bromophenylphenylether | U | 347 | ug/kg | 104 | 347 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 347 | ug/kg | 139 | 347 |
| 106-47-8 | 4-Chloroaniline | U | 347 | ug/kg | 104 | 347 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 347 | ug/kg | 104 | 347 |
| 100-02-7 | 4-Nitrophenol | U | 347 | ug/kg | 104 | 347 |
| 83-32-9 | Acenaphthene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 208-96-8 | Acenaphthylene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 62-53-3 | Aniline | U | 347 | ug/kg | 104 | 347 |
| 120-12-7 | Anthracene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 56-55-3 | Benzo(a)anthracene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 50-32-8 | Benzo(a)pyrene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 65-85-0 | Benzoic acid | U | 695 | ug/kg | 174 | 695 |
| 100-51-6 | Benzyl alcohol | U | 347 | ug/kg | 104 | 347 |
| 85-68-7 | Butylbenzylphthalate | U | 347 | ug/kg | 104 | 347 |
| 218-01-9 | Chrysene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 84-74-2 | Di-n-butylphthalate | U | 347 | ug/kg | 104 | 347 |
| 117-84-0 | Di-n-octylphthalate | U | 347 | ug/kg | 104 | 347 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:30** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623003** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84162** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 21:22** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2318.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 132-64-9 | Dibenzofuran | U | 347 | ug/kg | 104 | 347 |
| 84-66-2 | Diethylphthalate | U | 347 | ug/kg | 104 | 347 |
| 131-11-3 | Dimethylphthalate | U | 347 | ug/kg | 104 | 347 |
| 122-39-4 | Diphenylamine | U | 347 | ug/kg | 104 | 347 |
| 206-44-0 | Fluoranthene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 86-73-7 | Fluorene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 118-74-1 | Hexachlorobenzene | U | 347 | ug/kg | 104 | 347 |
| 87-68-3 | Hexachlorobutadiene | U | 347 | ug/kg | 104 | 347 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 347 | ug/kg | 104 | 347 |
| 67-72-1 | Hexachloroethane | U | 347 | ug/kg | 104 | 347 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 78-59-1 | Isophorone | U | 347 | ug/kg | 104 | 347 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 347 | ug/kg | 104 | 347 |
| 621-64-7 | N-Nitrosodipropylamine | U | 347 | ug/kg | 104 | 347 |
| 91-20-3 | Naphthalene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 98-95-3 | Nitrobenzene | U | 347 | ug/kg | 104 | 347 |
| 87-86-5 | Pentachlorophenol | U | 347 | ug/kg | 104 | 347 |
| 85-01-8 | Phenanthrene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 108-95-2 | Phenol | U | 347 | ug/kg | 104 | 347 |
| 129-00-0 | Pyrene | U | 34.7 | ug/kg | 10.4 | 34.7 |
| 110-86-1 | Pyridine | U | 347 | ug/kg | 104 | 347 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 347 | ug/kg | 104 | 347 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 347 | ug/kg | 104 | 347 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 347 | ug/kg | 104 | 347 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 347 | ug/kg | 104 | 347 |
| 65794-96-9 | m,p-Cresols | U | 347 | ug/kg | 104 | 347 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 347 | ug/kg | 104 | 347 |
| 95-48-7 | o-Cresol | U | 347 | ug/kg | 104 | 347 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 347 | ug/kg | 115 | 347 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 347 | ug/kg | 104 | 347 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.911 | 192 | ug/kg | 0 | J |
| | unknown | 2.049 | 244 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:30** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623003** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **4.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84162** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 21:22** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2318.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.701 | 1650 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.32 | 191 | ug/kg | 98 | NJ |
| | unknown | 22.749 | 1320 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:50** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623004** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84163** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 21:53** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2319.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 122-66-7 | Azobenzene | U | 344 | ug/kg | 103 | 344 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 344 | ug/kg | 103 | 344 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 344 | ug/kg | 103 | 344 |
| 120-83-2 | 2,4-Dichlorophenol | U | 344 | ug/kg | 103 | 344 |
| 105-67-9 | 2,4-Dimethylphenol | U | 344 | ug/kg | 103 | 344 |
| 51-28-5 | 2,4-Dinitrophenol | U | 689 | ug/kg | 103 | 689 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 344 | ug/kg | 103 | 344 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 344 | ug/kg | 103 | 344 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 95-57-8 | 2-Chlorophenol | U | 344 | ug/kg | 103 | 344 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 344 | ug/kg | 103 | 344 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 88-75-5 | 2-Nitrophenol | U | 344 | ug/kg | 103 | 344 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 344 | ug/kg | 103 | 344 |
| 101-55-3 | 4-Bromophenylphenylether | U | 344 | ug/kg | 103 | 344 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 344 | ug/kg | 138 | 344 |
| 106-47-8 | 4-Chloroaniline | U | 344 | ug/kg | 103 | 344 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 344 | ug/kg | 103 | 344 |
| 100-02-7 | 4-Nitrophenol | U | 344 | ug/kg | 103 | 344 |
| 83-32-9 | Acenaphthene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 208-96-8 | Acenaphthylene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 62-53-3 | Aniline | U | 344 | ug/kg | 103 | 344 |
| 120-12-7 | Anthracene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 56-55-3 | Benzo(a)anthracene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 50-32-8 | Benzo(a)pyrene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 65-85-0 | Benzoic acid | U | 689 | ug/kg | 172 | 689 |
| 100-51-6 | Benzyl alcohol | U | 344 | ug/kg | 103 | 344 |
| 85-68-7 | Butylbenzylphthalate | U | 344 | ug/kg | 103 | 344 |
| 218-01-9 | Chrysene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 84-74-2 | Di-n-butylphthalate | U | 344 | ug/kg | 103 | 344 |
| 117-84-0 | Di-n-octylphthalate | U | 344 | ug/kg | 103 | 344 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:50** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623004** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84163** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 21:53** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2319.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 132-64-9 | Dibenzofuran | U | 344 | ug/kg | 103 | 344 |
| 84-66-2 | Diethylphthalate | U | 344 | ug/kg | 103 | 344 |
| 131-11-3 | Dimethylphthalate | U | 344 | ug/kg | 103 | 344 |
| 122-39-4 | Diphenylamine | U | 344 | ug/kg | 103 | 344 |
| 206-44-0 | Fluoranthene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 86-73-7 | Fluorene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 118-74-1 | Hexachlorobenzene | U | 344 | ug/kg | 103 | 344 |
| 87-68-3 | Hexachlorobutadiene | U | 344 | ug/kg | 103 | 344 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 344 | ug/kg | 103 | 344 |
| 67-72-1 | Hexachloroethane | U | 344 | ug/kg | 103 | 344 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 78-59-1 | Isophorone | U | 344 | ug/kg | 103 | 344 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 344 | ug/kg | 103 | 344 |
| 621-64-7 | N-Nitrosodipropylamine | U | 344 | ug/kg | 103 | 344 |
| 91-20-3 | Naphthalene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 98-95-3 | Nitrobenzene | U | 344 | ug/kg | 103 | 344 |
| 87-86-5 | Pentachlorophenol | U | 344 | ug/kg | 103 | 344 |
| 85-01-8 | Phenanthrene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 108-95-2 | Phenol | U | 344 | ug/kg | 103 | 344 |
| 129-00-0 | Pyrene | U | 34.4 | ug/kg | 10.3 | 34.4 |
| 110-86-1 | Pyridine | U | 344 | ug/kg | 103 | 344 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 344 | ug/kg | 103 | 344 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 344 | ug/kg | 103 | 344 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 344 | ug/kg | 103 | 344 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 344 | ug/kg | 103 | 344 |
| 65794-96-9 | m,p-Cresols | U | 344 | ug/kg | 103 | 344 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 344 | ug/kg | 103 | 344 |
| 95-48-7 | o-Cresol | U | 344 | ug/kg | 103 | 344 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 344 | ug/kg | 114 | 344 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 344 | ug/kg | 103 | 344 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 1.911 | 220 | ug/kg | 94 | NJ |
| | unknown | 2.049 | 610 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:50** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623004** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84163** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 21:53** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2319.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.706 | 2520 | ug/kg | | AJ |
| 005131-66-8 | 2-Propanol, 1-butoxy- | 4.806 | 359 | ug/kg | 90 | NJ |
| | unknown | 12.278 | 151 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.325 | 561 | ug/kg | 98 | NJ |
| | unknown | 12.539 | 210 | ug/kg | 0 | J |
| 000060-33-3 | 9,12-Octadecadienoic acid (Z,Z)- | 13.182 | 264 | ug/kg | 93 | NJ |
| 017351-34-7 | 14-Pentadecenoic acid | 13.206 | 522 | ug/kg | 89 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.301 | 392 | ug/kg | 94 | NJ |
| 000638-36-8 | Hexadecane, 2,6,10,14-tetramethyl- | 13.935 | 200 | ug/kg | 91 | NJ |
| | unknown | 14.239 | 210 | ug/kg | 0 | J |
| | unknown | 14.982 | 162 | ug/kg | 0 | J |
| 000112-85-6 | Docosanoic acid | 15.382 | 405 | ug/kg | 91 | NJ |
| 000112-95-8 | Eicosane | 16.339 | 304 | ug/kg | 93 | NJ |
| | unknown | 18.154 | 151 | ug/kg | 0 | J |
| | unknown | 19.806 | 232 | ug/kg | 0 | J |
| | unknown | 20.54 | 1600 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623005** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84142** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 22:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2320.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 122-66-7 | Azobenzene | U | 361 | ug/kg | 108 | 361 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 361 | ug/kg | 108 | 361 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 361 | ug/kg | 108 | 361 |
| 120-83-2 | 2,4-Dichlorophenol | U | 361 | ug/kg | 108 | 361 |
| 105-67-9 | 2,4-Dimethylphenol | U | 361 | ug/kg | 108 | 361 |
| 51-28-5 | 2,4-Dinitrophenol | U | 722 | ug/kg | 108 | 722 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 361 | ug/kg | 108 | 361 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 361 | ug/kg | 108 | 361 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 95-57-8 | 2-Chlorophenol | U | 361 | ug/kg | 108 | 361 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 361 | ug/kg | 108 | 361 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 88-75-5 | 2-Nitrophenol | U | 361 | ug/kg | 108 | 361 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 361 | ug/kg | 108 | 361 |
| 101-55-3 | 4-Bromophenylphenylether | U | 361 | ug/kg | 108 | 361 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 361 | ug/kg | 144 | 361 |
| 106-47-8 | 4-Chloroaniline | U | 361 | ug/kg | 108 | 361 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 361 | ug/kg | 108 | 361 |
| 100-02-7 | 4-Nitrophenol | U | 361 | ug/kg | 108 | 361 |
| 83-32-9 | Acenaphthene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 208-96-8 | Acenaphthylene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 62-53-3 | Aniline | U | 361 | ug/kg | 108 | 361 |
| 120-12-7 | Anthracene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 56-55-3 | Benzo(a)anthracene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 50-32-8 | Benzo(a)pyrene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 65-85-0 | Benzoic acid | U | 722 | ug/kg | 181 | 722 |
| 100-51-6 | Benzyl alcohol | U | 361 | ug/kg | 108 | 361 |
| 85-68-7 | Butylbenzylphthalate | U | 361 | ug/kg | 108 | 361 |
| 218-01-9 | Chrysene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 84-74-2 | Di-n-butylphthalate | U | 361 | ug/kg | 108 | 361 |
| 117-84-0 | Di-n-octylphthalate | U | 361 | ug/kg | 108 | 361 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623005** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84142** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 22:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2320.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 132-64-9 | Dibenzofuran | U | 361 | ug/kg | 108 | 361 |
| 84-66-2 | Diethylphthalate | U | 361 | ug/kg | 108 | 361 |
| 131-11-3 | Dimethylphthalate | U | 361 | ug/kg | 108 | 361 |
| 122-39-4 | Diphenylamine | U | 361 | ug/kg | 108 | 361 |
| 206-44-0 | Fluoranthene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 86-73-7 | Fluorene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 118-74-1 | Hexachlorobenzene | U | 361 | ug/kg | 108 | 361 |
| 87-68-3 | Hexachlorobutadiene | U | 361 | ug/kg | 108 | 361 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 361 | ug/kg | 108 | 361 |
| 67-72-1 | Hexachloroethane | U | 361 | ug/kg | 108 | 361 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 78-59-1 | Isophorone | U | 361 | ug/kg | 108 | 361 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 361 | ug/kg | 108 | 361 |
| 621-64-7 | N-Nitrosodipropylamine | U | 361 | ug/kg | 108 | 361 |
| 91-20-3 | Naphthalene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 98-95-3 | Nitrobenzene | U | 361 | ug/kg | 108 | 361 |
| 87-86-5 | Pentachlorophenol | U | 361 | ug/kg | 108 | 361 |
| 85-01-8 | Phenanthrene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 108-95-2 | Phenol | U | 361 | ug/kg | 108 | 361 |
| 129-00-0 | Pyrene | U | 36.1 | ug/kg | 10.8 | 36.1 |
| 110-86-1 | Pyridine | U | 361 | ug/kg | 108 | 361 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 361 | ug/kg | 108 | 361 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 361 | ug/kg | 108 | 361 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 361 | ug/kg | 108 | 361 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 361 | ug/kg | 108 | 361 |
| 65794-96-9 | m,p-Cresols | U | 361 | ug/kg | 108 | 361 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 361 | ug/kg | 108 | 361 |
| 95-48-7 | o-Cresol | U | 361 | ug/kg | 108 | 361 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 361 | ug/kg | 119 | 361 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 361 | ug/kg | 108 | 361 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 1.934 | 306 | ug/kg | 91 | NJ |
| | unknown | 2.073 | 475 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 08:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623005** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84142** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 22:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2320.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.706 | 2700 | ug/kg | | AJ |
| | unknown | 5.992 | 202 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.32 | 297 | ug/kg | 98 | NJ |
| | unknown | 12.349 | 411 | ug/kg | 0 | J |
| 001120-21-4 | Undecane | 12.539 | 461 | ug/kg | 89 | NJ |
| | unknown | 13.025 | 271 | ug/kg | 0 | J |
| | unknown | 13.201 | 235 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.297 | 690 | ug/kg | 91 | NJ |
| 000483-65-8 | Phenanthrene, 1-methyl-7-(1-methyl | 13.792 | 165 | ug/kg | 95 | NJ |
| | unknown | 13.935 | 759 | ug/kg | 0 | J |
| | unknown | 14.306 | 181 | ug/kg | 0 | J |
| 000112-95-8 | Eicosane | 14.43 | 202 | ug/kg | 94 | NJ |
| 1000155-85-0 | Bicyclo[10.8.0]eicosane, (E)- | 14.611 | 154 | ug/kg | 90 | NJ |
| | unknown | 14.701 | 363 | ug/kg | 0 | J |
| 001740-19-8 | 1-Phenanthrenecarboxylic acid, 1,2 | 14.858 | 535 | ug/kg | 98 | NJ |
| 000629-59-4 | Tetradecane | 14.982 | 367 | ug/kg | 93 | NJ |
| | unknown | 15.382 | 540 | ug/kg | 0 | J |
| 053057-53-7 | 1,21-Docosadiene | 15.873 | 288 | ug/kg | 89 | NJ |
| 055045-09-5 | Tridecane, 7-propyl- | 16.339 | 540 | ug/kg | 87 | NJ |
| 014811-95-1 | 1,19-Eicosadiene | 17.563 | 258 | ug/kg | 93 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:45** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623006** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84164** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 22:55** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2321.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 122-66-7 | Azobenzene | U | 370 | ug/kg | 111 | 370 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 370 | ug/kg | 111 | 370 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 370 | ug/kg | 111 | 370 |
| 120-83-2 | 2,4-Dichlorophenol | U | 370 | ug/kg | 111 | 370 |
| 105-67-9 | 2,4-Dimethylphenol | U | 370 | ug/kg | 111 | 370 |
| 51-28-5 | 2,4-Dinitrophenol | U | 741 | ug/kg | 111 | 741 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 370 | ug/kg | 111 | 370 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 370 | ug/kg | 111 | 370 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 95-57-8 | 2-Chlorophenol | U | 370 | ug/kg | 111 | 370 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 370 | ug/kg | 111 | 370 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 88-75-5 | 2-Nitrophenol | U | 370 | ug/kg | 111 | 370 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 370 | ug/kg | 111 | 370 |
| 101-55-3 | 4-Bromophenylphenylether | U | 370 | ug/kg | 111 | 370 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 370 | ug/kg | 148 | 370 |
| 106-47-8 | 4-Chloroaniline | U | 370 | ug/kg | 111 | 370 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 370 | ug/kg | 111 | 370 |
| 100-02-7 | 4-Nitrophenol | U | 370 | ug/kg | 111 | 370 |
| 83-32-9 | Acenaphthene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 208-96-8 | Acenaphthylene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 62-53-3 | Aniline | U | 370 | ug/kg | 111 | 370 |
| 120-12-7 | Anthracene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 56-55-3 | Benzo(a)anthracene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 50-32-8 | Benzo(a)pyrene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 65-85-0 | Benzoic acid | U | 741 | ug/kg | 185 | 741 |
| 100-51-6 | Benzyl alcohol | U | 370 | ug/kg | 111 | 370 |
| 85-68-7 | Butylbenzylphthalate | U | 370 | ug/kg | 111 | 370 |
| 218-01-9 | Chrysene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 84-74-2 | Di-n-butylphthalate | U | 370 | ug/kg | 111 | 370 |
| 117-84-0 | Di-n-octylphthalate | U | 370 | ug/kg | 111 | 370 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:45** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623006** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84164** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 22:55** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2321.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 132-64-9 | Dibenzofuran | U | 370 | ug/kg | 111 | 370 |
| 84-66-2 | Diethylphthalate | U | 370 | ug/kg | 111 | 370 |
| 131-11-3 | Dimethylphthalate | U | 370 | ug/kg | 111 | 370 |
| 122-39-4 | Diphenylamine | U | 370 | ug/kg | 111 | 370 |
| 206-44-0 | Fluoranthene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 86-73-7 | Fluorene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 118-74-1 | Hexachlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 87-68-3 | Hexachlorobutadiene | U | 370 | ug/kg | 111 | 370 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 370 | ug/kg | 111 | 370 |
| 67-72-1 | Hexachloroethane | U | 370 | ug/kg | 111 | 370 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 78-59-1 | Isophorone | U | 370 | ug/kg | 111 | 370 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 370 | ug/kg | 111 | 370 |
| 621-64-7 | N-Nitrosodipropylamine | U | 370 | ug/kg | 111 | 370 |
| 91-20-3 | Naphthalene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 98-95-3 | Nitrobenzene | U | 370 | ug/kg | 111 | 370 |
| 87-86-5 | Pentachlorophenol | U | 370 | ug/kg | 111 | 370 |
| 85-01-8 | Phenanthrene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 108-95-2 | Phenol | U | 370 | ug/kg | 111 | 370 |
| 129-00-0 | Pyrene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 110-86-1 | Pyridine | U | 370 | ug/kg | 111 | 370 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 370 | ug/kg | 111 | 370 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 370 | ug/kg | 111 | 370 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 370 | ug/kg | 111 | 370 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 370 | ug/kg | 111 | 370 |
| 65794-96-9 | m,p-Cresols | U | 370 | ug/kg | 111 | 370 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 370 | ug/kg | 111 | 370 |
| 95-48-7 | o-Cresol | U | 370 | ug/kg | 111 | 370 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 370 | ug/kg | 122 | 370 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 370 | ug/kg | 111 | 370 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 1.906 | 197 | ug/kg | 90 | NJ |
| | unknown | 2.044 | 338 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:45** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623006** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84164** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 22:55** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2321.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.701 | 2140 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.32 | 161 | ug/kg | 95 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.297 | 169 | ug/kg | 96 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:15** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623007** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84175** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 23:27** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.09 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2322.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 122-66-7 | Azobenzene | U | 370 | ug/kg | 111 | 370 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 370 | ug/kg | 111 | 370 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 370 | ug/kg | 111 | 370 |
| 120-83-2 | 2,4-Dichlorophenol | U | 370 | ug/kg | 111 | 370 |
| 105-67-9 | 2,4-Dimethylphenol | U | 370 | ug/kg | 111 | 370 |
| 51-28-5 | 2,4-Dinitrophenol | U | 740 | ug/kg | 111 | 740 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 370 | ug/kg | 111 | 370 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 370 | ug/kg | 111 | 370 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 95-57-8 | 2-Chlorophenol | U | 370 | ug/kg | 111 | 370 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 370 | ug/kg | 111 | 370 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 88-75-5 | 2-Nitrophenol | U | 370 | ug/kg | 111 | 370 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 370 | ug/kg | 111 | 370 |
| 101-55-3 | 4-Bromophenylphenylether | U | 370 | ug/kg | 111 | 370 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 370 | ug/kg | 148 | 370 |
| 106-47-8 | 4-Chloroaniline | U | 370 | ug/kg | 111 | 370 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 370 | ug/kg | 111 | 370 |
| 100-02-7 | 4-Nitrophenol | U | 370 | ug/kg | 111 | 370 |
| 83-32-9 | Acenaphthene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 208-96-8 | Acenaphthylene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 62-53-3 | Aniline | U | 370 | ug/kg | 111 | 370 |
| 120-12-7 | Anthracene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 56-55-3 | Benzo(a)anthracene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 50-32-8 | Benzo(a)pyrene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 65-85-0 | Benzoic acid | U | 740 | ug/kg | 185 | 740 |
| 100-51-6 | Benzyl alcohol | U | 370 | ug/kg | 111 | 370 |
| 85-68-7 | Butylbenzylphthalate | U | 370 | ug/kg | 111 | 370 |
| 218-01-9 | Chrysene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 84-74-2 | Di-n-butylphthalate | U | 370 | ug/kg | 111 | 370 |
| 117-84-0 | Di-n-octylphthalate | U | 370 | ug/kg | 111 | 370 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:15** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623007** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84175** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 23:27** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.09 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2322.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 132-64-9 | Dibenzofuran | U | 370 | ug/kg | 111 | 370 |
| 84-66-2 | Diethylphthalate | U | 370 | ug/kg | 111 | 370 |
| 131-11-3 | Dimethylphthalate | U | 370 | ug/kg | 111 | 370 |
| 122-39-4 | Diphenylamine | U | 370 | ug/kg | 111 | 370 |
| 206-44-0 | Fluoranthene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 86-73-7 | Fluorene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 118-74-1 | Hexachlorobenzene | U | 370 | ug/kg | 111 | 370 |
| 87-68-3 | Hexachlorobutadiene | U | 370 | ug/kg | 111 | 370 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 370 | ug/kg | 111 | 370 |
| 67-72-1 | Hexachloroethane | U | 370 | ug/kg | 111 | 370 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 78-59-1 | Isophorone | U | 370 | ug/kg | 111 | 370 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 370 | ug/kg | 111 | 370 |
| 621-64-7 | N-Nitrosodipropylamine | U | 370 | ug/kg | 111 | 370 |
| 91-20-3 | Naphthalene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 98-95-3 | Nitrobenzene | U | 370 | ug/kg | 111 | 370 |
| 87-86-5 | Pentachlorophenol | U | 370 | ug/kg | 111 | 370 |
| 85-01-8 | Phenanthrene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 108-95-2 | Phenol | U | 370 | ug/kg | 111 | 370 |
| 129-00-0 | Pyrene | U | 37.0 | ug/kg | 11.1 | 37.0 |
| 110-86-1 | Pyridine | U | 370 | ug/kg | 111 | 370 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 370 | ug/kg | 111 | 370 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 370 | ug/kg | 111 | 370 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 370 | ug/kg | 111 | 370 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 370 | ug/kg | 111 | 370 |
| 65794-96-9 | m,p-Cresols | U | 370 | ug/kg | 111 | 370 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 370 | ug/kg | 111 | 370 |
| 95-48-7 | o-Cresol | U | 370 | ug/kg | 111 | 370 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 370 | ug/kg | 122 | 370 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 370 | ug/kg | 111 | 370 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.934 | 329 | ug/kg | 0 | J |
| | unknown | 2.072 | 278 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:15** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623007** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84175** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 23:27** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.09 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2322.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.711 | 2660 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.32 | 270 | ug/kg | 96 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.296 | 210 | ug/kg | 97 | NJ |
| 000112-95-8 | Eicosane | 14.977 | 165 | ug/kg | 96 | NJ |
| 000646-31-1 | Tetracosane | 16.335 | 242 | ug/kg | 93 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:55** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623008** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **12.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84154** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 23:58** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2323.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 382 | ug/kg | 114 | 382 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 382 | ug/kg | 114 | 382 |
| 122-66-7 | Azobenzene | U | 382 | ug/kg | 114 | 382 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 382 | ug/kg | 114 | 382 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 382 | ug/kg | 114 | 382 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 382 | ug/kg | 114 | 382 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 382 | ug/kg | 114 | 382 |
| 120-83-2 | 2,4-Dichlorophenol | U | 382 | ug/kg | 114 | 382 |
| 105-67-9 | 2,4-Dimethylphenol | U | 382 | ug/kg | 114 | 382 |
| 51-28-5 | 2,4-Dinitrophenol | U | 763 | ug/kg | 114 | 763 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 382 | ug/kg | 114 | 382 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 382 | ug/kg | 114 | 382 |
| 91-58-7 | 2-Chloronaphthalene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 95-57-8 | 2-Chlorophenol | U | 382 | ug/kg | 114 | 382 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 382 | ug/kg | 114 | 382 |
| 91-57-6 | 2-Methylnaphthalene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 88-75-5 | 2-Nitrophenol | U | 382 | ug/kg | 114 | 382 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 382 | ug/kg | 114 | 382 |
| 101-55-3 | 4-Bromophenylphenylether | U | 382 | ug/kg | 114 | 382 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 382 | ug/kg | 153 | 382 |
| 106-47-8 | 4-Chloroaniline | U | 382 | ug/kg | 114 | 382 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 382 | ug/kg | 114 | 382 |
| 100-02-7 | 4-Nitrophenol | U | 382 | ug/kg | 114 | 382 |
| 83-32-9 | Acenaphthene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 208-96-8 | Acenaphthylene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 62-53-3 | Aniline | U | 382 | ug/kg | 114 | 382 |
| 120-12-7 | Anthracene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 56-55-3 | Benzo(a)anthracene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 50-32-8 | Benzo(a)pyrene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 205-99-2 | Benzo(b)fluoranthene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 191-24-2 | Benzo(ghi)perylene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 207-08-9 | Benzo(k)fluoranthene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 65-85-0 | Benzoic acid | U | 763 | ug/kg | 191 | 763 |
| 100-51-6 | Benzyl alcohol | U | 382 | ug/kg | 114 | 382 |
| 85-68-7 | Butylbenzylphthalate | U | 382 | ug/kg | 114 | 382 |
| 218-01-9 | Chrysene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 84-74-2 | Di-n-butylphthalate | U | 382 | ug/kg | 114 | 382 |
| 117-84-0 | Di-n-octylphthalate | U | 382 | ug/kg | 114 | 382 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:55** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623008** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **12.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84154** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 23:58** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2323.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 132-64-9 | Dibenzofuran | U | 382 | ug/kg | 114 | 382 |
| 84-66-2 | Diethylphthalate | U | 382 | ug/kg | 114 | 382 |
| 131-11-3 | Dimethylphthalate | U | 382 | ug/kg | 114 | 382 |
| 122-39-4 | Diphenylamine | U | 382 | ug/kg | 114 | 382 |
| 206-44-0 | Fluoranthene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 86-73-7 | Fluorene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 118-74-1 | Hexachlorobenzene | U | 382 | ug/kg | 114 | 382 |
| 87-68-3 | Hexachlorobutadiene | U | 382 | ug/kg | 114 | 382 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 382 | ug/kg | 114 | 382 |
| 67-72-1 | Hexachloroethane | U | 382 | ug/kg | 114 | 382 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 78-59-1 | Isophorone | U | 382 | ug/kg | 114 | 382 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 382 | ug/kg | 114 | 382 |
| 621-64-7 | N-Nitrosodipropylamine | U | 382 | ug/kg | 114 | 382 |
| 91-20-3 | Naphthalene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 98-95-3 | Nitrobenzene | U | 382 | ug/kg | 114 | 382 |
| 87-86-5 | Pentachlorophenol | U | 382 | ug/kg | 114 | 382 |
| 85-01-8 | Phenanthrene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 108-95-2 | Phenol | U | 382 | ug/kg | 114 | 382 |
| 129-00-0 | Pyrene | U | 38.2 | ug/kg | 11.4 | 38.2 |
| 110-86-1 | Pyridine | U | 382 | ug/kg | 114 | 382 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 382 | ug/kg | 114 | 382 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 382 | ug/kg | 114 | 382 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 382 | ug/kg | 114 | 382 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 382 | ug/kg | 114 | 382 |
| 65794-96-9 | m,p-Cresols | U | 382 | ug/kg | 114 | 382 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 382 | ug/kg | 114 | 382 |
| 95-48-7 | o-Cresol | U | 382 | ug/kg | 114 | 382 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 382 | ug/kg | 126 | 382 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 382 | ug/kg | 114 | 382 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 1.93 | 278 | ug/kg | 90 | NJ |
| | unknown | 2.068 | 285 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:55** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623008** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **12.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84154** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 23:58** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.08 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2323.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.706 | 1130 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.33 | 706 | ug/kg | 99 | NJ |
| | unknown | 13.03 | 154 | ug/kg | 0 | J |
| | unknown | 13.201 | 268 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.301 | 296 | ug/kg | 99 | NJ |
| | unknown | 13.935 | 395 | ug/kg | 0 | J |
| 000506-30-9 | Eicosanoic acid | 14.235 | 197 | ug/kg | 99 | NJ |
| 000629-94-7 | Heneicosane | 14.982 | 413 | ug/kg | 94 | NJ |
| 000112-85-6 | Docosanoic acid | 15.382 | 203 | ug/kg | 95 | NJ |
| | unknown | 15.873 | 208 | ug/kg | 0 | J |
| 014167-59-0 | Tetratriacontane | 16.34 | 554 | ug/kg | 87 | NJ |
| 000557-59-5 | Tetracosanoic acid | 16.901 | 1050 | ug/kg | 86 | NJ |
| 014811-95-1 | 1,19-Eicosadiene | 17.568 | 1420 | ug/kg | 99 | NJ |
| 000112-95-8 | Eicosane | 18.154 | 379 | ug/kg | 90 | NJ |
| 000112-54-9 | Dodecanal | 19.806 | 434 | ug/kg | 86 | NJ |
| 000646-31-1 | Tetracosane | 20.54 | 1040 | ug/kg | 93 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623009** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84165** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 00:29** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.14 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2324.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 365 | ug/kg | 109 | 365 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 365 | ug/kg | 109 | 365 |
| 122-66-7 | Azobenzene | U | 365 | ug/kg | 109 | 365 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 365 | ug/kg | 109 | 365 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 365 | ug/kg | 109 | 365 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 365 | ug/kg | 109 | 365 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 365 | ug/kg | 109 | 365 |
| 120-83-2 | 2,4-Dichlorophenol | U | 365 | ug/kg | 109 | 365 |
| 105-67-9 | 2,4-Dimethylphenol | U | 365 | ug/kg | 109 | 365 |
| 51-28-5 | 2,4-Dinitrophenol | U | 729 | ug/kg | 109 | 729 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 365 | ug/kg | 109 | 365 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 365 | ug/kg | 109 | 365 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 95-57-8 | 2-Chlorophenol | U | 365 | ug/kg | 109 | 365 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 365 | ug/kg | 109 | 365 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 88-75-5 | 2-Nitrophenol | U | 365 | ug/kg | 109 | 365 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 365 | ug/kg | 109 | 365 |
| 101-55-3 | 4-Bromophenylphenylether | U | 365 | ug/kg | 109 | 365 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 365 | ug/kg | 146 | 365 |
| 106-47-8 | 4-Chloroaniline | U | 365 | ug/kg | 109 | 365 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 365 | ug/kg | 109 | 365 |
| 100-02-7 | 4-Nitrophenol | U | 365 | ug/kg | 109 | 365 |
| 83-32-9 | Acenaphthene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 208-96-8 | Acenaphthylene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 62-53-3 | Aniline | U | 365 | ug/kg | 109 | 365 |
| 120-12-7 | Anthracene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 56-55-3 | Benzo(a)anthracene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 50-32-8 | Benzo(a)pyrene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 65-85-0 | Benzoic acid | U | 729 | ug/kg | 182 | 729 |
| 100-51-6 | Benzyl alcohol | U | 365 | ug/kg | 109 | 365 |
| 85-68-7 | Butylbenzylphthalate | U | 365 | ug/kg | 109 | 365 |
| 218-01-9 | Chrysene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 84-74-2 | Di-n-butylphthalate | U | 365 | ug/kg | 109 | 365 |
| 117-84-0 | Di-n-octylphthalate | U | 365 | ug/kg | 109 | 365 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623009** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84165** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 00:29** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.14 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2324.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 132-64-9 | Dibenzofuran | U | 365 | ug/kg | 109 | 365 |
| 84-66-2 | Diethylphthalate | U | 365 | ug/kg | 109 | 365 |
| 131-11-3 | Dimethylphthalate | U | 365 | ug/kg | 109 | 365 |
| 122-39-4 | Diphenylamine | U | 365 | ug/kg | 109 | 365 |
| 206-44-0 | Fluoranthene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 86-73-7 | Fluorene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 118-74-1 | Hexachlorobenzene | U | 365 | ug/kg | 109 | 365 |
| 87-68-3 | Hexachlorobutadiene | U | 365 | ug/kg | 109 | 365 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 365 | ug/kg | 109 | 365 |
| 67-72-1 | Hexachloroethane | U | 365 | ug/kg | 109 | 365 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 78-59-1 | Isophorone | U | 365 | ug/kg | 109 | 365 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 365 | ug/kg | 109 | 365 |
| 621-64-7 | N-Nitrosodipropylamine | U | 365 | ug/kg | 109 | 365 |
| 91-20-3 | Naphthalene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 98-95-3 | Nitrobenzene | U | 365 | ug/kg | 109 | 365 |
| 87-86-5 | Pentachlorophenol | U | 365 | ug/kg | 109 | 365 |
| 85-01-8 | Phenanthrene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 108-95-2 | Phenol | U | 365 | ug/kg | 109 | 365 |
| 129-00-0 | Pyrene | U | 36.5 | ug/kg | 10.9 | 36.5 |
| 110-86-1 | Pyridine | U | 365 | ug/kg | 109 | 365 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 365 | ug/kg | 109 | 365 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 365 | ug/kg | 109 | 365 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 365 | ug/kg | 109 | 365 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 365 | ug/kg | 109 | 365 |
| 65794-96-9 | m,p-Cresols | U | 365 | ug/kg | 109 | 365 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 365 | ug/kg | 109 | 365 |
| 95-48-7 | o-Cresol | U | 365 | ug/kg | 109 | 365 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 365 | ug/kg | 120 | 365 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 365 | ug/kg | 109 | 365 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.692 | 752 | ug/kg | | AJ |
| | unknown | 11.506 | 591 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623009** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84165** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 00:29** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.14 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2324.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000057-10-3 | n-Hexadecanoic acid | 12.33 | 943 | ug/kg | 96 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.301 | 182 | ug/kg | 93 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:11** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623010** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84176** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 01:01** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2325.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 369 | ug/kg | 111 | 369 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 369 | ug/kg | 111 | 369 |
| 122-66-7 | Azobenzene | U | 369 | ug/kg | 111 | 369 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 369 | ug/kg | 111 | 369 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 369 | ug/kg | 111 | 369 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 369 | ug/kg | 111 | 369 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 369 | ug/kg | 111 | 369 |
| 120-83-2 | 2,4-Dichlorophenol | U | 369 | ug/kg | 111 | 369 |
| 105-67-9 | 2,4-Dimethylphenol | U | 369 | ug/kg | 111 | 369 |
| 51-28-5 | 2,4-Dinitrophenol | U | 738 | ug/kg | 111 | 738 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 369 | ug/kg | 111 | 369 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 369 | ug/kg | 111 | 369 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 95-57-8 | 2-Chlorophenol | U | 369 | ug/kg | 111 | 369 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 369 | ug/kg | 111 | 369 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 88-75-5 | 2-Nitrophenol | U | 369 | ug/kg | 111 | 369 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 369 | ug/kg | 111 | 369 |
| 101-55-3 | 4-Bromophenylphenylether | U | 369 | ug/kg | 111 | 369 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 369 | ug/kg | 148 | 369 |
| 106-47-8 | 4-Chloroaniline | U | 369 | ug/kg | 111 | 369 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 369 | ug/kg | 111 | 369 |
| 100-02-7 | 4-Nitrophenol | U | 369 | ug/kg | 111 | 369 |
| 83-32-9 | Acenaphthene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 208-96-8 | Acenaphthylene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 62-53-3 | Aniline | U | 369 | ug/kg | 111 | 369 |
| 120-12-7 | Anthracene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 56-55-3 | Benzo(a)anthracene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 50-32-8 | Benzo(a)pyrene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 65-85-0 | Benzoic acid | U | 738 | ug/kg | 184 | 738 |
| 100-51-6 | Benzyl alcohol | U | 369 | ug/kg | 111 | 369 |
| 85-68-7 | Butylbenzylphthalate | U | 369 | ug/kg | 111 | 369 |
| 218-01-9 | Chrysene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 84-74-2 | Di-n-butylphthalate | U | 369 | ug/kg | 111 | 369 |
| 117-84-0 | Di-n-octylphthalate | U | 369 | ug/kg | 111 | 369 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:11** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623010** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84176** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 01:01** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2325.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 132-64-9 | Dibenzofuran | U | 369 | ug/kg | 111 | 369 |
| 84-66-2 | Diethylphthalate | U | 369 | ug/kg | 111 | 369 |
| 131-11-3 | Dimethylphthalate | U | 369 | ug/kg | 111 | 369 |
| 122-39-4 | Diphenylamine | U | 369 | ug/kg | 111 | 369 |
| 206-44-0 | Fluoranthene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 86-73-7 | Fluorene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 118-74-1 | Hexachlorobenzene | U | 369 | ug/kg | 111 | 369 |
| 87-68-3 | Hexachlorobutadiene | U | 369 | ug/kg | 111 | 369 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 369 | ug/kg | 111 | 369 |
| 67-72-1 | Hexachloroethane | U | 369 | ug/kg | 111 | 369 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 78-59-1 | Isophorone | U | 369 | ug/kg | 111 | 369 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 369 | ug/kg | 111 | 369 |
| 621-64-7 | N-Nitrosodipropylamine | U | 369 | ug/kg | 111 | 369 |
| 91-20-3 | Naphthalene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 98-95-3 | Nitrobenzene | U | 369 | ug/kg | 111 | 369 |
| 87-86-5 | Pentachlorophenol | U | 369 | ug/kg | 111 | 369 |
| 85-01-8 | Phenanthrene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 108-95-2 | Phenol | U | 369 | ug/kg | 111 | 369 |
| 129-00-0 | Pyrene | U | 36.9 | ug/kg | 11.1 | 36.9 |
| 110-86-1 | Pyridine | U | 369 | ug/kg | 111 | 369 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 369 | ug/kg | 111 | 369 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 369 | ug/kg | 111 | 369 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 369 | ug/kg | 111 | 369 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 369 | ug/kg | 111 | 369 |
| 65794-96-9 | m,p-Cresols | U | 369 | ug/kg | 111 | 369 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 369 | ug/kg | 111 | 369 |
| 95-48-7 | o-Cresol | U | 369 | ug/kg | 111 | 369 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 369 | ug/kg | 122 | 369 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 369 | ug/kg | 111 | 369 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 1.915 | 299 | ug/kg | 91 | NJ |
| | unknown | 2.053 | 274 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:11** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623010** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **9.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84176** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 01:01** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2325.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.696 | 995 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.32 | 233 | ug/kg | 98 | NJ |
| | unknown | 13.201 | 273 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.297 | 259 | ug/kg | 97 | NJ |
| | unknown | 15.139 | 238 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 10:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623011** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84144** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 01:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2326.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 122-66-7 | Azobenzene | U | 356 | ug/kg | 107 | 356 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 120-83-2 | 2,4-Dichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 105-67-9 | 2,4-Dimethylphenol | U | 356 | ug/kg | 107 | 356 |
| 51-28-5 | 2,4-Dinitrophenol | U | 712 | ug/kg | 107 | 712 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 356 | ug/kg | 107 | 356 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 356 | ug/kg | 107 | 356 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 95-57-8 | 2-Chlorophenol | U | 356 | ug/kg | 107 | 356 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 356 | ug/kg | 107 | 356 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 88-75-5 | 2-Nitrophenol | U | 356 | ug/kg | 107 | 356 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 356 | ug/kg | 107 | 356 |
| 101-55-3 | 4-Bromophenylphenylether | U | 356 | ug/kg | 107 | 356 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 356 | ug/kg | 142 | 356 |
| 106-47-8 | 4-Chloroaniline | U | 356 | ug/kg | 107 | 356 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 356 | ug/kg | 107 | 356 |
| 100-02-7 | 4-Nitrophenol | U | 356 | ug/kg | 107 | 356 |
| 83-32-9 | Acenaphthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 208-96-8 | Acenaphthylene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 62-53-3 | Aniline | U | 356 | ug/kg | 107 | 356 |
| 120-12-7 | Anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 56-55-3 | Benzo(a)anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 50-32-8 | Benzo(a)pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 65-85-0 | Benzoic acid | U | 712 | ug/kg | 178 | 712 |
| 100-51-6 | Benzyl alcohol | U | 356 | ug/kg | 107 | 356 |
| 85-68-7 | Butylbenzylphthalate | U | 356 | ug/kg | 107 | 356 |
| 218-01-9 | Chrysene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 84-74-2 | Di-n-butylphthalate | U | 356 | ug/kg | 107 | 356 |
| 117-84-0 | Di-n-octylphthalate | U | 356 | ug/kg | 107 | 356 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 10:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623011** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84144** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 01:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2326.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 132-64-9 | Dibenzofuran | U | 356 | ug/kg | 107 | 356 |
| 84-66-2 | Diethylphthalate | U | 356 | ug/kg | 107 | 356 |
| 131-11-3 | Dimethylphthalate | U | 356 | ug/kg | 107 | 356 |
| 122-39-4 | Diphenylamine | U | 356 | ug/kg | 107 | 356 |
| 206-44-0 | Fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 86-73-7 | Fluorene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 118-74-1 | Hexachlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 87-68-3 | Hexachlorobutadiene | U | 356 | ug/kg | 107 | 356 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 356 | ug/kg | 107 | 356 |
| 67-72-1 | Hexachloroethane | U | 356 | ug/kg | 107 | 356 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 78-59-1 | Isophorone | U | 356 | ug/kg | 107 | 356 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 356 | ug/kg | 107 | 356 |
| 621-64-7 | N-Nitrosodipropylamine | U | 356 | ug/kg | 107 | 356 |
| 91-20-3 | Naphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 98-95-3 | Nitrobenzene | U | 356 | ug/kg | 107 | 356 |
| 87-86-5 | Pentachlorophenol | U | 356 | ug/kg | 107 | 356 |
| 85-01-8 | Phenanthrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 108-95-2 | Phenol | U | 356 | ug/kg | 107 | 356 |
| 129-00-0 | Pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 110-86-1 | Pyridine | U | 356 | ug/kg | 107 | 356 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 356 | ug/kg | 107 | 356 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 356 | ug/kg | 107 | 356 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 356 | ug/kg | 107 | 356 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 356 | ug/kg | 107 | 356 |
| 65794-96-9 | m,p-Cresols | U | 356 | ug/kg | 107 | 356 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 356 | ug/kg | 107 | 356 |
| 95-48-7 | o-Cresol | U | 356 | ug/kg | 107 | 356 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 356 | ug/kg | 117 | 356 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 356 | ug/kg | 107 | 356 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 1.92 | 425 | ug/kg | 90 | NJ |
| | unknown | 2.058 | 949 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 10:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623011** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84144** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 01:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2326.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.711 | 2180 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.325 | 321 | ug/kg | 98 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.297 | 195 | ug/kg | 99 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623012** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84155** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 20:51** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.12 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2416.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 122-66-7 | Azobenzene | U | 373 | ug/kg | 112 | 373 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 120-83-2 | 2,4-Dichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 105-67-9 | 2,4-Dimethylphenol | U | 373 | ug/kg | 112 | 373 |
| 51-28-5 | 2,4-Dinitrophenol | U | 745 | ug/kg | 112 | 745 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 373 | ug/kg | 112 | 373 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 373 | ug/kg | 112 | 373 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 95-57-8 | 2-Chlorophenol | U | 373 | ug/kg | 112 | 373 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 373 | ug/kg | 112 | 373 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 88-75-5 | 2-Nitrophenol | U | 373 | ug/kg | 112 | 373 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 373 | ug/kg | 112 | 373 |
| 101-55-3 | 4-Bromophenylphenylether | U | 373 | ug/kg | 112 | 373 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 373 | ug/kg | 149 | 373 |
| 106-47-8 | 4-Chloroaniline | U | 373 | ug/kg | 112 | 373 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 373 | ug/kg | 112 | 373 |
| 100-02-7 | 4-Nitrophenol | U | 373 | ug/kg | 112 | 373 |
| 83-32-9 | Acenaphthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 208-96-8 | Acenaphthylene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 62-53-3 | Aniline | U | 373 | ug/kg | 112 | 373 |
| 120-12-7 | Anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 56-55-3 | Benzo(a)anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 50-32-8 | Benzo(a)pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 65-85-0 | Benzoic acid | U | 745 | ug/kg | 186 | 745 |
| 100-51-6 | Benzyl alcohol | U | 373 | ug/kg | 112 | 373 |
| 85-68-7 | Butylbenzylphthalate | U | 373 | ug/kg | 112 | 373 |
| 218-01-9 | Chrysene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 84-74-2 | Di-n-butylphthalate | U | 373 | ug/kg | 112 | 373 |
| 117-84-0 | Di-n-octylphthalate | U | 373 | ug/kg | 112 | 373 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623012** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84155** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 20:51** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.12 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2416.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 132-64-9 | Dibenzofuran | U | 373 | ug/kg | 112 | 373 |
| 84-66-2 | Diethylphthalate | U | 373 | ug/kg | 112 | 373 |
| 131-11-3 | Dimethylphthalate | U | 373 | ug/kg | 112 | 373 |
| 122-39-4 | Diphenylamine | U | 373 | ug/kg | 112 | 373 |
| 206-44-0 | Fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 86-73-7 | Fluorene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 118-74-1 | Hexachlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 87-68-3 | Hexachlorobutadiene | U | 373 | ug/kg | 112 | 373 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 373 | ug/kg | 112 | 373 |
| 67-72-1 | Hexachloroethane | U | 373 | ug/kg | 112 | 373 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 78-59-1 | Isophorone | U | 373 | ug/kg | 112 | 373 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 373 | ug/kg | 112 | 373 |
| 621-64-7 | N-Nitrosodipropylamine | U | 373 | ug/kg | 112 | 373 |
| 91-20-3 | Naphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 98-95-3 | Nitrobenzene | U | 373 | ug/kg | 112 | 373 |
| 87-86-5 | Pentachlorophenol | U | 373 | ug/kg | 112 | 373 |
| 85-01-8 | Phenanthrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 108-95-2 | Phenol | U | 373 | ug/kg | 112 | 373 |
| 129-00-0 | Pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 110-86-1 | Pyridine | U | 373 | ug/kg | 112 | 373 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 373 | ug/kg | 112 | 373 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 373 | ug/kg | 112 | 373 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 373 | ug/kg | 112 | 373 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 373 | ug/kg | 112 | 373 |
| 65794-96-9 | m,p-Cresols | U | 373 | ug/kg | 112 | 373 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 373 | ug/kg | 112 | 373 |
| 95-48-7 | o-Cresol | U | 373 | ug/kg | 112 | 373 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 373 | ug/kg | 123 | 373 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 373 | ug/kg | 112 | 373 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.663 | 964 | ug/kg | | AJ |
| | unknown | 12.049 | 162 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 09:35** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623012** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84155** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 20:51** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.12 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2416.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000057-10-3 | n-Hexadecanoic acid | 12.301 | 499 | ug/kg | 96 | NJ |
| | unknown | 13.001 | 171 | ug/kg | 0 | J |
| | unknown | 13.154 | 213 | ug/kg | 0 | J |
| | unknown | 13.178 | 284 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.273 | 384 | ug/kg | 98 | NJ |
| | unknown | 13.911 | 371 | ug/kg | 0 | J |
| 000506-12-7 | Heptadecanoic acid | 14.206 | 217 | ug/kg | 95 | NJ |
| 000112-95-8 | Eicosane | 14.944 | 175 | ug/kg | 90 | NJ |
| 001599-67-3 | 1-Docosene | 15.073 | 772 | ug/kg | 93 | NJ |
| | unknown | 15.344 | 180 | ug/kg | 0 | J |
| 001928-30-9 | Tricosane, 2-methyl- | 16.292 | 555 | ug/kg | 91 | NJ |
| | unknown | 17.13 | 2630 | ug/kg | 0 | J |
| 000593-45-3 | Octadecane | 18.092 | 1490 | ug/kg | 96 | NJ |
| | unknown | 20.459 | 2310 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623013** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84177** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 02:34** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2328.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 122-66-7 | Azobenzene | U | 355 | ug/kg | 107 | 355 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 120-83-2 | 2,4-Dichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 105-67-9 | 2,4-Dimethylphenol | U | 355 | ug/kg | 107 | 355 |
| 51-28-5 | 2,4-Dinitrophenol | U | 710 | ug/kg | 107 | 710 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 355 | ug/kg | 107 | 355 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 355 | ug/kg | 107 | 355 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 95-57-8 | 2-Chlorophenol | U | 355 | ug/kg | 107 | 355 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 355 | ug/kg | 107 | 355 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 88-75-5 | 2-Nitrophenol | U | 355 | ug/kg | 107 | 355 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 355 | ug/kg | 107 | 355 |
| 101-55-3 | 4-Bromophenylphenylether | U | 355 | ug/kg | 107 | 355 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 355 | ug/kg | 142 | 355 |
| 106-47-8 | 4-Chloroaniline | U | 355 | ug/kg | 107 | 355 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 355 | ug/kg | 107 | 355 |
| 100-02-7 | 4-Nitrophenol | U | 355 | ug/kg | 107 | 355 |
| 83-32-9 | Acenaphthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 208-96-8 | Acenaphthylene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 62-53-3 | Aniline | U | 355 | ug/kg | 107 | 355 |
| 120-12-7 | Anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 56-55-3 | Benzo(a)anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 50-32-8 | Benzo(a)pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 65-85-0 | Benzoic acid | U | 710 | ug/kg | 178 | 710 |
| 100-51-6 | Benzyl alcohol | U | 355 | ug/kg | 107 | 355 |
| 85-68-7 | Butylbenzylphthalate | U | 355 | ug/kg | 107 | 355 |
| 218-01-9 | Chrysene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 84-74-2 | Di-n-butylphthalate | U | 355 | ug/kg | 107 | 355 |
| 117-84-0 | Di-n-octylphthalate | U | 355 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623013** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84177** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 02:34** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2328.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 132-64-9 | Dibenzofuran | U | 355 | ug/kg | 107 | 355 |
| 84-66-2 | Diethylphthalate | U | 355 | ug/kg | 107 | 355 |
| 131-11-3 | Dimethylphthalate | U | 355 | ug/kg | 107 | 355 |
| 122-39-4 | Diphenylamine | U | 355 | ug/kg | 107 | 355 |
| 206-44-0 | Fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 86-73-7 | Fluorene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 118-74-1 | Hexachlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 87-68-3 | Hexachlorobutadiene | U | 355 | ug/kg | 107 | 355 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 355 | ug/kg | 107 | 355 |
| 67-72-1 | Hexachloroethane | U | 355 | ug/kg | 107 | 355 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 78-59-1 | Isophorone | U | 355 | ug/kg | 107 | 355 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 355 | ug/kg | 107 | 355 |
| 621-64-7 | N-Nitrosodipropylamine | U | 355 | ug/kg | 107 | 355 |
| 91-20-3 | Naphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 98-95-3 | Nitrobenzene | U | 355 | ug/kg | 107 | 355 |
| 87-86-5 | Pentachlorophenol | U | 355 | ug/kg | 107 | 355 |
| 85-01-8 | Phenanthrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 108-95-2 | Phenol | U | 355 | ug/kg | 107 | 355 |
| 129-00-0 | Pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 110-86-1 | Pyridine | U | 355 | ug/kg | 107 | 355 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 355 | ug/kg | 107 | 355 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 355 | ug/kg | 107 | 355 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 355 | ug/kg | 107 | 355 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 355 | ug/kg | 107 | 355 |
| 65794-96-9 | m,p-Cresols | U | 355 | ug/kg | 107 | 355 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 355 | ug/kg | 107 | 355 |
| 95-48-7 | o-Cresol | U | 355 | ug/kg | 107 | 355 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 355 | ug/kg | 117 | 355 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 355 | ug/kg | 107 | 355 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.925 | 343 | ug/kg | 0 | J |
| | unknown | 2.063 | 745 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 11:05** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623013** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **6.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84177** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 02:34** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2328.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.706 | 1500 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.325 | 309 | ug/kg | 98 | NJ |
| | unknown | 13.201 | 205 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.297 | 254 | ug/kg | 94 | NJ |
| | unknown | 14.235 | 154 | ug/kg | 0 | J |
| 1000155-85-3 | Cyclohexadecane, 1,2-diethyl- | 15.106 | 560 | ug/kg | 93 | NJ |
| | unknown | 15.378 | 268 | ug/kg | 0 | J |
| | unknown | 16.34 | 563 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623014** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84121** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 21:23** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2417.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 122-66-7 | Azobenzene | U | 373 | ug/kg | 112 | 373 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 120-83-2 | 2,4-Dichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 105-67-9 | 2,4-Dimethylphenol | U | 373 | ug/kg | 112 | 373 |
| 51-28-5 | 2,4-Dinitrophenol | U | 745 | ug/kg | 112 | 745 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 373 | ug/kg | 112 | 373 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 373 | ug/kg | 112 | 373 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 95-57-8 | 2-Chlorophenol | U | 373 | ug/kg | 112 | 373 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 373 | ug/kg | 112 | 373 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 88-75-5 | 2-Nitrophenol | U | 373 | ug/kg | 112 | 373 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 373 | ug/kg | 112 | 373 |
| 101-55-3 | 4-Bromophenylphenylether | U | 373 | ug/kg | 112 | 373 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 373 | ug/kg | 149 | 373 |
| 106-47-8 | 4-Chloroaniline | U | 373 | ug/kg | 112 | 373 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 373 | ug/kg | 112 | 373 |
| 100-02-7 | 4-Nitrophenol | U | 373 | ug/kg | 112 | 373 |
| 83-32-9 | Acenaphthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 208-96-8 | Acenaphthylene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 62-53-3 | Aniline | U | 373 | ug/kg | 112 | 373 |
| 120-12-7 | Anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 56-55-3 | Benzo(a)anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 50-32-8 | Benzo(a)pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 65-85-0 | Benzoic acid | U | 745 | ug/kg | 186 | 745 |
| 100-51-6 | Benzyl alcohol | U | 373 | ug/kg | 112 | 373 |
| 85-68-7 | Butylbenzylphthalate | U | 373 | ug/kg | 112 | 373 |
| 218-01-9 | Chrysene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 84-74-2 | Di-n-butylphthalate | U | 373 | ug/kg | 112 | 373 |
| 117-84-0 | Di-n-octylphthalate | U | 373 | ug/kg | 112 | 373 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623014** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84121** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 21:23** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2417.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 132-64-9 | Dibenzofuran | U | 373 | ug/kg | 112 | 373 |
| 84-66-2 | Diethylphthalate | U | 373 | ug/kg | 112 | 373 |
| 131-11-3 | Dimethylphthalate | U | 373 | ug/kg | 112 | 373 |
| 122-39-4 | Diphenylamine | U | 373 | ug/kg | 112 | 373 |
| 206-44-0 | Fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 86-73-7 | Fluorene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 118-74-1 | Hexachlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 87-68-3 | Hexachlorobutadiene | U | 373 | ug/kg | 112 | 373 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 373 | ug/kg | 112 | 373 |
| 67-72-1 | Hexachloroethane | U | 373 | ug/kg | 112 | 373 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 78-59-1 | Isophorone | U | 373 | ug/kg | 112 | 373 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 373 | ug/kg | 112 | 373 |
| 621-64-7 | N-Nitrosodipropylamine | U | 373 | ug/kg | 112 | 373 |
| 91-20-3 | Naphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 98-95-3 | Nitrobenzene | U | 373 | ug/kg | 112 | 373 |
| 87-86-5 | Pentachlorophenol | U | 373 | ug/kg | 112 | 373 |
| 85-01-8 | Phenanthrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 108-95-2 | Phenol | U | 373 | ug/kg | 112 | 373 |
| 129-00-0 | Pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 110-86-1 | Pyridine | U | 373 | ug/kg | 112 | 373 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 373 | ug/kg | 112 | 373 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 373 | ug/kg | 112 | 373 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 373 | ug/kg | 112 | 373 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 373 | ug/kg | 112 | 373 |
| 65794-96-9 | m,p-Cresols | U | 373 | ug/kg | 112 | 373 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 373 | ug/kg | 112 | 373 |
| 95-48-7 | o-Cresol | U | 373 | ug/kg | 112 | 373 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 373 | ug/kg | 123 | 373 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 373 | ug/kg | 112 | 373 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.677 | 1550 | ug/kg | 0 | J |
| | unknown | 11.515 | 797 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/11/2014 07:40** | **Matrix:** | **S** |
| **Lab Sample ID:** | **352623014** | **Date Received:** | **07/15/2014 08:55** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84121** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 21:23** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2417.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 002091-29-4 | 9-Hexadecenoic acid | 12.258 | 263 | ug/kg | 97 | NJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.306 | 2140 | ug/kg | 96 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.277 | 750 | ug/kg | 87 | NJ |
| 118625-56-2 | 1-Hexadecene, 16-bromo- | 15.006 | 1490 | ug/kg | 87 | NJ |

# Quality Control Summary

**Semi-Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3795**

**Matrix Type: SOLID**

| Sample ID | Client ID | 2FP %REC | PHL %REC | NBZ %REC | FBP %REC | TBP %REC | TPH %REC |
|---|---|---|---|---|---|---|---|
| 1203132846 | MB for batch 1405531 | 62 | 65 | 82 | 74 | 62 | 77 |
| 1203132847 | LCS for batch 1405531 | 81 | 77 | 77 | 76 | 79 | 85 |
| 352623001 | RE57-14-84140 | 69 | 65 | 69 | 73 | 68 | 86 |
| 352623002 | RE57-14-84151 | 60 | 60 | 70 | 61 | 61 | 76 |
| 352623003 | RE57-14-84162 | 44 | 45 | 44 | 43 | 47 | 52 |
| 352623004 | RE57-14-84163 | 61 | 61 | 58 | 59 | 63 | 65 |
| 352623005 | RE57-14-84142 | 65 | 58 | 62 | 63 | 53 | 63 |
| 352623006 | RE57-14-84164 | 46 | 48 | 46 | 45 | 49 | 51 |
| 352623007 | RE57-14-84175 | 68 | 66 | 66 | 66 | 61 | 75 |
| 352623008 | RE57-14-84154 | 62 | 62 | 60 | 61 | 53 | 66 |
| 352623009 | RE57-14-84165 | 31 | 35 | 31 | 38 | 42 | 53 |
| 352623010 | RE57-14-84176 | 35 | 37 | 33 | 37 | 48 | 53 |
| 352623011 | RE57-14-84144 | 75 | 73 | 73 | 72 | 69 | 76 |
| 352623013 | RE57-14-84177 | 69 | 67 | 67 | 67 | 66 | 78 |
| 1203132848 | RE57-14-84990MS | 49 | 55 | 46 | 53 | 63 | 78 |
| 352623012 | RE57-14-84155 | 48 | 53 | 44 | 53 | 61 | 74 |
| 352623014 | RE57-14-84121 | 66 | 67 | 60 | 64 | 64 | 81 |
| 1203132849 | RE57-14-84990MSD | 25 | 26 | 24 | 26 | 38 | 47 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| 2FP | = 2-Fluorophenol | (23%-107%) |
| PHL | = Phenol-d5 | (25%-108%) |
| NBZ | = Nitrobenzene-d5 | (21%-103%) |
| FBP | = 2-Fluorobiphenyl | (25%-100%) |
| TBP | = 2,4,6-Tribromophenol | (20%-122%) |
| TPH | = p-Terphenyl-d14 | (31%-124%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1405531**
**Lab Sample ID** **1203132847**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/23/2014 19:48**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 62-75-9 | LCS | N-Methyl-N-nitrosomethylam | 1660 | 0.0 | 1270 | 76 | 31-84 |
| 110-86-1 | LCS | Pyridine | 1660 | 0.0 | 959 | 58 | 29-85 |
| 62-53-3 | LCS | Aniline | 1660 | 0.0 | 1310 | 79 | 34-101 |
| 108-95-2 | LCS | Phenol | 1660 | 0.0 | 1340 | 81 | 38-98 |
| 111-44-4 | LCS | bis(2-Chloroethyl) ether | 1660 | 0.0 | 1330 | 80 | 35-96 |
| 95-57-8 | LCS | 2-Chlorophenol | 1660 | 0.0 | 1410 | 85 | 38-100 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 1660 | 0.0 | 1250 | 75 | 39-110 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 1660 | 0.0 | 1270 | 76 | 40-110 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 1660 | 0.0 | 1290 | 77 | 39-93 |
| 108-60-1 | LCS | bis(2-Chloro-1-methylethyl)et | 1660 | 0.0 | 1100 | 66 | 27-109 |
| 100-51-6 | LCS | Benzyl alcohol | 1660 | 0.0 | 1270 | 76 | 35-95 |
| 95-48-7 | LCS | o-Cresol | 1660 | 0.0 | 1490 | 90 | 37-97 |
| 65794-96-9 | LCS | m,p-Cresols | 1660 | 0.0 | 1680 | 101 | 39-115 |
| 621-64-7 | LCS | N-Nitrosodipropylamine | 1660 | 0.0 | 1500 | 90 | 34-106 |
| 67-72-1 | LCS | Hexachloroethane | 1660 | 0.0 | 1360 | 82 | 34-98 |
| 98-95-3 | LCS | Nitrobenzene | 1660 | 0.0 | 1320 | 79 | 35-99 |
| 78-59-1 | LCS | Isophorone | 1660 | 0.0 | 1350 | 81 | 36-98 |
| 88-75-5 | LCS | 2-Nitrophenol | 1660 | 0.0 | 1250 | 75 | 35-106 |
| 105-67-9 | LCS | 2,4-Dimethylphenol | 1660 | 0.0 | 1250 | 75 | 35-102 |
| 111-91-1 | LCS | bis(2-Chloroethoxy)methane | 1660 | 0.0 | 1230 | 74 | 37-98 |
| 120-83-2 | LCS | 2,4-Dichlorophenol | 1660 | 0.0 | 1210 | 73 | 35-110 |
| 65-85-0 | LCS | Benzoic acid | 3330 | 0.0 | 2030 | 61 | 27-99 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1405531**
**Lab Sample ID** **1203132847**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/23/2014 19:48**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 106-47-8 | LCS | 4-Chloroaniline | 1660 | 0.0 | 1060 | 64 | 32-106 |
| 87-68-3 | LCS | Hexachlorobutadiene | 1660 | 0.0 | 1210 | 73 | 32-104 |
| 59-50-7 | LCS | 4-Chloro-3-methylphenol | 1660 | 0.0 | 1410 | 85 | 35-104 |
| 91-57-6 | LCS | 2-Methylnaphthalene | 1660 | 0.0 | 1220 | 73 | 36-107 |
| 91-20-3 | LCS | Naphthalene | 1660 | 0.0 | 1250 | 75 | 38-106 |
| 77-47-4 | LCS | Hexachlorocyclopentadiene | 1660 | 0.0 | 871 | 52 | 24-84 |
| 88-06-2 | LCS | 2,4,6-Trichlorophenol | 1660 | 0.0 | 1330 | 80 | 36-98 |
| 95-95-4 | LCS | 2,4,5-Trichlorophenol | 1660 | 0.0 | 1340 | 81 | 41-103 |
| 91-58-7 | LCS | 2-Chloronaphthalene | 1660 | 0.0 | 1340 | 81 | 39-101 |
| 88-74-4 | LCS | 2-Nitroaniline<br>*o-Nitroaniline* | 1660 | 0.0 | 1350 | 81 | 34-116 |
| 99-09-2 | LCS | 3-Nitroaniline<br>*m-Nitroaniline* | 1660 | 0.0 | 1120 | 67 | 32-113 |
| 131-11-3 | LCS | Dimethylphthalate | 1660 | 0.0 | 1410 | 85 | 41-105 |
| 606-20-2 | LCS | 2,6-Dinitrotoluene | 1660 | 0.0 | 1360 | 82 | 41-103 |
| 121-14-2 | LCS | 2,4-Dinitrotoluene | 1660 | 0.0 | 1410 | 85 | 43-109 |
| 208-96-8 | LCS | Acenaphthylene | 1660 | 0.0 | 1340 | 80 | 38-103 |
| 83-32-9 | LCS | Acenaphthene | 1660 | 0.0 | 1300 | 78 | 36-105 |
| 51-28-5 | LCS | 2,4-Dinitrophenol | 1660 | 0.0 | 892 | 54 | 22-83 |
| 132-64-9 | LCS | Dibenzofuran | 1660 | 0.0 | 1320 | 80 | 38-104 |
| 84-66-2 | LCS | Diethylphthalate | 1660 | 0.0 | 1460 | 88 | 42-109 |
| 100-02-7 | LCS | 4-Nitrophenol | 1660 | 0.0 | 1090 | 66 | 23-114 |
| 86-73-7 | LCS | Fluorene | 1660 | 0.0 | 1330 | 80 | 39-102 |
| 7005-72-3 | LCS | 4-Chlorophenylphenylether | 1660 | 0.0 | 1410 | 85 | 41-104 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1405531**
**Lab Sample ID** **1203132847**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/23/2014 19:48**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 100-01-6 | LCS | 4-Nitroaniline<br>*p-Nitroaniline* | 1660 | 0.0 | 1440 | 86 | 35-150 |
| 534-52-1 | LCS | 2-Methyl-4,6-dinitrophenol | 1660 | 0.0 | 1060 | 63 | 33-103 |
| 122-39-4 | LCS | Diphenylamine | 1660 | 0.0 | 1170 | 70 | 40-101 |
| 122-66-7 | LCS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1660 | 0.0 | 1380 | 83 | 33-102 |
| 101-55-3 | LCS | 4-Bromophenylphenylether | 1660 | 0.0 | 1150 | 69 | 42-110 |
| 118-74-1 | LCS | Hexachlorobenzene | 1660 | 0.0 | 1210 | 73 | 41-108 |
| 87-86-5 | LCS | Pentachlorophenol | 1660 | 0.0 | 1150 | 69 | 31-93 |
| 85-01-8 | LCS | Phenanthrene | 1660 | 0.0 | 1220 | 73 | 43-105 |
| 120-12-7 | LCS | Anthracene | 1660 | 0.0 | 1230 | 74 | 43-104 |
| 84-74-2 | LCS | Di-n-butylphthalate | 1660 | 0.0 | 1370 | 83 | 46-112 |
| 206-44-0 | LCS | Fluoranthene | 1660 | 0.0 | 1310 | 79 | 44-106 |
| 129-00-0 | LCS | Pyrene | 1660 | 0.0 | 1330 | 80 | 33-99 |
| 85-68-7 | LCS | Butylbenzylphthalate | 1660 | 0.0 | 1500 | 90 | 37-107 |
| 117-81-7 | LCS | bis(2-Ethylhexyl)phthalate | 1660 | 0.0 | 1390 | 84 | 41-104 |
| 56-55-3 | LCS | Benzo(a)anthracene | 1660 | 0.0 | 1330 | 80 | 46-108 |
| 218-01-9 | LCS | Chrysene | 1660 | 0.0 | 1350 | 81 | 47-107 |
| 117-84-0 | LCS | Di-n-octylphthalate | 1660 | 0.0 | 1390 | 83 | 41-110 |
| 205-99-2 | LCS | Benzo(b)fluoranthene | 1660 | 0.0 | 1200 | 72 | 42-111 |
| 207-08-9 | LCS | Benzo(k)fluoranthene | 1660 | 0.0 | 1180 | 71 | 43-103 |
| 50-32-8 | LCS | Benzo(a)pyrene | 1660 | 0.0 | 1240 | 75 | 45-109 |
| 193-39-5 | LCS | Indeno(1,2,3-cd)pyrene | 1660 | 0.0 | 1430 | 86 | 45-115 |
| 53-70-3 | LCS | Dibenzo(a,h)anthracene | 1660 | 0.0 | 1620 | 97 | 39-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **LCS for batch 1405531**
**Lab Sample ID** **1203132847**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/23/2014 19:48**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 191-24-2 | LCS | Benzo(ghi)perylene | 1660 | 0.0 | 1470 | 89 | 43-115 |
| 91-94-1 | LCS | 3,3'-Dichlorobenzidine | 1660 | 0.0 | 1400 | 84 | 32-111 |
| 120-82-1 | LCS | 1,2,4-Trichlorobenzene | 1660 | 0.0 | 1270 | 77 | 37-98 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84990MS**
**Lab Sample ID** **1203132848**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 04:08**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MS | N-Methyl-N-nitrosomethylam | 1810 | 0.00 | U | 728 | 40 | 24-86 |
| 110-86-1 | MS | Pyridine | 1810 | 0.00 | U | 460 | 26 | 24-87 |
| 62-53-3 | MS | Aniline | 1810 | 0.00 | U | 936 | 52 | 28-91 |
| 108-95-2 | MS | Phenol | 1810 | 0.00 | U | 1050 | 58 | 28-108 |
| 111-44-4 | MS | bis(2-Chloroethyl) ether | 1810 | 0.00 | U | 778 | 43 | 25-102 |
| 95-57-8 | MS | 2-Chlorophenol | 1810 | 0.00 | U | 1030 | 57 | 28-108 |
| 541-73-1 | MS | 1,3-Dichlorobenzene | 1810 | 0.00 | U | 699 | 39 | 24-96 |
| 106-46-7 | MS | 1,4-Dichlorobenzene | 1810 | 0.00 | U | 707 | 39 | 24-97 |
| 95-50-1 | MS | 1,2-Dichlorobenzene | 1810 | 0.00 | U | 755 | 42 | 25-99 |
| 108-60-1 | MS | bis(2-Chloro-1-methylethyl)et | 1810 | 0.00 | U | 703 | 39 | 25-105 |
| 100-51-6 | MS | Benzyl alcohol | 1810 | 0.00 | U | 1040 | 57 | 21-109 |
| 95-48-7 | MS | o-Cresol | 1810 | 0.00 | U | 1210 | 67 | 27-105 |
| 65794-96-9 | MS | m,p-Cresols | 1810 | 0.00 | U | 1490 | 82 | 32-123 |
| 621-64-7 | MS | N-Nitrosodipropylamine | 1810 | 0.00 | U | 1130 | 62 | 23-117 |
| 67-72-1 | MS | Hexachloroethane | 1810 | 0.00 | U | 761 | 42 | 24-102 |
| 98-95-3 | MS | Nitrobenzene | 1810 | 0.00 | U | 944 | 52 | 25-104 |
| 78-59-1 | MS | Isophorone | 1810 | 0.00 | U | 1090 | 60 | 24-108 |
| 88-75-5 | MS | 2-Nitrophenol | 1810 | 0.00 | U | 923 | 51 | 24-106 |
| 105-67-9 | MS | 2,4-Dimethylphenol | 1810 | 0.00 | U | 1120 | 62 | 30-109 |
| 111-91-1 | MS | bis(2-Chloroethoxy)methane | 1810 | 0.00 | U | 947 | 52 | 27-104 |
| 120-83-2 | MS | 2,4-Dichlorophenol | 1810 | 0.00 | U | 1090 | 60 | 31-103 |
| 65-85-0 | MS | Benzoic acid | 3610 | 0.00 | U | 2450 | 68 | 15-115 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84990MS**
**Lab Sample ID** **1203132848**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 04:08**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MS | 4-Chloroaniline | 1810 | 0.00 | U | 955 | 53 | 27-100 |
| 87-68-3 | MS | Hexachlorobutadiene | 1810 | 0.00 | U | 767 | 42 | 24-105 |
| 59-50-7 | MS | 4-Chloro-3-methylphenol | 1810 | 0.00 | U | 1380 | 76 | 32-112 |
| 91-57-6 | MS | 2-Methylnaphthalene | 1810 | 0.00 | U | 965 | 53 | 23-107 |
| 91-20-3 | MS | Naphthalene | 1810 | 0.00 | U | 895 | 50 | 21-107 |
| 77-47-4 | MS | Hexachlorocyclopentadiene | 1810 | 0.00 | U | 555 | 31 | 12-106 |
| 88-06-2 | MS | 2,4,6-Trichlorophenol | 1810 | 0.00 | U | 1220 | 68 | 32-103 |
| 95-95-4 | MS | 2,4,5-Trichlorophenol | 1810 | 0.00 | U | 1290 | 71 | 38-109 |
| 91-58-7 | MS | 2-Chloronaphthalene | 1810 | 0.00 | U | 1130 | 62 | 27-109 |
| 88-74-4 | MS | 2-Nitroaniline<br>*o-Nitroaniline* | 1810 | 0.00 | U | 1300 | 72 | 37-114 |
| 99-09-2 | MS | 3-Nitroaniline<br>*m-Nitroaniline* | 1810 | 0.00 | U | 1010 | 56 | 31-110 |
| 131-11-3 | MS | Dimethylphthalate | 1810 | 0.00 | U | 1340 | 74 | 38-110 |
| 606-20-2 | MS | 2,6-Dinitrotoluene | 1810 | 0.00 | U | 1250 | 69 | 36-107 |
| 121-14-2 | MS | 2,4-Dinitrotoluene | 1810 | 0.00 | U | 1280 | 71 | 36-115 |
| 208-96-8 | MS | Acenaphthylene | 1810 | 0.00 | U | 1160 | 64 | 32-103 |
| 83-32-9 | MS | Acenaphthene | 1810 | 0.00 | U | 1100 | 61 | 28-102 |
| 51-28-5 | MS | 2,4-Dinitrophenol | 1810 | 0.00 | U | 716 | 40 | 19-101 |
| 132-64-9 | MS | Dibenzofuran | 1810 | 0.00 | U | 1140 | 63 | 28-117 |
| 84-66-2 | MS | Diethylphthalate | 1810 | 0.00 | U | 1370 | 76 | 40-113 |
| 100-02-7 | MS | 4-Nitrophenol | 1810 | 0.00 | U | 1210 | 67 | 12-128 |
| 86-73-7 | MS | Fluorene | 1810 | 0.00 | U | 1140 | 63 | 30-115 |
| 7005-72-3 | MS | 4-Chlorophenylphenylether | 1810 | 0.00 | U | 1240 | 69 | 37-110 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84990MS**
**Lab Sample ID** **1203132848**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 04:08**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MS | 4-Nitroaniline<br>*p-Nitroaniline* | 1810 | 0.00 | U | 1300 | 72 | 36-141 |
| 534-52-1 | MS | 2-Methyl-4,6-dinitrophenol | 1810 | 0.00 | U | 929 | 51 | 14-116 |
| 122-39-4 | MS | Diphenylamine | 1810 | 0.00 | U | 1280 | 71 | 34-111 |
| 122-66-7 | MS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1810 | 0.00 | U | 1480 | 82 | 35-105 |
| 101-55-3 | MS | 4-Bromophenylphenylether | 1810 | 0.00 | U | 1240 | 68 | 37-112 |
| 118-74-1 | MS | Hexachlorobenzene | 1810 | 0.00 | U | 1240 | 69 | 34-111 |
| 87-86-5 | MS | Pentachlorophenol | 1810 | 0.00 | U | 1350 | 75 | 22-108 |
| 85-01-8 | MS | Phenanthrene | 1810 | 0.00 | U | 1270 | 70 | 28-119 |
| 120-12-7 | MS | Anthracene | 1810 | 0.00 | U | 1280 | 71 | 36-104 |
| 84-74-2 | MS | Di-n-butylphthalate | 1810 | 0.00 | U | 1550 | 86 | 42-119 |
| 206-44-0 | MS | Fluoranthene | 1810 | 0.00 | U | 1430 | 79 | 32-115 |
| 129-00-0 | MS | Pyrene | 1810 | 0.00 | U | 1320 | 73 | 25-119 |
| 85-68-7 | MS | Butylbenzylphthalate | 1810 | 0.00 | U | 1730 | 96 | 33-121 |
| 117-81-7 | MS | bis(2-Ethylhexyl)phthalate | 1810 | 0.00 | U | 1750 | 97 | 33-124 |
| 56-55-3 | MS | Benzo(a)anthracene | 1810 | 0.00 | U | 1420 | 79 | 27-120 |
| 218-01-9 | MS | Chrysene | 1810 | 0.00 | U | 1470 | 81 | 33-114 |
| 117-84-0 | MS | Di-n-octylphthalate | 1810 | 0.00 | U | 1760 | 98 | 36-115 |
| 205-99-2 | MS | Benzo(b)fluoranthene | 1810 | 0.00 | U | 1610 | 89 | 30-119 |
| 207-08-9 | MS | Benzo(k)fluoranthene | 1810 | 0.00 | U | 1620 | 89 | 31-125 |
| 50-32-8 | MS | Benzo(a)pyrene | 1810 | 0.00 | U | 1430 | 79 | 31-116 |
| 193-39-5 | MS | Indeno(1,2,3-cd)pyrene | 1810 | 0.00 | U | 1010 | 56 | 29-117 |
| 53-70-3 | MS | Dibenzo(a,h)anthracene | 1810 | 0.00 | U | 1200 | 66 | 26-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84990MS**
**Lab Sample ID** **1203132848**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 04:08**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MS | Benzo(ghi)perylene | 1810 | 0.00 | U | 918 | 51 | 30-109 |
| 91-94-1 | MS | 3,3'-Dichlorobenzidine | 1810 | 0.00 | U | 964 | 53 | 28-105 |
| 120-82-1 | MS | 1,2,4-Trichlorobenzene | 1810 | 0.00 | U | 864 | 48 | 25-102 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84990MSD**
**Lab Sample ID** **1203132849**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 21:54**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MSD | N-Methyl-N-nitrosomethylam | 1800 | 0.00 | U | 400 | 22 * | 24-86 | 58 * | 0-30 |
| 110-86-1 | MSD | Pyridine | 1800 | 0.00 | U | 290 | 16 * | 24-87 | 46 * | 0-30 |
| 62-53-3 | MSD | Aniline | 1800 | 0.00 | U | 441 | 24 * | 28-91 | 72 * | 0-30 |
| 108-95-2 | MSD | Phenol | 1800 | 0.00 | U | 505 | 28 | 28-108 | 70 * | 0-30 |
| 111-44-4 | MSD | bis(2-Chloroethyl) ether | 1800 | 0.00 | U | 412 | 23 * | 25-102 | 62 * | 0-30 |
| 95-57-8 | MSD | 2-Chlorophenol | 1800 | 0.00 | U | 508 | 28 | 28-108 | 68 * | 0-30 |
| 541-73-1 | MSD | 1,3-Dichlorobenzene | 1800 | 0.00 | U | 378 | 21 * | 24-96 | 60 * | 0-30 |
| 106-46-7 | MSD | 1,4-Dichlorobenzene | 1800 | 0.00 | U | 391 | 22 * | 24-97 | 58 * | 0-30 |
| 95-50-1 | MSD | 1,2-Dichlorobenzene | 1800 | 0.00 | U | 409 | 23 * | 25-99 | 59 * | 0-30 |
| 108-60-1 | MSD | bis(2-Chloro-1-methylethyl)et | 1800 | 0.00 | U | 362 | 20 * | 25-105 | 64 * | 0-30 |
| 100-51-6 | MSD | Benzyl alcohol | 1800 | 0.00 | U | 500 | 28 | 21-109 | 70 * | 0-30 |
| 95-48-7 | MSD | o-Cresol | 1800 | 0.00 | U | 575 | 32 | 27-105 | 71 * | 0-30 |
| 65794-96-9 | MSD | m,p-Cresols | 1800 | 0.00 | U | 691 | 38 | 32-123 | 73 * | 0-30 |
| 621-64-7 | MSD | N-Nitrosodipropylamine | 1800 | 0.00 | U | 514 | 28 | 23-117 | 75 * | 0-30 |
| 67-72-1 | MSD | Hexachloroethane | 1800 | 0.00 | U | 415 | 23 * | 24-102 | 59 * | 0-30 |
| 98-95-3 | MSD | Nitrobenzene | 1800 | 0.00 | U | 455 | 25 | 25-104 | 70 * | 0-30 |
| 78-59-1 | MSD | Isophorone | 1800 | 0.00 | U | 496 | 27 | 24-108 | 75 * | 0-30 |
| 88-75-5 | MSD | 2-Nitrophenol | 1800 | 0.00 | U | 426 | 24 | 24-106 | 74 * | 0-30 |
| 105-67-9 | MSD | 2,4-Dimethylphenol | 1800 | 0.00 | U | 478 | 26 * | 30-109 | 81 * | 0-30 |
| 111-91-1 | MSD | bis(2-Chloroethoxy)methane | 1800 | 0.00 | U | 419 | 23 * | 27-104 | 77 * | 0-30 |
| 120-83-2 | MSD | 2,4-Dichlorophenol | 1800 | 0.00 | U | 494 | 27 * | 31-103 | 75 * | 0-30 |
| 65-85-0 | MSD | Benzoic acid | 3610 | 0.00 | U | 1320 | 36 | 15-115 | 60 * | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84990MSD**
**Lab Sample ID** **1203132849**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 21:54**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MSD | 4-Chloroaniline | 1800 | 0.00 | U | 468 | 26 * | 27-100 | 68 * | 0-30 |
| 87-68-3 | MSD | Hexachlorobutadiene | 1800 | 0.00 | U | 389 | 22 * | 24-105 | 65 * | 0-30 |
| 59-50-7 | MSD | 4-Chloro-3-methylphenol | 1800 | 0.00 | U | 713 | 39 | 32-112 | 64 * | 0-30 |
| 91-57-6 | MSD | 2-Methylnaphthalene | 1800 | 0.00 | U | 448 | 25 | 23-107 | 73 * | 0-30 |
| 91-20-3 | MSD | Naphthalene | 1800 | 0.00 | U | 423 | 23 | 21-107 | 72 * | 0-30 |
| 77-47-4 | MSD | Hexachlorocyclopentadiene | 1800 | 0.00 | U | 257 | 14 | 12-106 | 73 * | 0-30 |
| 88-06-2 | MSD | 2,4,6-Trichlorophenol | 1800 | 0.00 | U | 617 | 34 | 32-103 | 66 * | 0-30 |
| 95-95-4 | MSD | 2,4,5-Trichlorophenol | 1800 | 0.00 | U | 691 | 38 | 38-109 | 60 * | 0-30 |
| 91-58-7 | MSD | 2-Chloronaphthalene | 1800 | 0.00 | U | 537 | 30 | 27-109 | 71 * | 0-30 |
| 88-74-4 | MSD | 2-Nitroaniline<br>*o-Nitroaniline* | 1800 | 0.00 | U | 720 | 40 | 37-114 | 58 * | 0-30 |
| 99-09-2 | MSD | 3-Nitroaniline<br>*m-Nitroaniline* | 1800 | 0.00 | U | 662 | 37 | 31-110 | 42 * | 0-30 |
| 131-11-3 | MSD | Dimethylphthalate | 1800 | 0.00 | U | 710 | 39 | 38-110 | 62 * | 0-30 |
| 606-20-2 | MSD | 2,6-Dinitrotoluene | 1800 | 0.00 | U | 683 | 38 | 36-107 | 58 * | 0-30 |
| 121-14-2 | MSD | 2,4-Dinitrotoluene | 1800 | 0.00 | U | 766 | 42 | 36-115 | 50 * | 0-30 |
| 208-96-8 | MSD | Acenaphthylene | 1800 | 0.00 | U | 560 | 31 * | 32-103 | 70 * | 0-30 |
| 83-32-9 | MSD | Acenaphthene | 1800 | 0.00 | U | 536 | 30 | 28-102 | 69 * | 0-30 |
| 51-28-5 | MSD | 2,4-Dinitrophenol | 1800 | 0.00 | U | 325 | 18 * | 19-101 | 75 * | 0-30 |
| 132-64-9 | MSD | Dibenzofuran | 1800 | 0.00 | U | 604 | 33 | 28-117 | 62 * | 0-30 |
| 84-66-2 | MSD | Diethylphthalate | 1800 | 0.00 | U | 785 | 44 | 40-113 | 54 * | 0-30 |
| 100-02-7 | MSD | 4-Nitrophenol | 1800 | 0.00 | U | 719 | 40 | 12-128 | 51 * | 0-30 |
| 86-73-7 | MSD | Fluorene | 1800 | 0.00 | U | 622 | 34 | 30-115 | 59 * | 0-30 |
| 7005-72-3 | MSD | 4-Chlorophenylphenylether | 1800 | 0.00 | U | 660 | 37 | 37-110 | 61 * | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3795**
**Client ID:** **RE57-14-84990MSD**
**Lab Sample ID** **1203132849**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **8**
**Analysis Date:** **07/24/2014 21:54**
**Prep Batch ID:** **1405531**
**Batch ID:** **1405532**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MSD | 4-Nitroaniline<br>*p-Nitroaniline* | 1800 | 0.00 | U | 792 | 44 | 36-141 | 49 * | 0-30 |
| 534-52-1 | MSD | 2-Methyl-4,6-dinitrophenol | 1800 | 0.00 | U | 492 | 27 | 14-116 | 62 * | 0-30 |
| 122-39-4 | MSD | Diphenylamine | 1800 | 0.00 | U | 704 | 39 | 34-111 | 58 * | 0-30 |
| 122-66-7 | MSD | Azobenzene<br>*1,2-Diphenylhydrazine* | 1800 | 0.00 | U | 784 | 43 | 35-105 | 61 * | 0-30 |
| 101-55-3 | MSD | 4-Bromophenylphenylether | 1800 | 0.00 | U | 688 | 38 | 37-112 | 57 * | 0-30 |
| 118-74-1 | MSD | Hexachlorobenzene | 1800 | 0.00 | U | 674 | 37 | 34-111 | 59 * | 0-30 |
| 87-86-5 | MSD | Pentachlorophenol | 1800 | 0.00 | U | 675 | 37 | 22-108 | 67 * | 0-30 |
| 85-01-8 | MSD | Phenanthrene | 1800 | 0.00 | U | 720 | 40 | 28-119 | 55 * | 0-30 |
| 120-12-7 | MSD | Anthracene | 1800 | 0.00 | U | 745 | 41 | 36-104 | 53 * | 0-30 |
| 84-74-2 | MSD | Di-n-butylphthalate | 1800 | 0.00 | U | 898 | 50 | 42-119 | 53 * | 0-30 |
| 206-44-0 | MSD | Fluoranthene | 1800 | 0.00 | U | 821 | 46 | 32-115 | 54 * | 0-30 |
| 129-00-0 | MSD | Pyrene | 1800 | 0.00 | U | 800 | 44 | 25-119 | 49 * | 0-30 |
| 85-68-7 | MSD | Butylbenzylphthalate | 1800 | 0.00 | U | 977 | 54 | 33-121 | 56 * | 0-30 |
| 117-81-7 | MSD | bis(2-Ethylhexyl)phthalate | 1800 | 0.00 | U | 1010 | 56 | 33-124 | 54 * | 0-30 |
| 56-55-3 | MSD | Benzo(a)anthracene | 1800 | 0.00 | U | 829 | 46 | 27-120 | 53 * | 0-30 |
| 218-01-9 | MSD | Chrysene | 1800 | 0.00 | U | 822 | 46 | 33-114 | 56 * | 0-30 |
| 117-84-0 | MSD | Di-n-octylphthalate | 1800 | 0.00 | U | 1010 | 56 | 36-115 | 54 * | 0-30 |
| 205-99-2 | MSD | Benzo(b)fluoranthene | 1800 | 0.00 | U | 829 | 46 | 30-119 | 64 * | 0-30 |
| 207-08-9 | MSD | Benzo(k)fluoranthene | 1800 | 0.00 | U | 862 | 48 | 31-125 | 61 * | 0-30 |
| 50-32-8 | MSD | Benzo(a)pyrene | 1800 | 0.00 | U | 840 | 47 | 31-116 | 52 * | 0-30 |
| 193-39-5 | MSD | Indeno(1,2,3-cd)pyrene | 1800 | 0.00 | U | 703 | 39 | 29-117 | 36 * | 0-30 |
| 53-70-3 | MSD | Dibenzo(a,h)anthracene | 1800 | 0.00 | U | 794 | 44 | 26-128 | 41 * | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Sample Type:** | **Matrix Spike Duplicate** |
| **Client ID:** | **RE57-14-84990MSD** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203132849** | **%Moisture:** | **8** |
| **Instrument:** | **MSD5.I** | **Analysis Date:** | **07/24/2014 21:54** |
| **Analyst:** | **RMB** | **Prep Batch ID:** | **1405531** |
| **Inj. Vol:** | **1 uL** | **Batch ID:** | **1405532** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MSD | Benzo(ghi)perylene | 1800 | 0.00 | U | 686 | 38 | 30-109 | 29 | 0-30 |
| 91-94-1 | MSD | 3,3'-Dichlorobenzidine | 1800 | 0.00 | U | 638 | 35 | 28-105 | 41 * | 0-30 |
| 120-82-1 | MSD | 1,2,4-Trichlorobenzene | 1800 | 0.00 | U | 431 | 24 * | 25-102 | 67 * | 0-30 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1405531** | **Instrument ID:** | **MSD5.I** | **Data File:** | **s072314.b\s5G2314.D** |
| **Lab Sample ID:** | **1203132846** | **Prep Date:** | **07/23/2014 10:03** | **Analyzed:** | **07/23/14 19:16** |
| **Column:** | **DB-5ms** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1405531 | 1203132847 | s072314.b\s5G2315.D | 07/23/14 | 1948 |
| 02 | RE57-14-84140 | 352623001 | s072314.b\s5G2316.D | 07/23/14 | 2019 |
| 03 | RE57-14-84151 | 352623002 | s072314.b\s5G2317.D | 07/23/14 | 2050 |
| 04 | RE57-14-84162 | 352623003 | s072314.b\s5G2318.D | 07/23/14 | 2122 |
| 05 | RE57-14-84163 | 352623004 | s072314.b\s5G2319.D | 07/23/14 | 2153 |
| 06 | RE57-14-84142 | 352623005 | s072314.b\s5G2320.D | 07/23/14 | 2224 |
| 07 | RE57-14-84164 | 352623006 | s072314.b\s5G2321.D | 07/23/14 | 2255 |
| 08 | RE57-14-84175 | 352623007 | s072314.b\s5G2322.D | 07/23/14 | 2327 |
| 09 | RE57-14-84154 | 352623008 | s072314.b\s5G2323.D | 07/23/14 | 2358 |
| 10 | RE57-14-84165 | 352623009 | s072314.b\s5G2324.D | 07/24/14 | 0029 |
| 11 | RE57-14-84176 | 352623010 | s072314.b\s5G2325.D | 07/24/14 | 0101 |
| 12 | RE57-14-84144 | 352623011 | s072314.b\s5G2326.D | 07/24/14 | 0132 |
| 13 | RE57-14-84177 | 352623013 | s072314.b\s5G2328.D | 07/24/14 | 0234 |
| 14 | RE57-14-84990MS | 1203132848 | s072314.b\s5G2331.D | 07/24/14 | 0408 |
| 15 | RE57-14-84155 | 352623012 | s072414.b\s5G2416.D | 07/24/14 | 2051 |
| 16 | RE57-14-84121 | 352623014 | s072414.b\s5G2417.D | 07/24/14 | 2123 |
| 17 | RE57-14-84990MSD | 1203132849 | s072414.b\s5G2418.D | 07/24/14 | 2154 |

# Quality Control Data

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132846** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2314.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 122-66-7 | Azobenzene | U | 333 | ug/kg | 99.9 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | U | 333 | ug/kg | 99.9 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | U | 666 | ug/kg | 99.9 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 333 | ug/kg | 99.9 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 333 | ug/kg | 99.9 | 333 |
| 91-58-7 | 2-Chloronaphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 95-57-8 | 2-Chlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 91-57-6 | 2-Methylnaphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 88-75-5 | 2-Nitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 333 | ug/kg | 99.9 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | U | 333 | ug/kg | 99.9 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 333 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | U | 333 | ug/kg | 99.9 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 333 | ug/kg | 99.9 | 333 |
| 100-02-7 | 4-Nitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 83-32-9 | Acenaphthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 208-96-8 | Acenaphthylene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 62-53-3 | Aniline | U | 333 | ug/kg | 99.9 | 333 |
| 120-12-7 | Anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 65-85-0 | Benzoic acid | U | 666 | ug/kg | 166 | 666 |
| 100-51-6 | Benzyl alcohol | U | 333 | ug/kg | 99.9 | 333 |
| 85-68-7 | Butylbenzylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 218-01-9 | Chrysene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 117-84-0 | Di-n-octylphthalate | U | 333 | ug/kg | 99.9 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132846** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2314.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 132-64-9 | Dibenzofuran | U | 333 | ug/kg | 99.9 | 333 |
| 84-66-2 | Diethylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 131-11-3 | Dimethylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 122-39-4 | Diphenylamine | U | 333 | ug/kg | 99.9 | 333 |
| 206-44-0 | Fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 86-73-7 | Fluorene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 118-74-1 | Hexachlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 87-68-3 | Hexachlorobutadiene | U | 333 | ug/kg | 99.9 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 333 | ug/kg | 99.9 | 333 |
| 67-72-1 | Hexachloroethane | U | 333 | ug/kg | 99.9 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 78-59-1 | Isophorone | U | 333 | ug/kg | 99.9 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 333 | ug/kg | 99.9 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | U | 333 | ug/kg | 99.9 | 333 |
| 91-20-3 | Naphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 98-95-3 | Nitrobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 87-86-5 | Pentachlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 85-01-8 | Phenanthrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 108-95-2 | Phenol | U | 333 | ug/kg | 99.9 | 333 |
| 129-00-0 | Pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 110-86-1 | Pyridine | U | 333 | ug/kg | 99.9 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 333 | ug/kg | 99.9 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 333 | ug/kg | 99.9 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 333 | ug/kg | 99.9 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 333 | ug/kg | 99.9 | 333 |
| 65794-96-9 | m,p-Cresols | U | 333 | ug/kg | 99.9 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 333 | ug/kg | 99.9 | 333 |
| 95-48-7 | o-Cresol | U | 333 | ug/kg | 99.9 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 333 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 333 | ug/kg | 99.9 | 333 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.911 | 362 | ug/kg | 0 | J |
| | unknown | 3.615 | 933 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132846** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2314.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.72 | 2220 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.32 | 144 | ug/kg | 96 | NJ |
| | unknown | 18.149 | 345 | ug/kg | 0 | J |
| | unknown | 22.792 | 1310 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132847** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:48** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2315.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1270 | ug/kg | 99.8 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1290 | ug/kg | 99.8 | 333 |
| 122-66-7 | Azobenzene | | 1380 | ug/kg | 99.8 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 1250 | ug/kg | 99.8 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1270 | ug/kg | 99.8 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1340 | ug/kg | 99.8 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1330 | ug/kg | 99.8 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | | 1210 | ug/kg | 99.8 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | | 1250 | ug/kg | 99.8 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | | 892 | ug/kg | 99.8 | 665 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1410 | ug/kg | 99.8 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1360 | ug/kg | 99.8 | 333 |
| 91-58-7 | 2-Chloronaphthalene | | 1340 | ug/kg | 9.98 | 33.3 |
| 95-57-8 | 2-Chlorophenol | | 1410 | ug/kg | 99.8 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 1060 | ug/kg | 99.8 | 333 |
| 91-57-6 | 2-Methylnaphthalene | | 1220 | ug/kg | 9.98 | 33.3 |
| 88-75-5 | 2-Nitrophenol | | 1250 | ug/kg | 99.8 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1400 | ug/kg | 99.8 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | | 1150 | ug/kg | 99.8 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1410 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | | 1060 | ug/kg | 99.8 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1410 | ug/kg | 99.8 | 333 |
| 100-02-7 | 4-Nitrophenol | | 1090 | ug/kg | 99.8 | 333 |
| 83-32-9 | Acenaphthene | | 1300 | ug/kg | 9.98 | 33.3 |
| 208-96-8 | Acenaphthylene | | 1340 | ug/kg | 9.98 | 33.3 |
| 62-53-3 | Aniline | | 1310 | ug/kg | 99.8 | 333 |
| 120-12-7 | Anthracene | | 1230 | ug/kg | 9.98 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | | 1330 | ug/kg | 9.98 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | | 1240 | ug/kg | 9.98 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | | 1200 | ug/kg | 9.98 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | | 1470 | ug/kg | 9.98 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | | 1180 | ug/kg | 9.98 | 33.3 |
| 65-85-0 | Benzoic acid | | 2030 | ug/kg | 166 | 665 |
| 100-51-6 | Benzyl alcohol | | 1270 | ug/kg | 99.8 | 333 |
| 85-68-7 | Butylbenzylphthalate | | 1500 | ug/kg | 99.8 | 333 |
| 218-01-9 | Chrysene | | 1350 | ug/kg | 9.98 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | | 1370 | ug/kg | 99.8 | 333 |
| 117-84-0 | Di-n-octylphthalate | | 1390 | ug/kg | 99.8 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203132847** | | | | |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1405531** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/23/2014 19:48** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2315.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1620 | ug/kg | 9.98 | 33.3 |
| 132-64-9 | Dibenzofuran | | 1320 | ug/kg | 99.8 | 333 |
| 84-66-2 | Diethylphthalate | | 1460 | ug/kg | 99.8 | 333 |
| 131-11-3 | Dimethylphthalate | | 1410 | ug/kg | 99.8 | 333 |
| 122-39-4 | Diphenylamine | | 1170 | ug/kg | 99.8 | 333 |
| 206-44-0 | Fluoranthene | | 1310 | ug/kg | 9.98 | 33.3 |
| 86-73-7 | Fluorene | | 1330 | ug/kg | 9.98 | 33.3 |
| 118-74-1 | Hexachlorobenzene | | 1210 | ug/kg | 99.8 | 333 |
| 87-68-3 | Hexachlorobutadiene | | 1210 | ug/kg | 99.8 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | | 871 | ug/kg | 99.8 | 333 |
| 67-72-1 | Hexachloroethane | | 1360 | ug/kg | 99.8 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1430 | ug/kg | 9.98 | 33.3 |
| 78-59-1 | Isophorone | | 1350 | ug/kg | 99.8 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1270 | ug/kg | 99.8 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | | 1500 | ug/kg | 99.8 | 333 |
| 91-20-3 | Naphthalene | | 1250 | ug/kg | 9.98 | 33.3 |
| 98-95-3 | Nitrobenzene | | 1320 | ug/kg | 99.8 | 333 |
| 87-86-5 | Pentachlorophenol | | 1150 | ug/kg | 99.8 | 333 |
| 85-01-8 | Phenanthrene | | 1220 | ug/kg | 9.98 | 33.3 |
| 108-95-2 | Phenol | | 1340 | ug/kg | 99.8 | 333 |
| 129-00-0 | Pyrene | | 1330 | ug/kg | 9.98 | 33.3 |
| 110-86-1 | Pyridine | | 959 | ug/kg | 99.8 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 1100 | ug/kg | 99.8 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1230 | ug/kg | 99.8 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1330 | ug/kg | 99.8 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1390 | ug/kg | 99.8 | 333 |
| 65794-96-9 | m,p-Cresols | | 1680 | ug/kg | 99.8 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1120 | ug/kg | 99.8 | 333 |
| 95-48-7 | o-Cresol | | 1490 | ug/kg | 99.8 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1350 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1440 | ug/kg | 99.8 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203132848** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84990MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 04:08** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.09 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2331.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 864 | ug/kg | 108 | 361 |
| 95-50-1 | 1,2-Dichlorobenzene | | 755 | ug/kg | 108 | 361 |
| 122-66-7 | Azobenzene | | 1480 | ug/kg | 108 | 361 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 699 | ug/kg | 108 | 361 |
| 106-46-7 | 1,4-Dichlorobenzene | | 707 | ug/kg | 108 | 361 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1290 | ug/kg | 108 | 361 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1220 | ug/kg | 108 | 361 |
| 120-83-2 | 2,4-Dichlorophenol | | 1090 | ug/kg | 108 | 361 |
| 105-67-9 | 2,4-Dimethylphenol | | 1120 | ug/kg | 108 | 361 |
| 51-28-5 | 2,4-Dinitrophenol | J | 716 | ug/kg | 108 | 722 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1280 | ug/kg | 108 | 361 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1250 | ug/kg | 108 | 361 |
| 91-58-7 | 2-Chloronaphthalene | | 1130 | ug/kg | 10.8 | 36.1 |
| 95-57-8 | 2-Chlorophenol | | 1030 | ug/kg | 108 | 361 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 929 | ug/kg | 108 | 361 |
| 91-57-6 | 2-Methylnaphthalene | | 965 | ug/kg | 10.8 | 36.1 |
| 88-75-5 | 2-Nitrophenol | | 923 | ug/kg | 108 | 361 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 964 | ug/kg | 108 | 361 |
| 101-55-3 | 4-Bromophenylphenylether | | 1240 | ug/kg | 108 | 361 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1380 | ug/kg | 144 | 361 |
| 106-47-8 | 4-Chloroaniline | | 955 | ug/kg | 108 | 361 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1240 | ug/kg | 108 | 361 |
| 100-02-7 | 4-Nitrophenol | | 1210 | ug/kg | 108 | 361 |
| 83-32-9 | Acenaphthene | | 1100 | ug/kg | 10.8 | 36.1 |
| 208-96-8 | Acenaphthylene | | 1160 | ug/kg | 10.8 | 36.1 |
| 62-53-3 | Aniline | | 936 | ug/kg | 108 | 361 |
| 120-12-7 | Anthracene | | 1280 | ug/kg | 10.8 | 36.1 |
| 56-55-3 | Benzo(a)anthracene | | 1420 | ug/kg | 10.8 | 36.1 |
| 50-32-8 | Benzo(a)pyrene | | 1430 | ug/kg | 10.8 | 36.1 |
| 205-99-2 | Benzo(b)fluoranthene | | 1610 | ug/kg | 10.8 | 36.1 |
| 191-24-2 | Benzo(ghi)perylene | | 918 | ug/kg | 10.8 | 36.1 |
| 207-08-9 | Benzo(k)fluoranthene | | 1620 | ug/kg | 10.8 | 36.1 |
| 65-85-0 | Benzoic acid | | 2450 | ug/kg | 181 | 722 |
| 100-51-6 | Benzyl alcohol | | 1040 | ug/kg | 108 | 361 |
| 85-68-7 | Butylbenzylphthalate | | 1730 | ug/kg | 108 | 361 |
| 218-01-9 | Chrysene | | 1470 | ug/kg | 10.8 | 36.1 |
| 84-74-2 | Di-n-butylphthalate | | 1550 | ug/kg | 108 | 361 |
| 117-84-0 | Di-n-octylphthalate | | 1760 | ug/kg | 108 | 361 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203132848** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84990MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 04:08** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.09 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072314.b\s5G2331.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1200 | ug/kg | 10.8 | 36.1 |
| 132-64-9 | Dibenzofuran | | 1140 | ug/kg | 108 | 361 |
| 84-66-2 | Diethylphthalate | | 1370 | ug/kg | 108 | 361 |
| 131-11-3 | Dimethylphthalate | | 1340 | ug/kg | 108 | 361 |
| 122-39-4 | Diphenylamine | | 1280 | ug/kg | 108 | 361 |
| 206-44-0 | Fluoranthene | | 1430 | ug/kg | 10.8 | 36.1 |
| 86-73-7 | Fluorene | | 1140 | ug/kg | 10.8 | 36.1 |
| 118-74-1 | Hexachlorobenzene | | 1240 | ug/kg | 108 | 361 |
| 87-68-3 | Hexachlorobutadiene | | 767 | ug/kg | 108 | 361 |
| 77-47-4 | Hexachlorocyclopentadiene | | 555 | ug/kg | 108 | 361 |
| 67-72-1 | Hexachloroethane | | 761 | ug/kg | 108 | 361 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1010 | ug/kg | 10.8 | 36.1 |
| 78-59-1 | Isophorone | | 1090 | ug/kg | 108 | 361 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 728 | ug/kg | 108 | 361 |
| 621-64-7 | N-Nitrosodipropylamine | | 1130 | ug/kg | 108 | 361 |
| 91-20-3 | Naphthalene | | 895 | ug/kg | 10.8 | 36.1 |
| 98-95-3 | Nitrobenzene | | 944 | ug/kg | 108 | 361 |
| 87-86-5 | Pentachlorophenol | | 1350 | ug/kg | 108 | 361 |
| 85-01-8 | Phenanthrene | | 1270 | ug/kg | 10.8 | 36.1 |
| 108-95-2 | Phenol | | 1050 | ug/kg | 108 | 361 |
| 129-00-0 | Pyrene | | 1320 | ug/kg | 10.8 | 36.1 |
| 110-86-1 | Pyridine | | 460 | ug/kg | 108 | 361 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 703 | ug/kg | 108 | 361 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 947 | ug/kg | 108 | 361 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 778 | ug/kg | 108 | 361 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1750 | ug/kg | 108 | 361 |
| 65794-96-9 | m,p-Cresols | | 1490 | ug/kg | 108 | 361 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1010 | ug/kg | 108 | 361 |
| 95-48-7 | o-Cresol | | 1210 | ug/kg | 108 | 361 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1300 | ug/kg | 119 | 361 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1300 | ug/kg | 108 | 361 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203132849** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84990MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 21:54** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2418.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 431 | ug/kg | 108 | 361 |
| 95-50-1 | 1,2-Dichlorobenzene | | 409 | ug/kg | 108 | 361 |
| 122-66-7 | Azobenzene | | 784 | ug/kg | 108 | 361 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 378 | ug/kg | 108 | 361 |
| 106-46-7 | 1,4-Dichlorobenzene | | 391 | ug/kg | 108 | 361 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 691 | ug/kg | 108 | 361 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 617 | ug/kg | 108 | 361 |
| 120-83-2 | 2,4-Dichlorophenol | | 494 | ug/kg | 108 | 361 |
| 105-67-9 | 2,4-Dimethylphenol | | 478 | ug/kg | 108 | 361 |
| 51-28-5 | 2,4-Dinitrophenol | J | 325 | ug/kg | 108 | 722 |
| 121-14-2 | 2,4-Dinitrotoluene | | 766 | ug/kg | 108 | 361 |
| 606-20-2 | 2,6-Dinitrotoluene | | 683 | ug/kg | 108 | 361 |
| 91-58-7 | 2-Chloronaphthalene | | 537 | ug/kg | 10.8 | 36.1 |
| 95-57-8 | 2-Chlorophenol | | 508 | ug/kg | 108 | 361 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 492 | ug/kg | 108 | 361 |
| 91-57-6 | 2-Methylnaphthalene | | 448 | ug/kg | 10.8 | 36.1 |
| 88-75-5 | 2-Nitrophenol | | 426 | ug/kg | 108 | 361 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 638 | ug/kg | 108 | 361 |
| 101-55-3 | 4-Bromophenylphenylether | | 688 | ug/kg | 108 | 361 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 713 | ug/kg | 144 | 361 |
| 106-47-8 | 4-Chloroaniline | | 468 | ug/kg | 108 | 361 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 660 | ug/kg | 108 | 361 |
| 100-02-7 | 4-Nitrophenol | | 719 | ug/kg | 108 | 361 |
| 83-32-9 | Acenaphthene | | 536 | ug/kg | 10.8 | 36.1 |
| 208-96-8 | Acenaphthylene | | 560 | ug/kg | 10.8 | 36.1 |
| 62-53-3 | Aniline | | 441 | ug/kg | 108 | 361 |
| 120-12-7 | Anthracene | | 745 | ug/kg | 10.8 | 36.1 |
| 56-55-3 | Benzo(a)anthracene | | 829 | ug/kg | 10.8 | 36.1 |
| 50-32-8 | Benzo(a)pyrene | | 840 | ug/kg | 10.8 | 36.1 |
| 205-99-2 | Benzo(b)fluoranthene | | 829 | ug/kg | 10.8 | 36.1 |
| 191-24-2 | Benzo(ghi)perylene | | 686 | ug/kg | 10.8 | 36.1 |
| 207-08-9 | Benzo(k)fluoranthene | | 862 | ug/kg | 10.8 | 36.1 |
| 65-85-0 | Benzoic acid | | 1320 | ug/kg | 180 | 722 |
| 100-51-6 | Benzyl alcohol | | 500 | ug/kg | 108 | 361 |
| 85-68-7 | Butylbenzylphthalate | | 977 | ug/kg | 108 | 361 |
| 218-01-9 | Chrysene | | 822 | ug/kg | 10.8 | 36.1 |
| 84-74-2 | Di-n-butylphthalate | | 898 | ug/kg | 108 | 361 |
| 117-84-0 | Di-n-octylphthalate | | 1010 | ug/kg | 108 | 361 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3795** | **Date Collected:** | **07/17/2014 08:29** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203132849** | **Date Received:** | **07/19/2014 08:40** | **%Moisture:** | **8** |
| **Client Sample:** | **QC for batch 1405531** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84990MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1405532** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/24/2014 21:54** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/23/2014 10:03** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072414.b\s5G2418.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 794 | ug/kg | 10.8 | 36.1 |
| 132-64-9 | Dibenzofuran | | 604 | ug/kg | 108 | 361 |
| 84-66-2 | Diethylphthalate | | 785 | ug/kg | 108 | 361 |
| 131-11-3 | Dimethylphthalate | | 710 | ug/kg | 108 | 361 |
| 122-39-4 | Diphenylamine | | 704 | ug/kg | 108 | 361 |
| 206-44-0 | Fluoranthene | | 821 | ug/kg | 10.8 | 36.1 |
| 86-73-7 | Fluorene | | 622 | ug/kg | 10.8 | 36.1 |
| 118-74-1 | Hexachlorobenzene | | 674 | ug/kg | 108 | 361 |
| 87-68-3 | Hexachlorobutadiene | | 389 | ug/kg | 108 | 361 |
| 77-47-4 | Hexachlorocyclopentadiene | J | 257 | ug/kg | 108 | 361 |
| 67-72-1 | Hexachloroethane | | 415 | ug/kg | 108 | 361 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 703 | ug/kg | 10.8 | 36.1 |
| 78-59-1 | Isophorone | | 496 | ug/kg | 108 | 361 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 400 | ug/kg | 108 | 361 |
| 621-64-7 | N-Nitrosodipropylamine | | 514 | ug/kg | 108 | 361 |
| 91-20-3 | Naphthalene | | 423 | ug/kg | 10.8 | 36.1 |
| 98-95-3 | Nitrobenzene | | 455 | ug/kg | 108 | 361 |
| 87-86-5 | Pentachlorophenol | | 675 | ug/kg | 108 | 361 |
| 85-01-8 | Phenanthrene | | 720 | ug/kg | 10.8 | 36.1 |
| 108-95-2 | Phenol | | 505 | ug/kg | 108 | 361 |
| 129-00-0 | Pyrene | | 800 | ug/kg | 10.8 | 36.1 |
| 110-86-1 | Pyridine | J | 290 | ug/kg | 108 | 361 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 362 | ug/kg | 108 | 361 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 419 | ug/kg | 108 | 361 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 412 | ug/kg | 108 | 361 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1010 | ug/kg | 108 | 361 |
| 65794-96-9 | m,p-Cresols | | 691 | ug/kg | 108 | 361 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 662 | ug/kg | 108 | 361 |
| 95-48-7 | o-Cresol | | 575 | ug/kg | 108 | 361 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 720 | ug/kg | 119 | 361 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 792 | ug/kg | 108 | 361 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 28-JUL-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| SEMIVOA GC/MS | SW846 3541/8270D | Solid | ARSL (LANL) |
| **Batch ID:** | **Sample Numbers:** | | |
| 1405532 | See Below | | |

**Potentially affected work order(s)(SDG): 352623(2014-3795),353064(2014-3910)**

**Application Issues:**

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for MSD/PSD

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. The 1203132849MSD failed spike recovery for multiple analytes. Please see the QC Summary/Spike Recovery Report for the specific analytes and associated recoveries.<br><br>2. Multiple RPD values between the 1203132848MS and 1203132849MSD were not within the 0-30% limits. Please see the QC Summary/Spike Recovery Report for the specific analyte pairs and associated RPD values. | 1. The MS and LCS passed recoveries. The data are reported.<br><br>2. These RPD failures are attributed to the large difference in the recovery values between analyte pairs in the MS and MSD. The MS and LCS passed recovery for all analytes. The data are reported. |

**Originator's Name:**

Richard Bomar 29-JUL-14

**Data Validator/Group Leader:**

Herbert Maier 29-JUL-14

# Perchlorates by LCMSMS Analysis

# Case Narrative

**Perchlorate by LC-MS/MS**
**ARS International, LLC (ARSL)**
**SDG 2014-3795**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography-Mass Spectrometry/Mass Spectrometry (LC-MS/MS) by EPA Method 6850 Modified (6850M)** |
| Analytical Method: | SW846 6850 Modified |
| Prep Method: | SW846 6850 Modified |
| Analytical Batch Number: | 1404629 |
| Prep Batch Number: | 1404628 |

## Sample Analysis

| Sample ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 1203130460 | Interference Check Sample (ICS) |
| 1203130456 | Method Blank (MB) |
| 1203130457 | Laboratory Control Sample (LCS) |
| 1203130458 | 352623001(RE57-14-84140) Matrix Spike (MS) |
| 1203130459 | 352623001(RE57-14-84140) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP).

The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 11.

## Calibration Information

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

**ICV Requirements**
The initial calibration verification standard (ICV) met the acceptance criteria.

**CCB Requirements**
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

**CCV Requirements**
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

**Low Level Standard (CRI) Requirements**
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

## Quality Control (QC) Information

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Interference Check Sample (ICS)**
The ICS spike recoveries met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Client sample 352623001 (RE57-14-84140) was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
The RPDs between the MS and MSD met the acceptance limits.

**Retention Time Standard Area Acceptance**
The retention time standard areas were within the required acceptance criteria for all samples and QC.

**Retention Time**
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard.

The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used.

In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

## Technical Information

**Holding Time Specifications**
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-extractions or re-analyses were not required in this SDG.

## Miscellaneous Information

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents.

A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

**Method Comments**
The samples in this SDG were not originally analyzed using EPA Method 314.0.

**Additional Comments**
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred.

Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

**Perchlorate Isotope Ratio**
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples.

Please see the isotope ratio criteria in the Miscellaneous Section.

**System Configuration**

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for Perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1 and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for Perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package.

Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Chromatographic Columns**

Chromatographic separation of Perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3795  GEL Work Order: 352623

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Michael A. Penny Jr.  **Name: Michael Penny**

**Date: 24 JUL 2014**  **Title: Group Leader**

# Sample Data Summary

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84140

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623001

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .543 | 2.17 | 2.17 | ug/kg | U | 1 | 22-JUL-14 20:28 | per0722015a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 20:28 | per0722015a |
| 14797-73-0 | Perchlorate-101 | .543 | 2.17 | 2.17 | ug/kg | U | 1 | 22-JUL-14 20:28 | per0722015a |
| | Perchlorate-O(18) | | | 5.11 | ug/kg | | 1 | 22-JUL-14 20:28 | per0722015a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84151

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623002

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 95.5

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .516 | 2.06 | 2.06 | ug/kg | U | 1 | 22-JUL-14 20:54 | per0722018a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 20:54 | per0722018a |
| 14797-73-0 | Perchlorate-101 | .516 | 2.06 | 2.06 | ug/kg | U | 1 | 22-JUL-14 20:54 | per0722018a |
| | Perchlorate-O(18) | | | 4.81 | ug/kg | | 1 | 22-JUL-14 20:54 | per0722018a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84162

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623003

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 95.7

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .522 | 2.09 | 2.09 | ug/kg | U | 1 | 22-JUL-14 21:02 | per0722019a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 21:02 | per0722019a |
| 14797-73-0 | Perchlorate-101 | .522 | 2.09 | 2.09 | ug/kg | U | 1 | 22-JUL-14 21:02 | per0722019a |
| | Perchlorate-O(18) | | | 5.04 | ug/kg | | 1 | 22-JUL-14 21:02 | per0722019a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84163

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623004

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 96.6

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .515 | 2.06 | 2.06 | ug/kg | U | 1 | 22-JUL-14 21:11 | per0722020a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 21:11 | per0722020a |
| 14797-73-0 | Perchlorate-101 | .515 | 2.06 | 2.06 | ug/kg | U | 1 | 22-JUL-14 21:11 | per0722020a |
| | Perchlorate-O(18) | | | 4.95 | ug/kg | | 1 | 22-JUL-14 21:11 | per0722020a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84142

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623005

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .541 | 2.16 | 2.16 | ug/kg | U | 1 | 22-JUL-14 21:19 | per0722021a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 21:19 | per0722021a |
| 14797-73-0 | Perchlorate-101 | .541 | 2.16 | 2.16 | ug/kg | U | 1 | 22-JUL-14 21:19 | per0722021a |
| | Perchlorate-O(18) | | | 5.02 | ug/kg | | 1 | 22-JUL-14 21:19 | per0722021a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84164

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623006

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 90

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .553 | 2.21 | 2.21 | ug/kg | U | 1 | 22-JUL-14 21:53 | per0722025a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 21:53 | per0722025a |
| 14797-73-0 | Perchlorate-101 | .553 | 2.21 | 2.21 | ug/kg | U | 1 | 22-JUL-14 21:53 | per0722025a |
| | Perchlorate-O(18) | | | 5.23 | ug/kg | | 1 | 22-JUL-14 21:53 | per0722025a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84175

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623007

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 90

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .551 | 2.2 | 2.20 | ug/kg | U | 1 | 22-JUL-14 22:01 | per0722026a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 22:01 | per0722026a |
| 14797-73-0 | Perchlorate-101 | .551 | 2.2 | 2.20 | ug/kg | U | 1 | 22-JUL-14 22:01 | per0722026a |
| | Perchlorate-O(18) | | | 5.19 | ug/kg | | 1 | 22-JUL-14 22:01 | per0722026a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84154

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623008

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 87

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .565 | 2.26 | 0.788 | ug/kg | J | 1 | 22-JUL-14 22:10 | per0722027a |
| | Perchlorate Isotope Ratio | | | 2.9 | | | 1 | 22-JUL-14 22:10 | per0722027a |
| 14797-73-0 | Perchlorate-101 | .565 | 2.26 | 0.825 | ug/kg | J | 1 | 22-JUL-14 22:10 | per0722027a |
| | Perchlorate-O(18) | | | 5.43 | ug/kg | | 1 | 22-JUL-14 22:10 | per0722027a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84165

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623009

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 91

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .541 | 2.16 | 0.814 | ug/kg | J | 1 | 22-JUL-14 22:18 | per0722028a |
| | Perchlorate Isotope Ratio | | | 3.1 | | | 1 | 22-JUL-14 22:18 | per0722028a |
| 14797-73-0 | Perchlorate-101 | .541 | 2.16 | 0.800 | ug/kg | J | 1 | 22-JUL-14 22:18 | per0722028a |
| | Perchlorate-O(18) | | | 5.12 | ug/kg | | 1 | 22-JUL-14 22:18 | per0722028a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84176

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623010

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 90.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .555 | 2.22 | 2.22 | ug/kg | U | 1 | 22-JUL-14 22:27 | per0722029a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 22:27 | per0722029a |
| 14797-73-0 | Perchlorate-101 | .555 | 2.22 | 2.22 | ug/kg | U | 1 | 22-JUL-14 22:27 | per0722029a |
| | Perchlorate-O(18) | | | 5.27 | ug/kg | | 1 | 22-JUL-14 22:27 | per0722029a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84144

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623011

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.6

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .534 | 2.14 | 2.14 | ug/kg | U | 1 | 22-JUL-14 22:35 | per0722030a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 22:35 | per0722030a |
| 14797-73-0 | Perchlorate-101 | .534 | 2.14 | 2.14 | ug/kg | U | 1 | 22-JUL-14 22:35 | per0722030a |
| | Perchlorate-O(18) | | | 4.99 | ug/kg | | 1 | 22-JUL-14 22:35 | per0722030a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84155

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623012

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 89

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .561 | 2.25 | 2.25 | ug/kg | U | 1 | 22-JUL-14 22:44 | per0722031a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 22:44 | per0722031a |
| 14797-73-0 | Perchlorate-101 | .561 | 2.25 | 2.25 | ug/kg | U | 1 | 22-JUL-14 22:44 | per0722031a |
| | Perchlorate-O(18) | | | 5.29 | ug/kg | | 1 | 22-JUL-14 22:44 | per0722031a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84177

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623013

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.8

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .531 | 2.12 | 2.12 | ug/kg | U | 1 | 22-JUL-14 22:52 | per0722032a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 22:52 | per0722032a |
| 14797-73-0 | Perchlorate-101 | .531 | 2.12 | 2.12 | ug/kg | U | 1 | 22-JUL-14 22:52 | per0722032a |
| | Perchlorate-O(18) | | | 5.05 | ug/kg | | 1 | 22-JUL-14 22:52 | per0722032a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84121

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 352623014

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 89

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .561 | 2.24 | 0.865 | ug/kg | J | 1 | 22-JUL-14 23:01 | per0722033a |
| | Perchlorate Isotope Ratio | | | 3.24 | | | 1 | 22-JUL-14 23:01 | per0722033a |
| 14797-73-0 | Perchlorate-101 | .561 | 2.24 | 0.811 | ug/kg | J | 1 | 22-JUL-14 23:01 | per0722033a |
| | Perchlorate-O(18) | | | 5.37 | ug/kg | | 1 | 22-JUL-14 23:01 | per0722033a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Quality Control Summary

## Perchlorate Laboratory Control Sample

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No. (SDG):** 2014-3795

**Extract Batch Code:** 1404628

**Date Filtered:** 22-JUL-14

**Matrix:** SOIL

**Sample ID:** 1203130457

| Analyte^ | True | Found | Units | %Rec | Q | Control Limits |
|---|---|---|---|---|---|---|
| Perchlorate | 1.97 | 1.87 | ug/kg | 95.0 | | 70 - 130 |
| Perchlorate Isotope Ratio | | 2.91 | | | | - |
| Perchlorate-101 | 1.97 | 1.95 | ug/kg | 99.2 | | 70 - 130 |
| Perchlorate-O(18) | | 4.78 | ug/kg | | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

## Perchlorate Spike/Spike Duplicate Summary

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No (SDG):** 2014-3795

**Extract Batch Code:** 1404628

**Date Extracted:** 22-JUL-14

**GEL MS/PS ID:** 1203130458

**Client ID:** RE57-14-84140

**GEL MSD/PSD ID:** 1203130459

**QC Type:** MS

| Compound^ | Spike Added | Sample Conc | Units | MS Conc | MS Rec # | MSD Conc | MSD Rec # | RPD # | RPD Limit | Recovery Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 2.16 | 0.202 | ug/kg | 2.20 | 92.7 | 2.21 | 92.4 | .155 | 30 | 75 - 125 |
| Perchlorate Isotope Ratio | 0 | 3.18 | | 3.01 | | 2.91 | | 3.5 | | - |
| Perchlorate-101 | 2.16 | 0.193 | ug/kg | 2.22 | 94 | 2.31 | 97.3 | 3.65 | 30 | 75 - 125 |
| Perchlorate-O(18) | 0 | 5.11 | ug/kg | 5.25 | | 5.17 | | 1.37 | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

# Quality Control Data

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
MB

**Date Received:** 22-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 1203130456

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .493 | 1.97 | 1.97 | ug/kg | U | 1 | 22-JUL-14 20:03 | per0722012a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 22-JUL-14 20:03 | per0722012a |
| 14797-73-0 | Perchlorate-101 | .493 | 1.97 | 1.97 | ug/kg | U | 1 | 22-JUL-14 20:03 | per0722012a |
| | Perchlorate-O(18) | | | 4.69 | ug/kg | | 1 | 22-JUL-14 20:03 | per0722012a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
LCS

**Date Received:** 22-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 1203130457

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .493 | 1.97 | 1.87 | ug/kg | J | 1 | 22-JUL-14 20:12 | per0722013a |
| | Perchlorate Isotope Ratio | | | 2.91 | | | 1 | 22-JUL-14 20:12 | per0722013a |
| 14797-73-0 | Perchlorate-101 | .493 | 1.97 | 1.95 | ug/kg | J | 1 | 22-JUL-14 20:12 | per0722013a |
| | Perchlorate-O(18) | | | 4.78 | ug/kg | | 1 | 22-JUL-14 20:12 | per0722013a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
ICS

**Date Received:**

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 1203130460

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .5 | 2 | 1.86 | ug/kg | J | 1 | 22-JUL-14 20:20 | per0722014a |
| | Perchlorate Isotope Ratio | | | 2.91 | | | 1 | 22-JUL-14 20:20 | per0722014a |
| 14797-73-0 | Perchlorate-101 | .5 | 2 | 1.95 | ug/kg | J | 1 | 22-JUL-14 20:20 | per0722014a |
| | Perchlorate-O(18) | | | 4.96 | ug/kg | | 1 | 22-JUL-14 20:20 | per0722014a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84140MS

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 1203130458

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .54 | 2.16 | 2.20 | ug/kg | | 1 | 22-JUL-14 20:37 | per0722016a |
| | Perchlorate Isotope Ratio | | | 3.01 | | | 1 | 22-JUL-14 20:37 | per0722016a |
| 14797-73-0 | Perchlorate-101 | .54 | 2.16 | 2.22 | ug/kg | | 1 | 22-JUL-14 20:37 | per0722016a |
| | Perchlorate-O(18) | | | 5.25 | ug/kg | | 1 | 22-JUL-14 20:37 | per0722016a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1404628

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84140MSD

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3795

**GEL Sample ID:** 1203130459

**Date Filtered:** 22-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .543 | 2.17 | 2.21 | ug/kg | | 1 | 22-JUL-14 20:45 | per0722017a |
| | Perchlorate Isotope Ratio | | | 2.91 | | | 1 | 22-JUL-14 20:45 | per0722017a |
| 14797-73-0 | Perchlorate-101 | .543 | 2.17 | 2.31 | ug/kg | | 1 | 22-JUL-14 20:45 | per0722017a |
| | Perchlorate-O(18) | | | 5.17 | ug/kg | | 1 | 22-JUL-14 20:45 | per0722017a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Metals Analysis

# Case Narrative

**Sample Analysis**

| Sample ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 352623015 | RE57-14-84125 |
| 352623016 | RE57-14-84126 |
| 1203128049 | Method Blank (MB) **ICP** |
| 1203128060 | Method Blank (MB) **ICP** |
| 1203128050 | Laboratory Control Sample (LCS) |
| 1203128061 | Laboratory Control Sample (LCS) |
| 1203128064 | 352623001(RE57-14-84140L) Serial Dilution (SD) |
| 1203128054 | 352623015(RE57-14-84125L) Serial Dilution (SD) |
| 1203128062 | 352623001(RE57-14-84140D) Sample Duplicate (DUP) |
| 1203128063 | 352623001(RE57-14-84140S) Matrix Spike (MS) |
| 1203128052 | 352623015(RE57-14-84125S) Matrix Spike (MS) |
| 1203128053 | 352623015(RE57-14-84125SD) Matrix Spike Duplicate (MSD) |

| | |
|---|---|
| 1203145723 | 352623001(RE57-14-84140PS) Post Spike (PS) |
| 1203128075 | Method Blank (MB) **ICP-MS** |
| 1203128093 | Method Blank (MB) **ICP-MS** |
| 1203128076 | Laboratory Control Sample (LCS) |
| 1203128094 | Laboratory Control Sample (LCS) |
| 1203128097 | 352623001(RE57-14-84140L) Serial Dilution (SD) |
| 1203128079 | 352623015(RE57-14-84125L) Serial Dilution (SD) |
| 1203128095 | 352623001(RE57-14-84140D) Sample Duplicate (DUP) |
| 1203128077 | 352623015(RE57-14-84125D) Sample Duplicate (DUP) |
| 1203128096 | 352623001(RE57-14-84140S) Matrix Spike (MS) |
| 1203128078 | 352623015(RE57-14-84125S) Matrix Spike (MS) |
| 1203148998 | 352623015(RE57-14-84125PS) Post Spike (PS) |
| 1203132305 | Method Blank (MB) **CVAA** |
| 1203133217 | Method Blank (MB) **CVAA** |
| 1203132306 | Laboratory Control Sample (LCS) |
| 1203133218 | Laboratory Control Sample (LCS) |
| 1203133221 | 352623001(RE57-14-84140L) Serial Dilution (SD) |
| 1203132309 | 352623015(RE57-14-84125L) Serial Dilution (SD) |
| 1203133219 | 352623001(RE57-14-84140D) Sample Duplicate (DUP) |
| 1203132307 | 352623015(RE57-14-84125D) Sample Duplicate (DUP) |
| 1203133220 | 352623001(RE57-14-84140S) Matrix Spike (MS) |
| 1203132308 | 352623015(RE57-14-84125S) Matrix Spike (MS) |

Samples 352623 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013 and 014 in this SDG were analyzed on a "dry weight" basis. Samples 352623 015 and 016 in this SDG were analyzed on an "as received" basis.

**Method/Analysis Information**

| | |
|---|---|
| **Analytical Batch:** | 1403624, 1403628, 1403634, 1403639, 1405304 and 1405678 |
| **Prep Batch :** | 1403622, 1403627, 1403633, 1403638, 1405303 and 1405677 |
| **Standard Operating Procedures:** | GL-MA-E-013 REV# 22, GL-MA-E-006 REV# 11, GL-MA-E-009 REV# 24, GL-MA-E-014 REV# 25 and GL-MA-E-010 REV# 28 |
| **Analytical Method:** | SW846 3005A/6010C, SW846 3050B/6010C, SW846 3005A/6020A, SW846 3050B/6020A, EPA 245.1/245.2 and SW846 7471A |

**Prep Method :** SW846 3005A, SW846 3050B, EPA 245.1/245.2 Prep and SW846 7471A Prep

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**System Configuration**

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with an ESI SC-FAST introduction, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 0.4L/min, argon gas flows of 13 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a PE 7300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with an ESI SC-FAST introduction, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 0.4L/min, argon gas flows of 13 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

The Metals analysis - ICPMS was performed on a PerkinElmer NexION 300X ICPMS. The instrument is equipped with a ESI PFA-ST nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1600W power, 16 L/m for the plasma, and 1.2 L/m auxiliary gases, and 1.12 L/min carrier gas flow.

**Calibration Information**

**Instrument Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**CRDL/PQL Requirements**
The CRDL/PQL standard recoveries met the referenced advisory control limits.

**ICSA/ICSAB Statement**
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blanks (CCB) Requirements**
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**
The following samples were selected as the quality control (QC) samples for this SDG: 352623015 (RE57-14-84125) and 352623001 (RE57-14-84140)-ICP, ICP-MS and CVAA.

**Matrix Spike (MS) Recovery Statement**
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. Not all the applicable analyte recoveries were within the acceptance criteria. Recoveries for magnesium and potassium were not within the acceptance limits in sample 1203128063 (RE57-14-84140)-ICP. The recovery for thallium was not within the acceptance limits in sample 1203128078 (RE57-14-84125)-ICP-MS.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The percent recovery (%R) obtained from the MSD analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. All applicable analytes met the acceptance criteria.

**MS/MSD Relative Percent Difference (RPD) Statement**
The relative percent difference (RPD) obtained from the designated matrix spike duplicate (MSD) is evaluated based on acceptance criteria of 20%. The RPD values between qualifying analyte results in the MS and MSD were within the acceptance limits.

**Serial Dilution % Difference Statement**
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the established acceptance percent difference criteria.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. All applicable analytes met these requirements.

**Post Spike (PS) Recovery Statement**
The percent recoveries (%R) obtained from the PS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The PS 1203148998 (RE57-14-84125)-ICP-MS did not meet the recommended quality control acceptance criteria for percent recoveries for thallium and verifies the presence of matrix interferences.

**Technical Information**

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Sample Dilutions**
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times. ICP-MS.

**Preparation Information**
The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. Data exception reports were included behind the Case Narrative or in the Miscellaneous Data section of this data package. The following DER was generated for this SDG: 1322786. ICP. The following DER was generated for this SDG: 1324792. ICP-MS.

**Additional Comments**
Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:** Pat Steele **Date:** 08/15/2014

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3795  GEL Work Order: 352623

**The Qualifiers in this report are defined as follows:**

* A quality control analyte recovery is outside of specified acceptance criteria

J Value is estimated

N Metals--The Matrix spike sample recovery is not within specified control limits

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Pat Steele 08/15/2014

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623001 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84140 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 92.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5730000 | ug/kg | | 7130 | 21000 | 21000 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 488 | ug/kg | J | 346 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1280 | ug/kg | | 215 | 1080 | 1080 | 2 | MS | BAJ | 08/15/14 07:37 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 77300 | ug/kg | | 105 | 524 | 524 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 472 | ug/kg | | 21.5 | 108 | 108 | 2 | MS | BAJ | 08/15/14 07:37 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 524 | ug/kg | U | 105 | 524 | 524 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1100000 | ug/kg | | 8390 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 3670 | ug/kg | | 157 | 524 | 524 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 1860 | ug/kg | | 157 | 524 | 524 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 2660 | ug/kg | | 315 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 8540000 | ug/kg | | 8390 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 9800 | ug/kg | | 346 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 596000 | ug/kg | N | 8910 | 31500 | 31500 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 412000 | ug/kg | | 210 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 11.4 | ug/kg | J | 4.23 | 12.6 | 12.6 | 1 | AV | MTM1 | 07/24/14 11:12 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 3240 | ug/kg | | 108 | 430 | 430 | 2 | MS | BAJ | 08/15/14 07:37 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 711000 | ug/kg | N | 6710 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1080 | ug/kg | U | 355 | 1080 | 1080 | 2 | MS | BAJ | 08/15/14 07:37 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 115 | ug/kg | J | 105 | 524 | 524 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 103000 | ug/kg | | 7340 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 87.3 | ug/kg | J | 64.5 | 430 | 430 | 2 | MS | BAJ | 08/15/14 07:37 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 8300 | ug/kg | | 105 | 524 | 524 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 43100 | ug/kg | | 419 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:01 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.518 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.505 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.516 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623002 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84151 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 95.5

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4510000 | ug/kg | | 6520 | 19200 | 19200 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 437 | ug/kg | J | 316 | 959 | 959 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1010 | ug/kg | J | 206 | 1030 | 1030 | 2 | MS | BAJ | 08/15/14 08:11 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 54800 | ug/kg | | 95.9 | 479 | 479 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 393 | ug/kg | | 20.6 | 103 | 103 | 2 | MS | BAJ | 08/15/14 08:11 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 479 | ug/kg | U | 95.9 | 479 | 479 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1020000 | ug/kg | | 7670 | 24000 | 24000 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 3630 | ug/kg | | 144 | 479 | 479 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 1690 | ug/kg | | 144 | 479 | 479 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 2200 | ug/kg | | 288 | 959 | 959 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 7730000 | ug/kg | | 7670 | 24000 | 24000 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 9280 | ug/kg | | 316 | 959 | 959 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 525000 | ug/kg | N | 8150 | 28800 | 28800 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 313000 | ug/kg | | 192 | 959 | 959 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 11.4 | ug/kg | J | 4.1 | 12.2 | 12.2 | 1 | AV | MTM1 | 07/24/14 11:20 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 2740 | ug/kg | | 103 | 413 | 413 | 2 | MS | BAJ | 08/15/14 08:11 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 635000 | ug/kg | N | 6130 | 24000 | 24000 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1030 | ug/kg | U | 341 | 1030 | 1030 | 2 | MS | BAJ | 08/15/14 08:11 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 479 | ug/kg | U | 95.9 | 479 | 479 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 107000 | ug/kg | | 6710 | 24000 | 24000 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 413 | ug/kg | U | 61.9 | 413 | 413 | 2 | MS | BAJ | 08/15/14 08:11 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 7100 | ug/kg | | 95.9 | 479 | 479 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 41400 | ug/kg | | 383 | 959 | 959 | 1 | P | HSC | 08/09/14 21:15 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.546 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.507 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.513 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623003 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84162 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 95.7

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3660000 | ug/kg | | 6700 | 19700 | 19700 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 986 | ug/kg | U | 325 | 986 | 986 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 789 | ug/kg | J | 197 | 984 | 984 | 2 | MS | BAJ | 08/15/14 08:15 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 22000 | ug/kg | | 98.6 | 493 | 493 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 749 | ug/kg | | 19.7 | 98.4 | 98.4 | 2 | MS | BAJ | 08/15/14 08:15 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 493 | ug/kg | U | 98.6 | 493 | 493 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 228000 | ug/kg | | 7890 | 24600 | 24600 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 46900 | ug/kg | | 148 | 493 | 493 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 780 | ug/kg | | 148 | 493 | 493 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 2790 | ug/kg | | 296 | 986 | 986 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 7820000 | ug/kg | | 7890 | 24600 | 24600 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 11500 | ug/kg | | 325 | 986 | 986 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 108000 | ug/kg | N | 8380 | 29600 | 29600 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 434000 | ug/kg | | 197 | 986 | 986 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 7.03 | ug/kg | J | 4.06 | 12.1 | 12.1 | 1 | AV | MTM1 | 07/24/14 11:22 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 1850 | ug/kg | | 98.4 | 394 | 394 | 2 | MS | BAJ | 08/15/14 08:15 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 727000 | ug/kg | N | 6310 | 24600 | 24600 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 984 | ug/kg | U | 325 | 984 | 984 | 2 | MS | BAJ | 08/15/14 08:15 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 493 | ug/kg | U | 98.6 | 493 | 493 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 434000 | ug/kg | | 6900 | 24600 | 24600 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 394 | ug/kg | U | 59 | 394 | 394 | 2 | MS | BAJ | 08/15/14 08:15 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 1390 | ug/kg | | 98.6 | 493 | 493 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 64300 | ug/kg | | 394 | 986 | 986 | 1 | P | HSC | 08/09/14 21:18 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.53 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.531 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.517 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623004 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84163 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 96.6

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4780000 | ug/kg | | 6650 | 19600 | 19600 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 978 | ug/kg | U | 323 | 978 | 978 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1440 | ug/kg | | 202 | 1010 | 1010 | 2 | MS | BAJ | 08/15/14 08:19 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 35600 | ug/kg | | 97.8 | 489 | 489 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 676 | ug/kg | | 20.2 | 101 | 101 | 2 | MS | BAJ | 08/15/14 08:19 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 489 | ug/kg | U | 97.8 | 489 | 489 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 543000 | ug/kg | | 7830 | 24500 | 24500 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 60600 | ug/kg | | 147 | 489 | 489 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 1400 | ug/kg | | 147 | 489 | 489 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 3430 | ug/kg | | 294 | 978 | 978 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 8010000 | ug/kg | | 7830 | 24500 | 24500 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 11200 | ug/kg | | 323 | 978 | 978 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 276000 | ug/kg | N | 8320 | 29400 | 29400 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 361000 | ug/kg | | 196 | 978 | 978 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 19.8 | ug/kg | | 4.14 | 12.3 | 12.3 | 1 | AV | MTM1 | 07/24/14 11:24 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 4810 | ug/kg | | 101 | 404 | 404 | 2 | MS | BAJ | 08/15/14 08:19 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 755000 | ug/kg | N | 6260 | 24500 | 24500 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1010 | ug/kg | U | 333 | 1010 | 1010 | 2 | MS | BAJ | 08/15/14 08:19 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 489 | ug/kg | U | 97.8 | 489 | 489 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 377000 | ug/kg | | 6850 | 24500 | 24500 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 404 | ug/kg | U | 60.5 | 404 | 404 | 2 | MS | BAJ | 08/15/14 08:19 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 3770 | ug/kg | | 97.8 | 489 | 489 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 52300 | ug/kg | | 391 | 978 | 978 | 1 | P | HSC | 08/09/14 21:21 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.529 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.513 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.503 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623005 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84142 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 92

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5300000 | ug/kg | | 6870 | 20200 | 20200 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 465 | ug/kg | J | 333 | 1010 | 1010 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1550 | ug/kg | | 212 | 1060 | 1060 | 2 | MS | BAJ | 08/15/14 08:23 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 83300 | ug/kg | | 101 | 505 | 505 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 488 | ug/kg | | 21.2 | 106 | 106 | 2 | MS | BAJ | 08/15/14 08:23 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 505 | ug/kg | U | 101 | 505 | 505 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1250000 | ug/kg | | 8080 | 25200 | 25200 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 4490 | ug/kg | | 151 | 505 | 505 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 1880 | ug/kg | | 151 | 505 | 505 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 3100 | ug/kg | | 303 | 1010 | 1010 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 8300000 | ug/kg | | 8080 | 25200 | 25200 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 10200 | ug/kg | | 333 | 1010 | 1010 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 700000 | ug/kg | N | 8580 | 30300 | 30300 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 412000 | ug/kg | | 202 | 1010 | 1010 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 11.2 | ug/kg | J | 4.27 | 12.8 | 12.8 | 1 | AV | MTM1 | 07/24/14 11:29 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 3690 | ug/kg | | 106 | 424 | 424 | 2 | MS | BAJ | 08/15/14 08:23 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 741000 | ug/kg | N | 6460 | 25200 | 25200 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1060 | ug/kg | U | 350 | 1060 | 1060 | 2 | MS | BAJ | 08/15/14 08:23 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 505 | ug/kg | U | 101 | 505 | 505 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 106000 | ug/kg | | 7070 | 25200 | 25200 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 424 | ug/kg | U | 63.7 | 424 | 424 | 2 | MS | BAJ | 08/15/14 08:23 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 8840 | ug/kg | | 101 | 505 | 505 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 43200 | ug/kg | | 404 | 1010 | 1010 | 1 | P | HSC | 08/09/14 21:25 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.538 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.512 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.511 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623006 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84164 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 90

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 7590000 | ug/kg | | 7120 | 21000 | 21000 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 1050 | ug/kg | U | 346 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 2050 | ug/kg | | 205 | 1020 | 1020 | 2 | MS | BAJ | 08/15/14 08:28 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 105000 | ug/kg | | 105 | 524 | 524 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 829 | ug/kg | | 20.5 | 102 | 102 | 2 | MS | BAJ | 08/15/14 08:28 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 524 | ug/kg | U | 105 | 524 | 524 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1140000 | ug/kg | | 8380 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 10300 | ug/kg | | 157 | 524 | 524 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 3420 | ug/kg | | 157 | 524 | 524 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 3920 | ug/kg | | 314 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 10600000 | ug/kg | | 8380 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 13500 | ug/kg | | 346 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 1020000 | ug/kg | N | 8900 | 31400 | 31400 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 565000 | ug/kg | | 210 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 18 | ug/kg | | 3.8 | 11.3 | 11.3 | 1 | AV | MTM1 | 07/24/14 11:30 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 5480 | ug/kg | | 102 | 410 | 410 | 2 | MS | BAJ | 08/15/14 08:28 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 975000 | ug/kg | N | 6700 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1020 | ug/kg | U | 338 | 1020 | 1020 | 2 | MS | BAJ | 08/15/14 08:28 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 149 | ug/kg | J | 105 | 524 | 524 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 125000 | ug/kg | | 7330 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 89.9 | ug/kg | J | 61.5 | 410 | 410 | 2 | MS | BAJ | 08/15/14 08:28 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 15100 | ug/kg | | 105 | 524 | 524 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 41100 | ug/kg | | 419 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:36 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.531 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.543 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.589 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623007 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84175 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 90

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 7010000 | ug/kg | | 7520 | 22100 | 22100 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 1110 | ug/kg | U | 365 | 1110 | 1110 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1950 | ug/kg | | 212 | 1060 | 1060 | 2 | MS | BAJ | 08/15/14 08:32 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 53400 | ug/kg | | 111 | 553 | 553 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 618 | ug/kg | | 21.2 | 106 | 106 | 2 | MS | BAJ | 08/15/14 08:32 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 553 | ug/kg | U | 111 | 553 | 553 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 759000 | ug/kg | | 8850 | 27700 | 27700 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 6690 | ug/kg | | 166 | 553 | 553 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 1410 | ug/kg | | 166 | 553 | 553 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 3110 | ug/kg | | 332 | 1110 | 1110 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 9210000 | ug/kg | | 8850 | 27700 | 27700 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 15500 | ug/kg | | 365 | 1110 | 1110 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 483000 | ug/kg | N | 9410 | 33200 | 33200 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 326000 | ug/kg | | 221 | 1110 | 1110 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 19.1 | ug/kg | | 4.34 | 12.9 | 12.9 | 1 | AV | MTM1 | 07/24/14 11:32 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 3110 | ug/kg | | 106 | 423 | 423 | 2 | MS | BAJ | 08/15/14 08:32 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 627000 | ug/kg | N | 7080 | 27700 | 27700 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1060 | ug/kg | U | 349 | 1060 | 1060 | 2 | MS | BAJ | 08/15/14 08:32 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 553 | ug/kg | U | 111 | 553 | 553 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 186000 | ug/kg | | 7750 | 27700 | 27700 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 423 | ug/kg | U | 63.5 | 423 | 423 | 2 | MS | BAJ | 08/15/14 08:32 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 6780 | ug/kg | | 111 | 553 | 553 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 59200 | ug/kg | | 443 | 1110 | 1110 | 1 | P | HSC | 08/09/14 21:39 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.503 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.526 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.516 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623008 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84154 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 87

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5880000 | ug/kg | | 7620 | 22400 | 22400 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 404 | ug/kg | J | 370 | 1120 | 1120 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1540 | ug/kg | | 217 | 1080 | 1080 | 2 | MS | BAJ | 08/15/14 08:36 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 126000 | ug/kg | | 112 | 560 | 560 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 519 | ug/kg | | 21.7 | 108 | 108 | 2 | MS | BAJ | 08/15/14 08:36 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 560 | ug/kg | U | 112 | 560 | 560 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1270000 | ug/kg | | 8970 | 28000 | 28000 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 3570 | ug/kg | | 168 | 560 | 560 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 1890 | ug/kg | | 168 | 560 | 560 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 3300 | ug/kg | | 336 | 1120 | 1120 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 9890000 | ug/kg | | 8970 | 28000 | 28000 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 12200 | ug/kg | | 370 | 1120 | 1120 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 622000 | ug/kg | N | 9530 | 33600 | 33600 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 443000 | ug/kg | | 224 | 1120 | 1120 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 15.8 | ug/kg | | 3.98 | 11.9 | 11.9 | 1 | AV | MTM1 | 07/24/14 11:34 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 3690 | ug/kg | | 108 | 433 | 433 | 2 | MS | BAJ | 08/15/14 08:36 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 867000 | ug/kg | N | 7170 | 28000 | 28000 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1080 | ug/kg | U | 357 | 1080 | 1080 | 2 | MS | BAJ | 08/15/14 08:36 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 560 | ug/kg | U | 112 | 560 | 560 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 103000 | ug/kg | | 7850 | 28000 | 28000 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 433 | ug/kg | U | 65 | 433 | 433 | 2 | MS | BAJ | 08/15/14 08:36 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 9900 | ug/kg | | 112 | 560 | 560 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 47000 | ug/kg | | 448 | 1120 | 1120 | 1 | P | HSC | 08/09/14 21:42 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.512 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.53 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.579 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623009 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84165 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 91

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 6430000 | ug/kg | | 7400 | 21800 | 21800 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 1090 | ug/kg | U | 359 | 1090 | 1090 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 18600 | ug/kg | | 211 | 1060 | 1060 | 2 | MS | BAJ | 08/15/14 08:54 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 1380000 | ug/kg | | 109 | 544 | 544 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 644 | ug/kg | | 21.1 | 106 | 106 | 2 | MS | BAJ | 08/15/14 08:54 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 544 | ug/kg | U | 109 | 544 | 544 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1830000 | ug/kg | | 8700 | 27200 | 27200 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 5100 | ug/kg | | 163 | 544 | 544 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 1530 | ug/kg | | 163 | 544 | 544 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 10000 | ug/kg | | 326 | 1090 | 1090 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 10600000 | ug/kg | | 8700 | 27200 | 27200 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 21200 | ug/kg | | 359 | 1090 | 1090 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 780000 | ug/kg | N | 9250 | 32600 | 32600 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 271000 | ug/kg | | 218 | 1090 | 1090 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 19.7 | ug/kg | | 4.02 | 12 | 12 | 1 | AV | MTM1 | 07/24/14 11:35 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 4050 | ug/kg | | 106 | 423 | 423 | 2 | MS | BAJ | 08/15/14 08:54 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 831000 | ug/kg | N | 6960 | 27200 | 27200 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1060 | ug/kg | U | 349 | 1060 | 1060 | 2 | MS | BAJ | 08/15/14 08:54 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 130 | ug/kg | J | 109 | 544 | 544 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 126000 | ug/kg | | 7610 | 27200 | 27200 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 86 | ug/kg | J | 63.4 | 423 | 423 | 2 | MS | BAJ | 08/15/14 08:54 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 10300 | ug/kg | | 109 | 544 | 544 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 66400 | ug/kg | | 435 | 1090 | 1090 | 1 | P | HSC | 08/09/14 21:46 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.505 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.52 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.549 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623010 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84176 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 90.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5260000 | ug/kg | | 7460 | 21900 | 21900 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 465 | ug/kg | J | 362 | 1100 | 1100 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 2520 | ug/kg | | 216 | 1080 | 1080 | 2 | MS | BAJ | 08/15/14 08:58 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 58300 | ug/kg | | 110 | 549 | 549 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 834 | ug/kg | | 21.6 | 108 | 108 | 2 | MS | BAJ | 08/15/14 08:58 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 120 | ug/kg | J | 110 | 549 | 549 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 620000 | ug/kg | | 8780 | 27400 | 27400 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 4180 | ug/kg | | 165 | 549 | 549 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 1940 | ug/kg | | 165 | 549 | 549 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 3140 | ug/kg | | 329 | 1100 | 1100 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 8900000 | ug/kg | | 8780 | 27400 | 27400 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 12300 | ug/kg | | 362 | 1100 | 1100 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 432000 | ug/kg | N | 9330 | 32900 | 32900 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 452000 | ug/kg | | 219 | 1100 | 1100 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 14.9 | ug/kg | | 4.14 | 12.4 | 12.4 | 1 | AV | MTM1 | 07/24/14 11:47 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 4510 | ug/kg | | 108 | 432 | 432 | 2 | MS | BAJ | 08/15/14 08:58 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 581000 | ug/kg | N | 7020 | 27400 | 27400 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1080 | ug/kg | U | 356 | 1080 | 1080 | 2 | MS | BAJ | 08/15/14 08:58 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 549 | ug/kg | U | 110 | 549 | 549 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 207000 | ug/kg | | 7680 | 27400 | 27400 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 432 | ug/kg | U | 64.8 | 432 | 432 | 2 | MS | BAJ | 08/15/14 08:58 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 5730 | ug/kg | | 110 | 549 | 549 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 53800 | ug/kg | | 439 | 1100 | 1100 | 1 | P | HSC | 08/09/14 21:49 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.506 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.514 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.539 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623011 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84144 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 93.6

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 8920000 | ug/kg | | 6780 | 19900 | 19900 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 997 | ug/kg | U | 329 | 997 | 997 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1780 | ug/kg | | 194 | 970 | 970 | 2 | MS | BAJ | 08/15/14 09:02 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 58800 | ug/kg | | 99.7 | 499 | 499 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 905 | ug/kg | | 19.4 | 97 | 97 | 2 | MS | BAJ | 08/15/14 09:02 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 499 | ug/kg | U | 99.7 | 499 | 499 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1190000 | ug/kg | | 7980 | 24900 | 24900 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 6260 | ug/kg | | 150 | 499 | 499 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 3300 | ug/kg | | 150 | 499 | 499 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 4550 | ug/kg | | 299 | 997 | 997 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 11500000 | ug/kg | | 7980 | 24900 | 24900 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 12400 | ug/kg | | 329 | 997 | 997 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 1330000 | ug/kg | N | 8470 | 29900 | 29900 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 278000 | ug/kg | | 199 | 997 | 997 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 22.8 | ug/kg | | 4.13 | 12.3 | 12.3 | 1 | AV | MTM1 | 07/24/14 11:49 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 4890 | ug/kg | | 97 | 388 | 388 | 2 | MS | BAJ | 08/15/14 09:02 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 958000 | ug/kg | N | 6380 | 24900 | 24900 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 970 | ug/kg | U | 320 | 970 | 970 | 2 | MS | BAJ | 08/15/14 09:02 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 499 | ug/kg | U | 99.7 | 499 | 499 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 133000 | ug/kg | | 6980 | 24900 | 24900 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 283 | ug/kg | J | 58.2 | 388 | 388 | 2 | MS | BAJ | 08/15/14 09:02 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 13800 | ug/kg | | 99.7 | 499 | 499 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 46600 | ug/kg | | 399 | 997 | 997 | 1 | P | HSC | 08/09/14 21:52 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.536 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.551 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.52 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623012 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84155 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5920000 | ug/kg | | 7310 | 21500 | 21500 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 361 | ug/kg | J | 355 | 1080 | 1080 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1520 | ug/kg | | 221 | 1100 | 1100 | 2 | MS | BAJ | 08/15/14 09:06 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 126000 | ug/kg | | 108 | 538 | 538 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 633 | ug/kg | | 22.1 | 110 | 110 | 2 | MS | BAJ | 08/15/14 09:06 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 538 | ug/kg | U | 108 | 538 | 538 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 2160000 | ug/kg | | 8600 | 26900 | 26900 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 3810 | ug/kg | | 161 | 538 | 538 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 2470 | ug/kg | | 161 | 538 | 538 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 4610 | ug/kg | | 323 | 1080 | 1080 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 8470000 | ug/kg | | 8600 | 26900 | 26900 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 13300 | ug/kg | | 355 | 1080 | 1080 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 903000 | ug/kg | N | 9140 | 32300 | 32300 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 570000 | ug/kg | | 215 | 1080 | 1080 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 14.7 | ug/kg | | 4.44 | 13.3 | 13.3 | 1 | AV | MTM1 | 07/24/14 11:50 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 4670 | ug/kg | | 110 | 442 | 442 | 2 | MS | BAJ | 08/15/14 09:06 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 1100000 | ug/kg | N | 6880 | 26900 | 26900 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1100 | ug/kg | U | 365 | 1100 | 1100 | 2 | MS | BAJ | 08/15/14 09:06 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 123 | ug/kg | J | 108 | 538 | 538 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 104000 | ug/kg | | 7530 | 26900 | 26900 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 105 | ug/kg | J | 66.3 | 442 | 442 | 2 | MS | BAJ | 08/15/14 09:06 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 9650 | ug/kg | | 108 | 538 | 538 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 50400 | ug/kg | | 430 | 1080 | 1080 | 1 | P | HSC | 08/09/14 21:56 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.522 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.508 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.508 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623013 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84177 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 93.8

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 7440000 | ug/kg | | 7140 | 21000 | 21000 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 1050 | ug/kg | U | 346 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 1490 | ug/kg | | 202 | 1010 | 1010 | 2 | MS | BAJ | 08/15/14 09:11 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 60100 | ug/kg | | 105 | 525 | 525 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 791 | ug/kg | | 20.2 | 101 | 101 | 2 | MS | BAJ | 08/15/14 09:11 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 525 | ug/kg | U | 105 | 525 | 525 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1090000 | ug/kg | | 8400 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 5820 | ug/kg | | 157 | 525 | 525 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 2360 | ug/kg | | 157 | 525 | 525 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 3420 | ug/kg | | 315 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 9810000 | ug/kg | | 8400 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 12600 | ug/kg | | 346 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 774000 | ug/kg | N | 8920 | 31500 | 31500 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 408000 | ug/kg | | 210 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 14.4 | ug/kg | | 4.24 | 12.6 | 12.6 | 1 | AV | MTM1 | 07/24/14 11:52 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 4170 | ug/kg | | 101 | 403 | 403 | 2 | MS | BAJ | 08/15/14 09:11 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 802000 | ug/kg | N | 6720 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1010 | ug/kg | U | 333 | 1010 | 1010 | 2 | MS | BAJ | 08/15/14 09:11 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 525 | ug/kg | U | 105 | 525 | 525 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 207000 | ug/kg | | 7350 | 26200 | 26200 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 72 | ug/kg | J | 60.5 | 403 | 403 | 2 | MS | BAJ | 08/15/14 09:11 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 8970 | ug/kg | | 105 | 525 | 525 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 50600 | ug/kg | | 420 | 1050 | 1050 | 1 | P | HSC | 08/09/14 21:59 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.508 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.529 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.506 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623014 **BASIS:** Dry Weight **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84121 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** S **%SOLIDS:** 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 6930000 | ug/kg | | 7180 | 21100 | 21100 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−36−0 | Antimony | 367 | ug/kg | J | 349 | 1060 | 1060 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−38−2 | Arsenic | 16600 | ug/kg | | 210 | 1050 | 1050 | 2 | MS | BAJ | 08/15/14 09:15 | 140814−7 | 1403639 |
| 7440−39−3 | Barium | 1250000 | ug/kg | | 106 | 528 | 528 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−41−7 | Beryllium | 658 | ug/kg | | 21 | 105 | 105 | 2 | MS | BAJ | 08/15/14 09:15 | 140814−7 | 1403639 |
| 7440−43−9 | Cadmium | 528 | ug/kg | U | 106 | 528 | 528 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−70−2 | Calcium | 1840000 | ug/kg | | 8450 | 26400 | 26400 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−47−3 | Chromium | 7680 | ug/kg | | 158 | 528 | 528 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−48−4 | Cobalt | 2370 | ug/kg | | 158 | 528 | 528 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−50−8 | Copper | 11100 | ug/kg | | 317 | 1060 | 1060 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7439−89−6 | Iron | 11800000 | ug/kg | | 8450 | 26400 | 26400 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7439−92−1 | Lead | 25000 | ug/kg | | 349 | 1060 | 1060 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7439−95−4 | Magnesium | 833000 | ug/kg | N | 8980 | 31700 | 31700 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7439−96−5 | Manganese | 451000 | ug/kg | | 211 | 1060 | 1060 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7439−97−6 | Mercury | 25.1 | ug/kg | | 4.33 | 12.9 | 12.9 | 1 | AV | MTM1 | 07/24/14 11:54 | 072414S1−10 | 1405678 |
| 7440−02−0 | Nickel | 4060 | ug/kg | | 105 | 420 | 420 | 2 | MS | BAJ | 08/15/14 09:15 | 140814−7 | 1403639 |
| 7440−09−7 | Potassium | 819000 | ug/kg | N | 6760 | 26400 | 26400 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7782−49−2 | Selenium | 1050 | ug/kg | U | 347 | 1050 | 1050 | 2 | MS | BAJ | 08/15/14 09:15 | 140814−7 | 1403639 |
| 7440−22−4 | Silver | 212 | ug/kg | J | 106 | 528 | 528 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−23−5 | Sodium | 122000 | ug/kg | | 7390 | 26400 | 26400 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−28−0 | Thallium | 71.8 | ug/kg | J | 63 | 420 | 420 | 2 | MS | BAJ | 08/15/14 09:15 | 140814−7 | 1403639 |
| 7440−62−2 | Vanadium | 11800 | ug/kg | | 106 | 528 | 528 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |
| 7440−66−6 | Zinc | 68500 | ug/kg | | 422 | 1060 | 1060 | 1 | P | HSC | 08/09/14 22:02 | 080914−1 | 1403628 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403628 | 1403627 | SW846 3050B | 0.531 | g | 50 | mL | 07/16/14 | JXO1 |
| 1403639 | 1403638 | SW846 3050B | 0.534 | g | 50 | mL | 07/16/14 | JXO1 |
| 1405678 | 1405677 | SW846 7471A Prep | 0.521 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** EPA

**SAMPLE ID:** 352623015 **BASIS:** As Received **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84125 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** W **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7439−97−6 | Mercury | 0.20 | ug/L | U | 0.067 | 0.2 | 0.2 | 1 | AV | MTM1 | 07/23/14 10:15 | 072314W1−11 | 1405304 |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623015 **BASIS:** As Received **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84125 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** W **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 87.6 | ug/L | J | 68 | 200 | 200 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7440−36−0 | Antimony | 3 | ug/L | U | 1 | 3 | 3 | 1 | MS | BAJ | 08/14/14 23:48 | 140814−4 | 1403634 |
| 7440−38−2 | Arsenic | 5 | ug/L | U | 1.7 | 5 | 5 | 1 | MS | BAJ | 08/15/14 10:53 | 140814−7 | 1403634 |
| 7440−39−3 | Barium | 30.7 | ug/L | | 1 | 5 | 5 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7440−41−7 | Beryllium | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7440−43−9 | Cadmium | 1 | ug/L | U | 0.11 | 1 | 1 | 1 | MS | BAJ | 08/14/14 23:48 | 140814−4 | 1403634 |
| 7440−70−2 | Calcium | 11300 | ug/L | | 50 | 200 | 200 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7440−47−3 | Chromium | 5.52 | ug/L | J | 2 | 10 | 10 | 1 | MS | BAJ | 08/15/14 11:14 | 140814−8 | 1403634 |
| 7440−48−4 | Cobalt | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7440−50−8 | Copper | 50 | ug/L | | 3 | 10 | 10 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7439−89−6 | Iron | 87.9 | ug/L | J | 30 | 100 | 100 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7439−92−1 | Lead | 2 | ug/L | U | 0.5 | 2 | 2 | 1 | MS | BAJ | 08/14/14 23:48 | 140814−4 | 1403634 |
| 7439−95−4 | Magnesium | 3410 | ug/L | | 110 | 300 | 300 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7439−96−5 | Manganese | 4.26 | ug/L | J | 2 | 10 | 10 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7440−02−0 | Nickel | 1.23 | ug/L | J | 0.5 | 2 | 2 | 1 | MS | BAJ | 08/15/14 11:14 | 140814−8 | 1403634 |
| 7440−09−7 | Potassium | 2100 | ug/L | | 50 | 150 | 150 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7782−49−2 | Selenium | 5 | ug/L | U | 1.5 | 5 | 5 | 1 | MS | BAJ | 08/15/14 10:53 | 140814−7 | 1403634 |
| 7440−22−4 | Silver | 1 | ug/L | U | 0.2 | 1 | 1 | 1 | MS | BAJ | 08/14/14 23:48 | 140814−4 | 1403634 |
| 7440−23−5 | Sodium | 12900 | ug/L | | 100 | 300 | 300 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7440−28−0 | Thallium | 2 | ug/L | UN | 0.45 | 2 | 2 | 1 | MS | PRB | 08/15/14 14:13 | 140815−9 | 1403634 |
| 7440−62−2 | Vanadium | 8 | ug/L | | 1 | 5 | 5 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |
| 7440−66−6 | Zinc | 10 | ug/L | U | 3.3 | 10 | 10 | 1 | P | HSC | 07/21/14 14:43 | 072114−3 | 1403624 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403624 | 1403622 | SW846 3005A | 50 | mL | 50 | mL | 07/16/14 | JXO1 |
| 1403634 | 1403633 | SW846 3005A | 50 | mL | 50 | mL | 07/16/14 | JXO1 |
| 1405304 | 1405303 | EPA 245.1/245.2 Prep | 20 | mL | 20 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **AV** | **EPA 245.1/245.2** |

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** EPA

**SAMPLE ID:** 352623016 **BASIS:** As Received **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84126 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** W **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7439−97−6 | Mercury | 0.20 | ug/L | U | 0.067 | 0.2 | 0.2 | 1 | AV | MTM1 | 07/23/14 10:24 | 072314W1−11 | 1405304 |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3795 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352623016 **BASIS:** As Received **DATE COLLECTED** 11−JUL−14

**CLIENT ID:** RE57−14−84126 **LEVEL:** Low **DATE RECEIVED** 15−JUL−14

**MATRIX:** W **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 210 | ug/L | | 68 | 200 | 200 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7440−36−0 | Antimony | 3 | ug/L | U | 1 | 3 | 3 | 1 | MS | BAJ | 08/15/14 00:21 | 140814−4 | 1403634 |
| 7440−38−2 | Arsenic | 5 | ug/L | U | 1.7 | 5 | 5 | 1 | MS | BAJ | 08/15/14 11:15 | 140814−7 | 1403634 |
| 7440−39−3 | Barium | 1.89 | ug/L | J | 1 | 5 | 5 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7440−41−7 | Beryllium | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7440−43−9 | Cadmium | 1 | ug/L | U | 0.11 | 1 | 1 | 1 | MS | BAJ | 08/15/14 00:21 | 140814−4 | 1403634 |
| 7440−70−2 | Calcium | 72.1 | ug/L | J | 50 | 200 | 200 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7440−47−3 | Chromium | 10 | ug/L | U | 2 | 10 | 10 | 1 | MS | BAJ | 08/15/14 11:19 | 140814−8 | 1403634 |
| 7440−48−4 | Cobalt | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7440−50−8 | Copper | 10 | ug/L | U | 3 | 10 | 10 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7439−89−6 | Iron | 134 | ug/L | | 30 | 100 | 100 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7439−92−1 | Lead | 2 | ug/L | U | 0.5 | 2 | 2 | 1 | MS | BAJ | 08/15/14 00:21 | 140814−4 | 1403634 |
| 7439−95−4 | Magnesium | 300 | ug/L | U | 110 | 300 | 300 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7439−96−5 | Manganese | 5.81 | ug/L | J | 2 | 10 | 10 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7440−02−0 | Nickel | 0.858 | ug/L | J | 0.5 | 2 | 2 | 1 | MS | BAJ | 08/15/14 11:19 | 140814−8 | 1403634 |
| 7440−09−7 | Potassium | 189 | ug/L | | 50 | 150 | 150 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7782−49−2 | Selenium | 5 | ug/L | U | 1.5 | 5 | 5 | 1 | MS | BAJ | 08/15/14 11:15 | 140814−7 | 1403634 |
| 7440−22−4 | Silver | 1 | ug/L | U | 0.2 | 1 | 1 | 1 | MS | BAJ | 08/15/14 00:21 | 140814−4 | 1403634 |
| 7440−23−5 | Sodium | 422 | ug/L | | 100 | 300 | 300 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7440−28−0 | Thallium | 2 | ug/L | UN | 0.45 | 2 | 2 | 1 | MS | PRB | 08/15/14 13:52 | 140815−9 | 1403634 |
| 7440−62−2 | Vanadium | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |
| 7440−66−6 | Zinc | 5.54 | ug/L | J | 3.3 | 10 | 10 | 1 | P | HSC | 07/21/14 15:00 | 072114−3 | 1403624 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403624 | 1403622 | SW846 3005A | 50 | mL | 50 | mL | 07/16/14 | JXO1 |
| 1403634 | 1403633 | SW846 3005A | 50 | mL | 50 | mL | 07/16/14 | JXO1 |
| 1405304 | 1405303 | EPA 245.1/245.2 Prep | 20 | mL | 20 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **AV** | **EPA 245.1/245.2** |

# Quality Control Summary

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3795

**Contract:** LANL00114

**Matrix:** S

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| 1203128049 | | | | | | | | |
| | Aluminum | 68 | ug/L | +/−200 | U | P | 68 | 200 |
| | Barium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Beryllium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Calcium | 50 | ug/L | +/−200 | U | P | 50 | 200 |
| | Cobalt | −1.17 | ug/L | +/−5 | J | P | 1 | 5 |
| | Copper | 3 | ug/L | +/−10 | U | P | 3 | 10 |
| | Iron | 31.3 | ug/L | +/−100 | J | P | 30 | 100 |
| | Magnesium | 110 | ug/L | +/−300 | U | P | 110 | 300 |
| | Manganese | 2 | ug/L | +/−10 | U | P | 2 | 10 |
| | Potassium | 77 | ug/L | +/−150 | J | P | 50 | 150 |
| | Sodium | 100 | ug/L | +/−300 | U | P | 100 | 300 |
| | Vanadium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Zinc | 3.3 | ug/L | +/−10 | U | P | 3.3 | 10 |
| 1203128060 | | | | | | | | |
| | Aluminum | 6650 | ug/kg | +/−19600 | U | P | 6650 | 19600 |
| | Antimony | 515 | ug/kg | +/−978 | J | P | 323 | 978 |
| | Barium | 97.8 | ug/kg | +/−489 | U | P | 97.8 | 489 |
| | Cadmium | 97.8 | ug/kg | +/−489 | U | P | 97.8 | 489 |
| | Calcium | 7830 | ug/kg | +/−24500 | U | P | 7830 | 24500 |
| | Chromium | 147 | ug/kg | +/−489 | U | P | 147 | 489 |
| | Cobalt | 147 | ug/kg | +/−489 | U | P | 147 | 489 |
| | Copper | 294 | ug/kg | +/−978 | U | P | 294 | 978 |
| | Iron | 7830 | ug/kg | +/−24500 | U | P | 7830 | 24500 |
| | Lead | 323 | ug/kg | +/−978 | U | P | 323 | 978 |
| | Magnesium | 8320 | ug/kg | +/−29400 | U | P | 8320 | 29400 |
| | Manganese | 196 | ug/kg | +/−978 | U | P | 196 | 978 |
| | Potassium | 6260 | ug/kg | +/−24500 | U | P | 6260 | 24500 |
| | Silver | 97.8 | ug/kg | +/−489 | U | P | 97.8 | 489 |
| | Sodium | 6850 | ug/kg | +/−24500 | U | P | 6850 | 24500 |
| | Vanadium | 97.8 | ug/kg | +/−489 | U | P | 97.8 | 489 |
| | Zinc | 391 | ug/kg | +/−978 | U | P | 391 | 978 |
| 1203128075 | | | | | | | | |
| | Antimony | 1 | ug/L | +/−3 | U | MS | 1 | 3 |
| | Arsenic | 1.7 | ug/L | +/−5 | U | MS | 1.7 | 5 |
| | Cadmium | 0.11 | ug/L | +/−1 | U | MS | 0.11 | 1 |
| | Chromium | 2 | ug/L | +/−10 | U | MS | 2 | 10 |
| | Lead | 0.5 | ug/L | +/−2 | U | MS | 0.5 | 2 |

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3795

**Contract:** LANL00114

**Matrix:** S

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| | Nickel | 0.5 | ug/L | +/−2 | U | MS | 0.5 | 2 |
| | Selenium | 1.5 | ug/L | +/−5 | U | MS | 1.5 | 5 |
| | Silver | 0.2 | ug/L | +/−1 | U | MS | 0.2 | 1 |
| | Thallium | 0.45 | ug/L | +/−2 | U | MS | 0.45 | 2 |
| 1203128093 | | | | | | | | |
| | Arsenic | 191 | ug/kg | +/−954 | U | MS | 191 | 954 |
| | Beryllium | 19.1 | ug/kg | +/−95.4 | U | MS | 19.1 | 95.4 |
| | Nickel | 95.4 | ug/kg | +/−382 | U | MS | 95.4 | 382 |
| | Selenium | 315 | ug/kg | +/−954 | U | MS | 315 | 954 |
| | Thallium | 57.3 | ug/kg | +/−382 | U | MS | 57.3 | 382 |
| 1203132305 | | | | | | | | |
| | Mercury | 0.067 | ug/L | +/−0.2 | U | AV | 0.067 | 0.2 |
| 1203133217 | | | | | | | | |
| | Mercury | 4.02 | ug/kg | +/−12 | U | AV | 4.02 | 12 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |
| **AV** | **EPA 245.1/245.2** |

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84125S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352623015 **Spike ID:** 1203128052

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | 75−125 | 5210 | | 87.6 | J | 5000 | 103 | | P |
| Barium | ug/L | 75−125 | 546 | | 30.7 | | 500 | 103 | | P |
| Beryllium | ug/L | 75−125 | 518 | | 1 | U | 500 | 104 | | P |
| Calcium | ug/L | 75−125 | 16800 | | 11300 | | 5000 | 110 | | P |
| Cobalt | ug/L | 75−125 | 508 | | 1 | U | 500 | 102 | | P |
| Copper | ug/L | 75−125 | 582 | | 50 | | 500 | 106 | | P |
| Iron | ug/L | 75−125 | 5280 | | 87.9 | J | 5000 | 104 | | P |
| Magnesium | ug/L | 75−125 | 8830 | | 3410 | | 5000 | 108 | | P |
| Manganese | ug/L | 75−125 | 523 | | 4.26 | J | 500 | 104 | | P |
| Potassium | ug/L | 75−125 | 7190 | | 2100 | | 5000 | 102 | | P |
| Sodium | ug/L | 75−125 | 18500 | | 12900 | | 5000 | 112 | | P |
| Vanadium | ug/L | 75−125 | 538 | | 8 | | 500 | 106 | | P |
| Zinc | ug/L | 75−125 | 518 | | 3.3 | U | 500 | 103 | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−5a−**

**Matrix Spike Duplicate Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84125SD

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352623015 **Spike ID:** 1203128053

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | 75−125 | 5230 | | 87.6 | J | 5000 | 103 | | P |
| Barium | ug/L | 75−125 | 545 | | 30.7 | | 500 | 103 | | P |
| Beryllium | ug/L | 75−125 | 513 | | 1 | U | 500 | 103 | | P |
| Calcium | ug/L | 75−125 | 16500 | | 11300 | | 5000 | 105 | | P |
| Cobalt | ug/L | 75−125 | 508 | | 1 | U | 500 | 102 | | P |
| Copper | ug/L | 75−125 | 580 | | 50 | | 500 | 106 | | P |
| Iron | ug/L | 75−125 | 5240 | | 87.9 | J | 5000 | 103 | | P |
| Magnesium | ug/L | 75−125 | 8640 | | 3410 | | 5000 | 105 | | P |
| Manganese | ug/L | 75−125 | 513 | | 4.26 | J | 500 | 102 | | P |
| Potassium | ug/L | 75−125 | 7360 | | 2100 | | 5000 | 105 | | P |
| Sodium | ug/L | 75−125 | 18300 | | 12900 | | 5000 | 108 | | P |
| Vanadium | ug/L | 75−125 | 543 | | 8 | | 500 | 107 | | P |
| Zinc | ug/L | 75−125 | 517 | | 3.3 | U | 500 | 103 | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84140S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 92.1

**Sample ID:** 352623001 **Spike ID:** 1203128063

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | | 8990000 | | 5730000 | | 528000 | 618 | N/A | P |
| Antimony | ug/kg | 75−125 | 44700 | | 488 | J | 52800 | 83.7 | | P |
| Barium | ug/kg | 75−125 | 132000 | | 77300 | | 52800 | 104 | | P |
| Cadmium | ug/kg | 75−125 | 50900 | | 105 | U | 52800 | 96.4 | | P |
| Calcium | ug/kg | 75−125 | 1740000 | | 1100000 | | 528000 | 121 | | P |
| Chromium | ug/kg | 75−125 | 56200 | | 3670 | | 52800 | 99.4 | | P |
| Cobalt | ug/kg | 75−125 | 52700 | | 1860 | | 52800 | 96.3 | | P |
| Copper | ug/kg | 75−125 | 59600 | | 2660 | | 52800 | 108 | | P |
| Iron | ug/kg | | 9520000 | | 8540000 | | 528000 | 186 | N/A | P |
| Lead | ug/kg | 75−125 | 63800 | | 9800 | | 52800 | 102 | | P |
| Magnesium | ug/kg | 75−125 | 1370000 | | 596000 | | 528000 | 146 | N | P |
| Manganese | ug/kg | | 411000 | | 412000 | | 52800 | −.277 | N/A | P |
| Potassium | ug/kg | 75−125 | 1420000 | | 711000 | | 528000 | 135 | N | P |
| Silver | ug/kg | 75−125 | 51400 | | 115 | J | 52800 | 97.1 | | P |
| Sodium | ug/kg | 75−125 | 630000 | | 103000 | | 528000 | 99.7 | | P |
| Vanadium | ug/kg | 75−125 | 63900 | | 8300 | | 52800 | 105 | | P |
| Zinc | ug/kg | 75−125 | 98100 | | 43100 | | 52800 | 104 | | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84125S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352623015 **Spike ID:** 1203128078

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | 75−125 | 53.1 | | 1 | U | 50 | 106 | | MS |
| Arsenic | ug/L | 75−125 | 51.3 | | 1.7 | U | 50 | 103 | | MS |
| Cadmium | ug/L | 75−125 | 52.9 | | 0.11 | U | 50 | 106 | | MS |
| Chromium | ug/L | 75−125 | 57.1 | | 5.52 | J | 50 | 103 | | MS |
| Lead | ug/L | 75−125 | 53 | | 0.5 | U | 50 | 105 | | MS |
| Nickel | ug/L | 75−125 | 52.3 | | 1.23 | J | 50 | 102 | | MS |
| Selenium | ug/L | 75−125 | 52.7 | | 1.5 | U | 50 | 105 | | MS |
| Silver | ug/L | 75−125 | 55.5 | | 0.2 | U | 50 | 111 | | MS |
| Thallium | ug/L | 75−125 | 22.3 | | 0.45 | U | 50 | 44.5 | N | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84140S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 92.1

**Sample ID:** 352623001 **Spike ID:** 1203128096

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Selenium | ug/kg | 75−125 | 5170 | | 355 | U | 5170 | 97.1 | | MS |
| Thallium | ug/kg | 75−125 | 5300 | | 87.3 | J | 5170 | 101 | | MS |
| Arsenic | ug/kg | 75−125 | 6490 | | 1280 | | 5170 | 101 | | MS |
| Beryllium | ug/kg | 75−125 | 5910 | | 472 | | 5170 | 105 | | MS |
| Nickel | ug/kg | 75−125 | 8530 | | 3240 | | 5170 | 102 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84125S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352623015 **Spike ID:** 1203132308

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | 75−125 | 1.81 | | 0.067 | U | 2 | 90.4 | | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84140S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 92.1

**Sample ID:** 352623001 **Spike ID:** 1203133220

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | 80−120 | 127 | | 11.4 | J | 128 | 90.1 | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−5a−**

**Spike Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84140PS

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 92.1

**Sample ID:** 352623001 **Spike ID:** 1203145723

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Magnesium | ug/L | 80−120 | 11300 | | 5690 | | 5000 | 111 | | P |
| Potassium | ug/L | 80−120 | 12000 | | 6780 | | 5000 | 103 | | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−5a−**

**Spike Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84125PS

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352623015 **Spike ID:** 1203148998

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | ug/L | 80−120 | 24.1 | | 0.45 | U | 50 | 48.3 | N | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3795 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84125SD

**Matrix:** WATER **Level:** Low

**Sample ID:** 1203128052 **Duplicate ID:** 1203128053 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | +/−20 | 5210 | | 5230 | | .293 | | P |
| Barium | ug/L | +/−20 | 546 | | 545 | | .2 | | P |
| Beryllium | ug/L | +/−20 | 518 | | 513 | | .909 | | P |
| Calcium | ug/L | +/−20 | 16800 | | 16500 | | 1.54 | | P |
| Cobalt | ug/L | +/−20 | 508 | | 508 | | .132 | | P |
| Copper | ug/L | +/−20 | 582 | | 580 | | .243 | | P |
| Iron | ug/L | +/−20 | 5280 | | 5240 | | .865 | | P |
| Magnesium | ug/L | +/−20 | 8830 | | 8640 | | 2.18 | | P |
| Manganese | ug/L | +/−20 | 523 | | 513 | | 1.99 | | P |
| Potassium | ug/L | +/−20 | 7190 | | 7360 | | 2.26 | | P |
| Sodium | ug/L | +/−20 | 18500 | | 18300 | | 1.21 | | P |
| Vanadium | ug/L | +/−20 | 538 | | 543 | | .925 | | P |
| Zinc | ug/L | +/−20 | 518 | | 517 | | .261 | | P |

***Analytical Methods:**

**P SW846 3005A/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3795 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84140D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352623001 **Duplicate ID:** 1203128062 **Percent Solids for Dup:** 92.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | +/−20% | 5730000 | | 5470000 | | 4.57 | | P |
| Antimony | ug/kg | | 488 | J | 347 | U | 200 | | P |
| Barium | ug/kg | +/−20% | 77300 | | 83800 | | 8.06 | | P |
| Cadmium | ug/kg | | 105 | U | 105 | U | | | P |
| Calcium | ug/kg | +/−20% | 1100000 | | 1190000 | | 7.49 | | P |
| Chromium | ug/kg | +/−20% | 3670 | | 3800 | | 3.48 | | P |
| Cobalt | ug/kg | +/−526 | 1860 | | 1940 | | 4.26 | | P |
| Copper | ug/kg | +/−1050 | 2660 | | 2930 | | 9.64 | | P |
| Iron | ug/kg | +/−20% | 8540000 | | 8520000 | | .15 | | P |
| Lead | ug/kg | +/−20% | 9800 | | 10400 | | 5.92 | | P |
| Magnesium | ug/kg | +/−20% | 596000 | | 620000 | | 4.01 | | P |
| Manganese | ug/kg | +/−20% | 412000 | | 442000 | | 7.05 | | P |
| Potassium | ug/kg | +/−20% | 711000 | | 714000 | | .379 | | P |
| Silver | ug/kg | | 115 | J | 105 | U | 200 | | P |
| Sodium | ug/kg | +/−26300 | 103000 | | 99900 | | 3.03 | | P |
| Vanadium | ug/kg | +/−20% | 8300 | | 8270 | | .3 | | P |
| Zinc | ug/kg | +/−20% | 43100 | | 43100 | | .00944 | | P |

***Analytical Methods:**

**P SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3795 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84125D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352623015 **Duplicate ID:** 1203128077 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | | 1 | U | 1 | U | | | MS |
| Arsenic | ug/L | | 1.7 | U | 1.7 | U | | | MS |
| Cadmium | ug/L | | 0.11 | U | 0.11 | U | | | MS |
| Chromium | ug/L | +/−10 | 5.52 | J | 5.62 | J | 1.69 | | MS |
| Lead | ug/L | | 0.5 | U | 0.5 | U | | | MS |
| Nickel | ug/L | +/−2 | 1.23 | J | 1.45 | J | 16.4 | | MS |
| Selenium | ug/L | | 1.5 | U | 1.5 | U | | | MS |
| Silver | ug/L | | 0.2 | U | 0.2 | U | | | MS |
| Thallium | ug/L | | 0.45 | U | 0.45 | U | | | MS |

***Analytical Methods:**

**MS SW846 3005A/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3795 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84140D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352623001 **Duplicate ID:** 1203128095 **Percent Solids for Dup:** 92.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | +/−1040 | 1280 | | 1910 | | 39.2 | | MS |
| Beryllium | ug/kg | +/−104 | 472 | | 528 | | 11.2 | | MS |
| Nickel | ug/kg | +/−20% | 3240 | | 3230 | | .251 | | MS |
| Selenium | ug/kg | | 355 | U | 342 | U | | | MS |
| Thallium | ug/kg | +/−415 | 87.3 | J | 74.6 | J | 15.7 | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3795 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84125D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352623015 **Duplicate ID:** 1203132307 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | | 0.067 | U | 0.067 | U | | | AV |

***Analytical Methods:**

**AV EPA 245.1/245.2**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3795 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84140D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352623001 **Duplicate ID:** 1203133219 **Percent Solids for Dup:** 92.1

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | +/−12.5 | 11.4 | J | 11 | J | 3.58 | | AV |

***Analytical Methods:**

**AV SW846 7471A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3795

**Contract:** LANL00114

**Aqueous LCS Source:** OS2I **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203128050 | | | | | | | | |
| | Aluminum | ug/L | 5000 | 5180 | | 104 | 80−120 | P |
| | Barium | ug/L | 500 | 519 | | 104 | 80−120 | P |
| | Beryllium | ug/L | 500 | 511 | | 102 | 80−120 | P |
| | Calcium | ug/L | 5000 | 5100 | | 102 | 80−120 | P |
| | Cobalt | ug/L | 500 | 510 | | 102 | 80−120 | P |
| | Copper | ug/L | 500 | 520 | | 104 | 80−120 | P |
| | Iron | ug/L | 5000 | 5250 | | 105 | 80−120 | P |
| | Magnesium | ug/L | 5000 | 5280 | | 106 | 80−120 | P |
| | Manganese | ug/L | 500 | 522 | | 104 | 80−120 | P |
| | Potassium | ug/L | 5000 | 5210 | | 104 | 80−120 | P |
| | Sodium | ug/L | 5000 | 5090 | | 102 | 80−120 | P |
| | Vanadium | ug/L | 500 | 538 | | 108 | 80−120 | P |
| | Zinc | ug/L | 500 | 521 | | 104 | 80−120 | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3795

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203128061 | | | | | | | | |
| | Aluminum | ug/kg | 8460000 | 8400000 | | 99.3 | 44.9−154.4 | P |
| | Antimony | ug/kg | 162000 | 114000 | | 70.7 | 33.1−167.3 | P |
| | Barium | ug/kg | 283000 | 278000 | | 98.2 | 82.8−117.6 | P |
| | Cadmium | ug/kg | 82800 | 80300 | | 97 | 84−115.9 | P |
| | Calcium | ug/kg | 5960000 | 6060000 | | 102 | 83.2−117 | P |
| | Chromium | ug/kg | 164000 | 167000 | | 102 | 81.5−117.9 | P |
| | Cobalt | ug/kg | 84800 | 85600 | | 101 | 84.8−114.9 | P |
| | Copper | ug/kg | 182000 | 200000 | | 110 | 84−116.6 | P |
| | Iron | ug/kg | 12200000 | 13700000 | | 113 | 50.5−148.8 | P |
| | Lead | ug/kg | 117000 | 114000 | | 97.7 | 83.3−116.7 | P |
| | Magnesium | ug/kg | 2850000 | 2840000 | | 99.7 | 75−125.3 | P |
| | Manganese | ug/kg | 302000 | 300000 | | 99.1 | 82.6−117.4 | P |
| | Potassium | ug/kg | 2710000 | 2550000 | | 94 | 69.1−130.9 | P |
| | Silver | ug/kg | 53800 | 51400 | | 95.5 | 66.3−133.7 | P |
| | Sodium | ug/kg | 491000 | 510000 | | 104 | 73.6−126.4 | P |
| | Vanadium | ug/kg | 135000 | 147000 | | 109 | 79.7−120.3 | P |
| | Zinc | ug/kg | 201000 | 200000 | | 99.6 | 82−118 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3795

**Contract:** LANL00114

**Aqueous LCS Source:** O2Si **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203128076 | | | | | | | | |
| | Antimony | ug/L | 50 | 50.1 | | 100 | 80−120 | MS |
| | Arsenic | ug/L | 50 | 51 | | 102 | 80−120 | MS |
| | Cadmium | ug/L | 50 | 50.9 | | 102 | 80−120 | MS |
| | Chromium | ug/L | 50 | 50.5 | | 101 | 80−120 | MS |
| | Lead | ug/L | 50 | 51.9 | | 104 | 80−120 | MS |
| | Nickel | ug/L | 50 | 50.9 | | 102 | 80−120 | MS |
| | Selenium | ug/L | 50 | 54.7 | | 109 | 80−120 | MS |
| | Silver | ug/L | 50 | 52.8 | | 106 | 80−120 | MS |
| | Thallium | ug/L | 50 | 43.1 | | 86.3 | 80−120 | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3795

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203128094 | | | | | | | | |
| | Arsenic | ug/kg | 135000 | 129000 | | 95.6 | 83.2−117.5 | MS |
| | Beryllium | ug/kg | 136000 | 131000 | | 96.3 | 84.1−115.9 | MS |
| | Nickel | ug/kg | 157000 | 161000 | | 102 | 84.3−115.7 | MS |
| | Selenium | ug/kg | 43000 | 44100 | | 103 | 77.9−122.3 | MS |
| | Thallium | ug/kg | 144000 | 143000 | | 99 | 81.5−119.2 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3795

**Contract:** LANL00114

**Aqueous LCS Source:** GEL **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203132306 | | | | | | | | |
| | Mercury | ug/L | 2 | 1.95 | | 97.7 | 85−115 | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3795

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203133218 | | | | | | | | |
| | Mercury | ug/kg | 7690 | 9200 | | 120 | 71.4−129 | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84125L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352623015 **Serial Dilution ID:** 1203128054

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 87.6 | J | 340 | U | 100 | | | P |
| Barium | 30.7 | | 30.8 | | .176 | | | P |
| Beryllium | 1 | U | 5 | U | | | | P |
| Calcium | 11300 | | 11300 | | .625 | | 10 | P |
| Cobalt | 1 | U | 5 | U | | | | P |
| Copper | 50 | | 55.8 | | 11.7 | | | P |
| Iron | 87.9 | J | 165 | J | 87.3 | | | P |
| Magnesium | 3410 | | 3320 | | 2.77 | | | P |
| Manganese | 4.26 | J | 10 | U | 100 | | | P |
| Potassium | 2100 | | 1980 | | 5.73 | | | P |
| Sodium | 12900 | | 12800 | | 1.05 | | 10 | P |
| Vanadium | 8 | | 7.82 | J | 2.27 | | | P |
| Zinc | 3.3 | U | 16.5 | U | | | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84140L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352623001 **Serial Dilution ID:** 1203128064

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 54600 | | 54700 | | .179 | | 10 | P |
| Antimony | 4.65 | J | 28.3 | J | 509 | | | P |
| Barium | 737 | | 743 | | .73 | | 10 | P |
| Cadmium | 1 | U | 5 | U | | | | P |
| Calcium | 10500 | | 10200 | | 2.99 | | 10 | P |
| Chromium | 35 | | 35 | | .12 | | | P |
| Cobalt | 17.7 | | 21.6 | J | 21.9 | | | P |
| Copper | 25.4 | | 22.5 | J | 11.3 | | | P |
| Iron | 81400 | | 81500 | | .025 | | 10 | P |
| Lead | 93.5 | | 109 | | 16.9 | | | P |
| Magnesium | 5690 | | 5480 | | 3.62 | | 10 | P |
| Manganese | 3930 | | 4070 | | 3.69 | | 10 | P |
| Potassium | 6780 | | 6750 | | .484 | | 10 | P |
| Silver | 1.09 | J | 5 | U | 100 | | | P |
| Sodium | 982 | | 1200 | J | 21.9 | | | P |
| Vanadium | 79.1 | | 78.4 | | .919 | | 10 | P |
| Zinc | 411 | | 403 | | 2.01 | | 10 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84125L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352623015 **Serial Dilution ID:** 1203128079

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Antimony | 1 | U | 5 | U | | | | MS |
| Arsenic | 1.7 | U | 8.5 | U | | | | MS |
| Cadmium | .11 | U | .55 | U | | | | MS |
| Chromium | 5.52 | J | 10 | U | 100 | | | MS |
| Lead | .5 | U | 2.5 | U | | | | MS |
| Nickel | 1.23 | J | 2.5 | U | 100 | | | MS |
| Selenium | 1.5 | U | 7.5 | U | | | | MS |
| Silver | .2 | U | 1 | U | | | | MS |
| Thallium | .45 | U | 8.85 | J | | | | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84140L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352623001 **Serial Dilution ID:** 1203128097

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 5.96 | | 7.15 | J | 19.9 | | | MS |
| Beryllium | 2.2 | | 2.32 | J | 5.65 | | | MS |
| Nickel | 15.1 | | 15.5 | | 2.65 | | | MS |
| Selenium | 1.65 | U | 8.25 | U | | | | MS |
| Thallium | .406 | J | 1.5 | U | 100 | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84125L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352623015 **Serial Dilution ID:** 1203132309

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .067 | U | .335 | U | | | | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3795 **Client ID** RE57−14−84140L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352623001 **Serial Dilution ID:** 1203133221

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .181 | J | .335 | U | 100 | | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 11-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| ICP | SW846 3050B/6010C | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1403628 | See Below | | |

**Potentially affected work order(s)(SDG): 352623(2014-3795)**

**Application Issues:**

Failed Recovery for MS/PS

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed Recovery for MS/PS:<br><br>QC 1203128063MS | 1.The matrix spike recovery failed outside of the control limits for magnesium and potassium. The post spike passed the required control limits for all analytes. This verifies the absence of a matrix interference. |

**Originator's Name:**

Helen Camello 11-AUG-14

**Data Validator/Group Leader:**

Louise Smith 11-AUG-14

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 15-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| ICP/MS | SW846 3005A/6020A | Liquid | ESHL, LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1403634 | See Below | | |

**Potentially affected work order(s)(SDG): 352615(2014-3789),352620(2014-3790),352623(2014-3795),352653(2014-3791)**

**Application Issues:**

Failed Recovery for MS/PS

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed Recovery for MS/PS:<br><br>QC 1203128078MS,1203148998PS | The matrix spike recovery failed outside of the control limits for thallium. The post spike failed outside the required control limits for thallium. This verifies the presence of a matrix interference. |

**Originator's Name:**

Elizabeth Janssen 15-AUG-14

**Data Validator/Group Leader:**

Paul Boyd 15-AUG-14

# General Chem Analysis

# Case Narrative

**General Chemistry Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3795**

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Cyanide and Total** | | |
| **Analytical Batch:** | 1403585 | **Method:** | SW9012A Cyanide and Total |
| **Prep Batch :** | 1403584 | **Method:** | SSW846 9010B Prep |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| Sample ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 1203127923 | MB for batch 1403584 |
| 1203127928 | Laboratory Control Sample (LCS) |
| 1203127924 | 352623001(RE57-14-84140) Sample Duplicate (DUP) |
| 1203127926 | 352623001(RE57-14-84140) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 17.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following sample was selected for QC analysis: 352623001 (RE57-14-84140).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recovery for this sample set was within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1203127924 (RE57-14-84140).

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**
All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**

The following sample in this sample group was diluted due to high concentration: 1203127928 (LCS).

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Method/Analysis Information**

| | | | |
|---|---|---|---|
| **Product:** | **Ion Chromatography** | | |
| **Analytical Batch:** | 1404219 | **Method:** | EPA 300.0 Nitrate in Soil |
| **Prep Batch :** | 1404218 | **Method:** | EPA 300.0 PREP |

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

| Sample ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 1203129424 | MB for batch 1404218 |
| 1203129429 | Laboratory Control Sample (LCS) |
| 1203129425 | 352623001(RE57-14-84140) Sample Duplicate (DUP) |
| 1203129426 | 352623014(RE57-14-84121) Sample Duplicate (DUP) |
| 1203129427 | 352623001(RE57-14-84140) Matrix Spike (MS) |
| 1203129428 | 352623014(RE57-14-84121) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 22.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories,

LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**Calibration Information**

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following samples were selected for QC analysis: 352623001 (RE57-14-84140) and 352623014 (RE57-14-84121).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recoveries for this sample set were within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD between the sample and its duplicate met the acceptance limits.

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
The following samples from this sample group were accidentally prepped outside of the method specified holding time. See the Data Exception Report (DER) section of this narrative for more information. 1203129425 (RE57-14-84140), 1203129426 (RE57-14-84121), 1203129428 (RE57-14-84121), 352623001 (RE57-14-84140), 352623002 (RE57-14-84151), 352623003 (RE57-14-84162), 352623004 (RE57-14-84163), 352623005 (RE57-14-84142), 352623006 (RE57-14-84164), 352623007 (RE57-14-84175), 352623008 (RE57-14-84154), 352623009 (RE57-14-84165), 352623010 (RE57-14-84176), 352623011 (RE57-14-84144), 352623012 (RE57-14-84155), 352623013 (RE57-14-84177) and 352623014 (RE57-14-84121).

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
The following DER was generated for this SDG: 1323088 1203129425 (RE57-14-84140), 1203129426 (RE57-14-84121), 1203129427 (RE57-14-84140), 1203129428 (RE57-14-84121), 352623001 (RE57-14-84140), 352623002 (RE57-14-84151), 352623003 (RE57-14-84162), 352623004 (RE57-14-84163), 352623005 (RE57-14-84142), 352623006 (RE57-14-84164), 352623007 (RE57-14-84175), 352623008 (RE57-14-84154), 352623009 (RE57-14-84165), 352623010 (RE57-14-84176), 352623011 (RE57-14-84144), 352623012 (RE57-14-84155), 352623013 (RE57-14-84177) and 352623014 (RE57-14-84121).

**Manual Integrations**
The following samples from this sample group had to be manually integrated due to errors in the instrument software peak integration: 352623007 (RE57-14-84175) and 352623008 (RE57-14-84154).

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:**_____ **Date:**_____12Aug14_____

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis Report
## for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3795  GEL Work Order: 352623

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria
**  Analyte is a Tracer compound
**  Analyte is a surrogate compound
H  Analytical holding time was exceeded
J  Value is estimated
N  Metals--The Matrix spike sample recovery is not within specified control limits
U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
h  Preparation or preservation holding time was exceeded

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84140
Sample ID: 352623001
Matrix: S
Collect Date: 11-JUL-14 07:35
Receive Date: 15-JUL-14
Collector: Client
Moisture: 7.93%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 90.7 | 272 | ug/kg | 1 | AXH3 | 07/24/14 | 1029 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.358 | 1.09 | mg/kg | 1 | MAR1 | 08/11/14 | 1436 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84151
Sample ID: 352623002
Matrix: S
Collect Date: 11-JUL-14 07:40
Receive Date: 15-JUL-14
Collector: Client
Moisture: 4.46%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 84.0 | 252 | ug/kg | 1 | AXH3 | 07/24/14 | 1032 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.345 | 1.05 | mg/kg | 1 | MAR1 | 08/11/14 | 1606 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84162
Sample ID: 352623003
Matrix: S
Collect Date: 11-JUL-14 08:30
Receive Date: 15-JUL-14
Collector: Client
Moisture: 4.29%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 83.9 | 251 | ug/kg | 1 | AXH3 | 07/24/14 | 1033 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.345 | 1.04 | mg/kg | 1 | MAR1 | 08/11/14 | 1636 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84163
Sample ID: 352623004
Matrix: S
Collect Date: 11-JUL-14 09:50
Receive Date: 15-JUL-14
Collector: Client
Moisture: 3.4%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 86.4 | 259 | ug/kg | 1 | AXH3 | 07/24/14 | 1034 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.342 | 1.04 | mg/kg | 1 | MAR1 | 08/11/14 | 1706 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84142
Sample ID: 352623005
Matrix: S
Collect Date: 11-JUL-14 08:05
Receive Date: 15-JUL-14
Collector: Client
Moisture: 7.96%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | | 730 | 88.9 | 266 | ug/kg | 1 | AXH3 | 07/24/14 | 1035 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Jh | 0.947 | 0.359 | 1.09 | mg/kg | 1 | MAR1 | 08/11/14 | 1736 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84164
Sample ID: 352623006
Matrix: S
Collect Date: 11-JUL-14 07:45
Receive Date: 15-JUL-14
Collector: Client
Moisture: 10.1%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 78.7 | 236 | ug/kg | 1 | AXH3 | 07/24/14 | 1035 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.367 | 1.11 | mg/kg | 1 | MAR1 | 08/11/14 | 1806 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84175 | Project: | LANL00114 |
| Sample ID: | 352623007 | Client ID: | ARSL004 |
| Matrix: | S | | |
| Collect Date: | 11-JUL-14 09:15 | | |
| Receive Date: | 15-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 10.2% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 89.4 | 268 | ug/kg | 1 | AXH3 | 07/24/14 | 1040 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.367 | 1.11 | mg/kg | 1 | MAR1 | 08/11/14 | 1935 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84154
Sample ID: 352623008
Matrix: S
Collect Date: 11-JUL-14 09:55
Receive Date: 15-JUL-14
Collector: Client
Moisture: 12.9%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 94.0 | 281 | ug/kg | 1 | AXH3 | 07/24/14 | 1041 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.379 | 1.15 | mg/kg | 1 | MAR1 | 08/11/14 | 2005 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84165 | Project: | LANL00114 |
| Sample ID: | 352623009 | Client ID: | ARSL004 |
| Matrix: | S | | |
| Collect Date: | 11-JUL-14 09:40 | | |
| Receive Date: | 15-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 8.98% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 91.7 | 275 | ug/kg | 1 | AXH3 | 07/24/14 | 1042 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.363 | 1.10 | mg/kg | 1 | MAR1 | 08/11/14 | 2035 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84176 | Project: | LANL00114 |
| Sample ID: | 352623010 | Client ID: | ARSL004 |
| Matrix: | S | | |
| Collect Date: | 11-JUL-14 11:11 | | |
| Receive Date: | 15-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 9.94% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 89.1 | 267 | ug/kg | 1 | AXH3 | 07/24/14 | 1043 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.366 | 1.11 | mg/kg | 1 | MAR1 | 08/11/14 | 2105 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84144
Sample ID: 352623011
Matrix: S
Collect Date: 11-JUL-14 10:05
Receive Date: 15-JUL-14
Collector: Client
Moisture: 6.44%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 84.2 | 252 | ug/kg | 1 | AXH3 | 07/24/14 | 1043 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.353 | 1.07 | mg/kg | 1 | MAR1 | 08/11/14 | 2135 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84155
Sample ID: 352623012
Matrix: S
Collect Date: 11-JUL-14 09:35
Receive Date: 15-JUL-14
Collector: Client
Moisture: 10.9%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 90.1 | 270 | ug/kg | 1 | AXH3 | 07/24/14 | 1044 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.370 | 1.12 | mg/kg | 1 | MAR1 | 08/11/14 | 2205 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

Client Sample ID: RE57-14-84177
Sample ID: 352623013
Matrix: S
Collect Date: 11-JUL-14 11:05
Receive Date: 15-JUL-14
Collector: Client
Moisture: 6.23%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 75.5 | 226 | ug/kg | 1 | AXH3 | 07/24/14 | 1045 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.352 | 1.07 | mg/kg | 1 | MAR1 | 08/11/14 | 2235 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 12, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3795

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84121 | Project: | LANL00114 |
| Sample ID: | 352623014 | Client ID: | ARSL004 |
| Matrix: | S | | |
| Collect Date: | 11-JUL-14 07:40 | | |
| Receive Date: | 15-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 10.9% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 79.4 | 238 | ug/kg | 1 | AXH3 | 07/24/14 | 1046 | 1403585 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | Uh | ND | 0.370 | 1.12 | mg/kg | 1 | MAR1 | 08/11/14 | 2305 | 1404219 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | MAR1 | 08/11/14 | 1045 | 1404218 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/23/14 | 1323 | 1403584 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# Quality Control Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: August 12, 2014**



**Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**
**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352623**

| Parmname | NOM | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|
| **Flow Injection Analysis** | | | | | | | | | | |
| Batch 1403585 | | | | | | | | | | |
| QC1203127924 352623001 DUP | | | | | | | | | | |
| Cyanide, Total | U | ND | U | ND | ug/kg | N/A | | | AXH3 | 07/24/14 10:30 |
| QC1203127928 LCS | | | | | | | | | | |
| Cyanide, Total | 90600 | | | 91400 | ug/kg | | 101 | (68%-140%) | | 07/24/14 10:28 |
| QC1203127923 MB | | | | | | | | | | |
| Cyanide, Total | | | U | 250 | ug/kg | | | | | 07/24/14 10:28 |
| QC1203127926 352623001 MS | | | | | | | | | | |
| Cyanide, Total | 5220 U | ND | | 4850 | ug/kg | | 91.9 | (55%-125%) | | 07/24/14 10:31 |
| **Ion Chromatography** | | | | | | | | | | |
| Batch 1404219 | | | | | | | | | | |
| QC1203129425 352623001 DUP | | | | | | | | | | |
| Nitrate-N | Uh | ND | Uh | ND | mg/kg | N/A | | | MAR1 | 08/11/14 15:06 |
| QC1203129426 352623014 DUP | | | | | | | | | | |
| Nitrate-N | Uh | ND | Uh | ND | mg/kg | N/A | | | | 08/11/14 23:35 |
| QC1203129429 LCS | | | | | | | | | | |
| Nitrate-N | 25.0 | | | 24.6 | mg/kg | | 98.5 | (90%-110%) | | 08/11/14 14:07 |
| QC1203129424 MB | | | | | | | | | | |
| Nitrate-N | | | U | 1.00 | mg/kg | | | | | 08/11/14 13:37 |
| QC1203129427 352623001 MS | | | | | | | | | | |
| Nitrate-N | 27.2 Uh | ND | h | 26.7 | mg/kg | | 98.4 | (90%-110%) | | 08/11/14 15:36 |
| QC1203129428 352623014 MS | | | | | | | | | | |
| Nitrate-N | 28.0 Uh | ND | h | 27.1 | mg/kg | | 96.7 | (90%-110%) | | 08/12/14 00:05 |

**Notes:**

| | |
|---|---|
| < | Result is less than value reported |
| > | Result is greater than value reported |
| B | The target analyte was detected in the associated blank. |
| E | General Chemistry--Concentration of the target analyte exceeds the instrument calibration range |
| H | Analytical holding time was exceeded |
| J | Value is estimated |

## QC Summary

**Workorder:** **352623**



| Parmname | NOM | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Z | Paint Filter Test--Particulates passed through the filter, however no free liquids were observed. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| d | 5-day BOD--The 2:1 depletion requirement was not met for this sample |
| e | 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 12-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| IC | EPA 300.0 | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1404219 | See Below | | |

**Potentially affected work order(s)(SDG): 352623(2014-3795)**

**Application Issues:**

Sample Prepped out of Holding

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Sample Prepped out of Holding:<br>352623 001,002,003,004,005,006,007,008,009,<br>010,011,012,013,014<br>QC 1203129425DUP,1203129426DUP,<br>1203129427MS,<br>1203129428MS | 1. The following samples from this sample group was accidentally prepped outside of the method specified holding time. |

**Originator's Name:**

Mary Sherwood 12-AUG-14

**Data Validator/Group Leader:**

Thomas Lewis 12-AUG-14

# Radiological Analysis

**Radiochemistry Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3795**
**Work Order 352623**

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **ISOU** |
| Analytical Method: | DOE EML HASL-300, U-02-RC Modified |
| Prep Method: | Dry Soil Prep |
| Analytical Batch Number: | 1403383 |
| Prep Batch Number: | 1403378 |

| Sample ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 1203127443 | Method Blank (MB) |
| 1203127444 | 352623001(RE57-14-84140) Sample Duplicate (DUP) |
| 1203127445 | Laboratory Control Sample (LCS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 25.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

**Standards Information**
Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**
Aliquot for sample 1203127443 (MB) was changed to 1.0 per client request.

**Designated QC**
The following sample was used for QC: 352623001 (RE57-14-84140). The QC was from ARSL work order 352623.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
Samples 352623001 (RE57-14-84140), 352623002 (RE57-14-84151), 352623004 (RE57-14-84163), 352623005 (RE57-14-84142), 352623006 (RE57-14-84164), 352623007 (RE57-14-84175), 352623008 (RE57-14-84154), 352623010 (RE57-14-84176), 352623011 (RE57-14-84144), 352623012 (RE57-14-84155) and 352623014 (RE57-14-84121) were given additional clean-up steps and recounted in order to improve the resolution. The recounts are reported.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integration**
No manual integrations were performed on data in this batch.

**Sample-Specific MDA/MDC**
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

**Additional Comments**
The MDCs (and Lc if requested) are calculated using a blank population.

**Blank Decision Level**
The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **Dry Weight-Percent Moisture** |
| Analytical Method: | Dry Soil Prep |
| Analytical Batch Number: | 1403378 |

| Sample ID | Client ID |
|---|---|
| 352623001 | RE57-14-84140 |
| 352623002 | RE57-14-84151 |
| 352623003 | RE57-14-84162 |
| 352623004 | RE57-14-84163 |
| 352623005 | RE57-14-84142 |
| 352623006 | RE57-14-84164 |
| 352623007 | RE57-14-84175 |
| 352623008 | RE57-14-84154 |
| 352623009 | RE57-14-84165 |
| 352623010 | RE57-14-84176 |
| 352623011 | RE57-14-84144 |
| 352623012 | RE57-14-84155 |
| 352623013 | RE57-14-84177 |
| 352623014 | RE57-14-84121 |
| 1203127436 | 352623001(RE57-14-84140) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 10 and GL-RAD-A-021 REV# 20.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Designated QC**
The following sample was used for QC: 352623001 (RE57-14-84140). The QC was from ARSL work order 352623.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
Not applicable. The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this sample set.

**Blank Decision Level**
Not Applicable. The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3795  GEL Work Order: 352623

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Heather M. McCarty  **Name:** **Heather McCarty**

**Date:** **26 JUL 2014**  **Title:** **Analyst II**

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545 Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84140
Sample ID: 352623001
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 7.93%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.09 | +/-0.0713 | 0.114 | 0.051 | +/-0.100 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1119 | 1403383 | 2 |
| Uranium-235/236 | | 0.0844 | +/-0.0232 | 0.0821 | 0.0334 | +/-0.0238 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.02 | +/-0.0685 | 0.0716 | 0.0296 | +/-0.0952 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 78.1 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84151
Sample ID: 352623002
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 4.46%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.37 | +/-0.091 | 0.149 | 0.0664 | +/-0.130 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1119 | 1403383 | 2 |
| Uranium-235/236 | U | 0.0512 | +/-0.0284 | 0.107 | 0.0435 | +/-0.0286 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.33 | +/-0.0904 | 0.0932 | 0.0386 | +/-0.127 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 65.8 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84162
Sample ID: 352623003
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 4.29%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.51 | +/-0.0804 | 0.106 | 0.0474 | +/-0.126 | 0.100 | pCi/g | | HAKB | 07/19/14 | 1637 | 1403383 | 2 |
| Uranium-235/236 | | 0.110 | +/-0.0251 | 0.0763 | 0.0311 | +/-0.0261 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.52 | +/-0.0808 | 0.0666 | 0.0275 | +/-0.127 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 81.8 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84163
Sample ID: 352623004
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 3.4%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.16 | +/-0.0737 | 0.111 | 0.0495 | +/-0.105 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1119 | 1403383 | 2 |
| Uranium-235/236 | U | 0.0437 | +/-0.0173 | 0.0797 | 0.0324 | +/-0.0175 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.14 | +/-0.0718 | 0.0695 | 0.0288 | +/-0.103 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 88.0 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84142
Sample ID: 352623005
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 7.96%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.31 | +/-0.0777 | 0.113 | 0.0503 | +/-0.115 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1119 | 1403383 | 2 |
| Uranium-235/236 | | 0.0999 | +/-0.026 | 0.0809 | 0.0329 | +/-0.0268 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.21 | +/-0.0742 | 0.0706 | 0.0292 | +/-0.108 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 78.0 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84164
Sample ID: 352623006
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 10.1%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.37 | +/-0.0951 | 0.162 | 0.0722 | +/-0.133 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1119 | 1403383 | 2 |
| Uranium-235/236 | U | 0.0637 | +/-0.0276 | 0.116 | 0.0473 | +/-0.0279 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.39 | +/-0.0951 | 0.101 | 0.0419 | +/-0.134 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 52.9 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84175
Sample ID: 352623007
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 10.2%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.34 | +/-0.0857 | 0.130 | 0.0581 | +/-0.123 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1119 | 1403383 | 2 |
| Uranium-235/236 | | 0.115 | +/-0.0351 | 0.0935 | 0.0381 | +/-0.0359 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.59 | +/-0.0919 | 0.0816 | 0.0338 | +/-0.140 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 66.3 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84154
Sample ID: 352623008
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 12.9%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.26 | +/-0.0848 | 0.137 | 0.0612 | +/-0.119 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1119 | 1403383 | 2 |
| Uranium-235/236 | U | 0.0608 | +/-0.0224 | 0.0985 | 0.0401 | +/-0.0228 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.24 | +/-0.0834 | 0.0859 | 0.0356 | +/-0.117 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 62.8 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84165
Sample ID: 352623009
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 8.98%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.13 | +/-0.0677 | 0.0978 | 0.0436 | +/-0.0988 | 0.100 | pCi/g | | HAKB | 07/19/14 | 1637 | 1403383 | 2 |
| Uranium-235/236 | | 0.116 | +/-0.0245 | 0.0702 | 0.0286 | +/-0.0256 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.33 | +/-0.0729 | 0.0613 | 0.0254 | +/-0.112 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 89.2 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84176
Sample ID: 352623010
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 9.94%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.48 | +/-0.083 | 0.114 | 0.0507 | +/-0.127 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1119 | 1403383 | 2 |
| Uranium-235/236 | | 0.0896 | +/-0.0263 | 0.0817 | 0.0332 | +/-0.0269 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.66 | +/-0.0884 | 0.0712 | 0.0295 | +/-0.140 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 79.6 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84144
Sample ID: 352623011
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 6.44%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.46 | +/-0.0832 | 0.116 | 0.0517 | +/-0.126 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1118 | 1403383 | 2 |
| Uranium-235/236 | U | 0.0799 | +/-0.0242 | 0.0832 | 0.0339 | +/-0.0248 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.27 | +/-0.0779 | 0.0726 | 0.030 | +/-0.114 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 77.8 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84155
Sample ID: 352623012
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 10.9%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.28 | +/-0.0858 | 0.141 | 0.0627 | +/-0.121 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1118 | 1403383 | 2 |
| Uranium-235/236 | U | 0.083 | +/-0.0259 | 0.101 | 0.0411 | +/-0.0265 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.21 | +/-0.0834 | 0.088 | 0.0364 | +/-0.116 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 64.1 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84177
Sample ID: 352623013
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 6.23%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.32 | +/-0.0725 | 0.0966 | 0.0431 | +/-0.111 | 0.100 | pCi/g | | HAKB | 07/19/14 | 1637 | 1403383 | 2 |
| Uranium-235/236 | | 0.076 | +/-0.0202 | 0.0693 | 0.0282 | +/-0.0207 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.30 | +/-0.0711 | 0.0605 | 0.025 | +/-0.109 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 90.2 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 26, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84121
Sample ID: 352623014
Matrix: S
Collect Date: 11-JUL-14
Receive Date: 15-JUL-14
Collector: Client
Moisture: 10.9%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.36 | +/-0.0791 | 0.113 | 0.0506 | +/-0.119 | 0.100 | pCi/g | | HAKB | 07/23/14 | 1118 | 1403383 | 2 |
| Uranium-235/236 | U | 0.0558 | +/-0.0209 | 0.0814 | 0.0332 | +/-0.0212 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.32 | +/-0.0781 | 0.071 | 0.0294 | +/-0.116 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/16/14 | 0627 | 1403378 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1403383 | 79.2 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# Quality Control Data

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: July 26, 2014**


**Client :** **Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**

**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352623**

| Parmname | NOM | | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Rad Alpha Spec** | | | | | | | | | | | |
| Batch 1403383 | | | | | | | | | | | |
| QC1203127444 352623001 DUP | | | | | | | | | | | |
| Uranium-233/234 | | | 1.09 | | 1.23 | pCi/g | 0.333 | | (0-1) | HAKB | 07/19/1416:39 |
| | | TPU: | +/-0.100 | | +/-0.109 | | | | | | |
| Uranium-235/236 | | | 0.0844 | U | 0.0715 | pCi/g | 0.142 | | (0-1) | | |
| | | TPU: | +/-0.0238 | | +/-0.0218 | | | | | | |
| Uranium-238 | | | 1.02 | | 1.40 | pCi/g | 0.884 | | (0-1) | | |
| | | TPU: | +/-0.0952 | | +/-0.120 | | | | | | |
| **Uranium-232 Tracer | 4.35 | | 3.41 | | 3.47 | pCi/g | | 79.7 | (50%-105%) | | |
| | | TPU: | +/-0.317 | | +/-0.314 | | | | | | |
| QC1203127445 LCS | | | | | | | | | | | |
| Uranium-233/234 | | | | | 4.95 | pCi/g | | | | HAKB | 07/19/1416:39 |
| | | TPU: | | | +/-0.455 | | | | | | |
| Uranium-235/236 | | | | U | 0.355 | pCi/g | | | | | |
| | | TPU: | | | +/-0.121 | | | | | | |
| Uranium-238 | 5.75 | | | | 4.76 | pCi/g | | 82.8 | (75%-125%) | | |
| | | TPU: | | | +/-0.444 | | | | | | |
| **Uranium-232 Tracer | 20.9 | | | | 19.1 | pCi/g | | 91.3 | (50%-105%) | | |
| | | TPU: | | | +/-1.51 | | | | | | |
| QC1203127443 MB | | | | | | | | | | | |
| Uranium-233/234 | | | | U | -0.00546 | pCi/g | | | | HAKB | 07/19/1416:39 |
| | | TPU: | | | +/-0.00482 | | | | | | |
| Uranium-235/236 | | | | U | 0.00675 | pCi/g | | | | | |
| | | TPU: | | | +/-0.00505 | | | | | | |
| Uranium-238 | | | | U | 0.00182 | pCi/g | | | | | |
| | | TPU: | | | +/-0.00546 | | | | | | |
| **Uranium-232 Tracer | 2.19 | | | | 2.05 | pCi/g | | 93.7 | (50%-105%) | | |
| | | TPU: | | | +/-0.153 | | | | | | |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

| | |
|---|---|
| ** | Analyte is a Tracer compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| BD | Results are either below the MDC or tracer recovery is low |
| FA | Failed analysis. |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| K | Analyte present. Reported value may be biased high. Actual value is expected to be lower. |
| L | Analyte present. Reported value may be biased low. Actual value is expected to be higher. |

## QC Summary

**Workorder:** **352623**



| Parmname | NOM | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| M | M if above MDC and less than LLD |
| M | REMP Result > MDC/CL and < RDL |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| UI | Gamma Spectroscopy--Uncertain identification |
| UJ | Gamma Spectroscopy--Uncertain identification |
| UL | Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | Other specific qualifiers were required to properly define the results. Consult case narrative. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
** Indicates analyte is a surrogate/tracer compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

COC/Lab Request #: 2014-3751



**Client Contact:**

**Lab Agreement # :** 126310011

**Project Number :**

**Analysis Turnaround Time:**

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

**Site Name:** Los Alamos National Laboratory

**Rad Screening Info:** Yes, Below Background

**Lab Reporting Limit Type:** Sample Quantitation Limit

**Special Instructions:**

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 |
|---|---|---|---|---|---|---|
| RE57-14-84157 | Jul 10 2014 | 07:40 | SO | 1 | 1 | 1 |
| RE57-14-84159 | Jul 10 2014 | 08:20 | SO | 1 | 1 | 1 |
| RE57-14-84138 | Jul 10 2014 | 10:30 | SO | 1 | 1 | 1 |
| RE57-14-84149 | Jul 10 2014 | 09:30 | SO | 1 | 1 | 1 |
| RE57-14-84160 | Jul 10 2014 | 11:45 | SO | 1 | 1 | 1 |
| RE57-14-84139 | Jul 10 2014 | 08:00 | SO | 1 | 1 | 1 |
| RE57-14-84150 | Jul 10 2014 | 08:15 | SO | 1 | 1 | 1 |
| RE57-14-84161 | Jul 10 2014 | | SO | 1 | 1 | 1 |
| RE57-14-84141 | Jul 10 2014 | 10:20 | SO | 1 | 1 | 1 |
| RE57-14-84152 | Jul 10 2014 | 10:40 | SO | 1 | 1 | 1 |
| RE57-14-84120 | Jul 10 2014 | 09:50 | SO | 1 | 1 | 1 |
| RE57-14-84130 | Jul 10 2014 | 10:20 | SO | 1 | | |
| RE57-14-84131 | Jul 10 2014 | 08:20 | SO | 1 | | |

**Special Instructions:**

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| Sheri Sherwood | Sheri Sherwood | 7/11/14 3pm | | | |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84120 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/10/14 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 0930 | MEDIA: | | | Fill |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | UNK | | OK 57-4015 | FIELD PREP: | NA | | OK |
| LOCATION TYPE: | | | 57-4015 | FIELD QC TYPE: | FD | | OK |
| TOP DEPTH: | | | 1.5 | SAMPLE USAGE: | QC | | OK |
| BOTTOM DEPTH: | | | 2.5 | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** QC of RE57-14-84149

**LOCATION COMMENTS:** 7.5 1ft above tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 74 dpm

Beta/Gamma 1606 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Tommy Sower

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Ford | 7-10-14 1505 | R. Sherwood | 7-10-14 1505 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84130 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 07/10/2014 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 1020 | MEDIA: | | | ~~Sand~~ NA |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | DC | | OK |
| LOCATION ID: | UNK | | 57-4018 | FIELD PREP: | NA | | |
| LOCATION TYPE: | | | 57-4018 | FIELD QC TYPE: | FTB | | |
| TOP DEPTH: | | | 0 ft | SAMPLE USAGE: | QC | | |
| BOTTOM DEPTH: | | | 1 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |

**SAMPLE COMMENTS:** QC of RE57-14-84141

**LOCATION COMMENTS:** 78 0-1 ft bgs leachfield not present

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm PID Ambient Reading = 0.0 / 0.0 ppm

Beta/Gamma 1563 dpm

**COLLECTED BY (PRINT)** W. Sanchez

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Jordan | 7-10-14 1505 | S. Shagnwood | 7-10-14 1905 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84131 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/10/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0820 | MEDIA: | | for 07/10/14 Sand NA |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | DC | OK |
| LOCATION ID: | UNK | 57-4014 | FIELD PREP: | NA | |
| LOCATION TYPE: | | 57-4014 | FIELD QC TYPE: | FTB | |
| TOP DEPTH: | | 4 ft | SAMPLE USAGE: | QC | |
| BOTTOM DEPTH: | | 5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |

**SAMPLE COMMENTS:** QC sample of RE57-14-84159

**LOCATION COMMENTS:** 7-4 2-3 ft into tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 19 dpm

Beta/Gamma 4648 dpm

PID Ambient Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Tom Sower

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Jack | 7-10-14 1505 | S. Sherwood | 7-10-14 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84138 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/10/14 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 1030 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4015 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | 57-4015 | OK | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | | 2.5 ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | | 3.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Qbt 3; Grey; abundant quartz

**LOCATION COMMENTS:** 7-5 0-1ft ~~bgs~~ below leachfield

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 34 dpm

Beta/Gamma 1615 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Thomas Sowa

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Tammy Jordan<br>(Signature) | 7-10-14 1505 | (Printed Name) D. Sherwood<br>(Signature) | 7-10-14 1505 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84139 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7-10-14 | FIELD MATRIX: | S | | ok |
| TIME COLLECTED (HH:MM): | | | 0800 | MEDIA: | | | native soil |
| PRS ID: | 57-007 | | ok | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 57-4016 | | ok | FIELD PREP: | NA | | ok |
| LOCATION TYPE: | 57-4016 | | ok | FIELD QC TYPE: | REG | | ok |
| TOP DEPTH: | | | 0 ft | SAMPLE USAGE: | INV | | ok |
| BOTTOM DEPTH: | | | 1 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | ↓ |

**SAMPLE COMMENTS:** Soil, weathered tuff, grayish-brown, moist, no HC odor

**LOCATION COMMENTS:** 7-6 (0-1 ft bgs) leachfield not present

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 29 dpm

Beta/Gamma 1606 dpm

PID Ambient Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** James Jordan

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Jordan<br>(Signature) James Jordan | 7-10-14 1505 | (Printed Name) S. Sherwood<br>(Signature) S. Sherwood | 7-10-14 1505 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84141

**WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/10/14 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 10:20 | MEDIA: | | | Fill |
| PRS ID: | 57-007 | | OK | SAMPLE TECH CODE: | HA | | OK |
| LOCATION ID: | 57-4018 | | ↓ | FIELD PREP: | NA | | ↓ |
| LOCATION TYPE: | 57-4018 | | ↓ | FIELD QC TYPE: | REG | | ↓ |
| TOP DEPTH: | | | 0 ft | SAMPLE USAGE: | INV | | ↓ |
| BOTTOM DEPTH: | | | 1 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | ↓ |

**SAMPLE COMMENTS:** Fill

**LOCATION COMMENTS:** 7-8 07/10/14 0-1 ft bgs leachfield not present

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm

Beta/Gamma 1563 dpm

PID Ambient Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** W. Sanchez

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Jordan<br>(Signature) James Jordan | 7-10-14 1505 | (Printed Name) S. Shenwood<br>(Signature) Shen Shenwood | 7-10-14 1505 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84149 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/10/14 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0930 | MEDIA: | | Fill |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4015 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | 57-4015 | OK | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | | 1.5 ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | | 2.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | ↓ |

**SAMPLE COMMENTS:** Sandy gravel, brown, moist, no HC odor

**LOCATION COMMENTS:** 7-5 1 ft above tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm

Beta/Gamma 1469 dpm

PID Ambient Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Tommy Sawer

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Jordan (Signature) | 7-10-14 1505 | (Printed Name) S. Sherwood (Signature) | 7-10-14 1505 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84150 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7-10-14 | FIELD MATRIX: | S | | ok |
| TIME COLLECTED (HH:MM): | | | 0815 | MEDIA: | | | ~~Above Soil~~ ALLH |
| PRS ID: | 57-007 | | ok | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 57-4016 | | ok | FIELD PREP: | NA | | ok |
| LOCATION TYPE: | 57-4016 | | ok | FIELD QC TYPE: | REG | | ok |
| TOP DEPTH: | | | 3 ft | SAMPLE USAGE: | INV | | ok |
| BOTTOM DEPTH: | | | 4 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** Soil, weathered tuff, grayish-brown, moist, no HC odor

**LOCATION COMMENTS:** 7-6 (1 ft above tuff)

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 34 dpm PID Ambient Reading = 0.0 / 0.0 ppm

Beta/Gamma 1600 dpm

**COLLECTED BY (PRINT)** James Jordan

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Jordan (Signature) James Jordan | 7-10-14 1505 | (Printed Name) S. Sherwood (Signature) Sher Sherwood | 7-12-14 1505 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84152 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/10/14 | FIELD MATRIX: | ~~S~~ | ~~Fill~~ 7/10/14 Soil |
| TIME COLLECTED (HH:MM): | | 10:40 AM | MEDIA: | | ~~native soil~~ ALLH |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4018 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4018 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 4.4 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 5.4 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Soil/fill ~~Fill~~ 07/10/2014

**LOCATION COMMENTS:** 7-8 (1 ft above tuff)

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 34 dpm PID Ambient / Reading = 0.0 / 0.0 ppm

Beta/Gamma 1630 dpm

**COLLECTED BY (PRINT)** W. Sanchez

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Jordan (Signature) | 7-10-14 1505 | (Printed Name) S. Sherwood (Signature) | 7-10-14 1505 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84157 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/10/14 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 07:40 AM | MEDIA: | | QBT 3 |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4012 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4012 | | FIELD QC TYPE: | REG | |
| TOP DEPTH: | | 4.75 feet | SAMPLE USAGE: | INV | |
| BOTTOM DEPTH: | | 5.25 feet | EXCAVATED: | | YES / NO / (NA) |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| N/A | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | N/A |
| N/A | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | N/A |

**SAMPLE COMMENTS:** Qbt3; Moderately welded; light grey to white

**LOCATION COMMENTS:** 7-2 (2-3 ft into tuff)

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 44 dpm

Beta/Gamma 1506 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Paffett, Kyle

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Jordan | 7-10-14 1505 | S. Sherwood | 7-10-14 1505 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84159 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/10/14 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 0820 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4014 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | 57-4014 | OK | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | | 4 Ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | | 5 Ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Qbt3; light grey to white w/sanidine and Quartz crystals. moderately welded.

**LOCATION COMMENTS:** 7-4 2-3ft into tuff

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 19 dpm

Beta/Gamma 1648 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** TOM SOWER

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Jordan / James Jordan | 7-10-14 1505 | S. Sherwood / S. Sherwood | 7-10-14 1505 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84160 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/10/14 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 11:45 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4015 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | 57-4015 | OK | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | | 4.5 ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | | 5.5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Qbt3; dark to medium grey; abundant quartz moderately to densely welded

**LOCATION COMMENTS:** 7-5 2-3 ft into tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

**Alpha** 19 **dpm** **PID** Ambient / Reading = 0.0 / 0.0 **ppm**

**Beta/Gamma** 1433 **dpm**

**COLLECTED BY (PRINT)** Thomas Sower

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Jordan (Signature) | 7-10-14 1505 | (Printed Name) Sherwood (Signature) | 7-10-14 1505 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84161 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/10/2014 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 1305 | MEDIA: | | Qbt3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4016 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4016 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 6 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 7 ft | EXCAVATED: | | YES / NO (NA) |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

SAMPLE COMMENTS: Qbt 3; light brown/grey; moderately welded

LOCATION COMMENTS: 7-6 (2-3 ft into tuff)

FIELD PARAMETERS:
FIELD SCREENING/MEASUREMENT RESULTS:

Alpha 39 dpm

Beta/Gamma 1509 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

COLLECTED BY (PRINT) J. Jordan

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Bobbie Rapp (signature) | 07/10/2014 1505 | S. Sherwood (signature) | 7/10/14 1505 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# DATA VALIDATION REPORT

Chain Of Custody No. 2014-3751

1. Distribution Of Samples In EDD.

| SDG | Analytical Method | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks |
|---|---|---|---|---|---|---|
| 352522 | EPA:300.0 | 10 | 1 | | | |
| 352522 | HASL-300:ISOU | 10 | 1 | | | |
| 352522 | SW-846:6010C | 10 | 1 | | | |
| 352522 | SW-846:6020 | 10 | 1 | | | |
| 352522 | SW-846:6850 | 10 | 1 | | | |
| 352522 | SW-846:7471A | 10 | 1 | | | |
| 352522 | SW-846:8260B | 10 | 1 | 2 | | |
| 352522 | SW-846:8270D | 10 | 1 | | | |
| 352522 | SW-846:9012A | 10 | 1 | | | |

| SDG | Analytical Method | Analysis Lot ID | Prep Lot ID | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks | Method Blanks | Matrix Spikes | Matrix Spike Dups | Analytical Spikes | Post-Digestion Spikes | Lab Control Samples | Lab Control Sample Dups | Blank Spike | Blank Spike Dups | Lab Duplicates | Storage Blanks | Preparation Blanks | Reagent Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 352522 | EPA:300.0 | 1403036 | 1403034 | 10 | 1 | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352522 | HASL-300:ISOU | 1402959 | 1402959 | 10 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352522 | SW-846:6010C | 1403267 | 1403266 | 10 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352522 | SW-846:6020 | 1403273 | 1403272 | 10 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352522 | SW-846:6850 | 1402813 | 1402812 | 10 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352522 | SW-846:7471A | 1405674 | 1405670 | 10 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352522 | SW-846:8260B | 1408149 | 1408147 | 10 | 1 | 2 | | | 2 | | | | | 4 | | | | | | | |
| 352522 | SW-846:8270D | 1404170 | 1404169 | 10 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352522 | SW-846:9012A | 1402234 | 1402233 | 1 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352522 | SW-846:9012A | 1402824 | 1402823 | 9 | | | | | 1 | | | | | 1 | | | | 2 | | | |

2. Distribution Of Analytes In EDD.

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| EPA:300.0 | GENERAL CHEMISTRY | LCS | 1203126612 | LCS | 0 | 0 | 1 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| EPA:300.0 | GENERAL CHEMISTRY | MB | 1203126607 | MB | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84120 | 352522011 | FD | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84137 | 1203126609 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84138 | 352522003 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84139 | 352522006 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84141 | 352522009 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84149 | 352522004 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84150 | 352522007 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84152 | 352522010 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84157 | 352522001 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84158 | 1203126608 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84159 | 352522002 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84160 | 352522005 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84161 | 352522008 | REG | 1 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | LCS | 1203126405 | LCS | 0 | 0 | 1 | 0 |
| HASL-300:ISOU | RAD | MB | 1203126403 | MB | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84120 | 352522011 | FD | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84138 | 352522003 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84139 | 352522006 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84141 | 352522009 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84149 | 352522004 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84150 | 352522007 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84152 | 352522010 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84157 | 1203126404 | DUP | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84157 | 352522001 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84159 | 352522002 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84160 | 352522005 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84161 | 352522008 | REG | 3 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203127182 | LCS | 0 | 0 | 17 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203127181 | MB | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84120 | 352522011 | FD | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84138 | 352522003 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84139 | 352522006 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84141 | 352522009 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84149 | 352522004 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84150 | 352522007 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84152 | 352522010 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84157 | 1203127183 | DUP | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84157 | 352522001 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84159 | 352522002 | REG | 17 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:6010C | INORGANIC | RE57-14-84160 | 352522005 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84161 | 352522008 | REG | 17 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203127197 | LCS | 0 | 0 | 5 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203127196 | MB | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84120 | 352522011 | FD | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84138 | 352522003 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84139 | 352522006 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84141 | 352522009 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84149 | 352522004 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84150 | 352522007 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84152 | 352522010 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84157 | 1203127198 | DUP | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84157 | 352522001 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84159 | 352522002 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84160 | 352522005 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84161 | 352522008 | REG | 5 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | LCS | 1203125997 | LCS | 0 | 0 | 1 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | MB | 1203125996 | MB | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84120 | 352522011 | FD | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84138 | 352522003 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84139 | 352522006 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84141 | 352522009 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84149 | 352522004 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84150 | 352522007 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84152 | 352522010 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84157 | 352522001 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84159 | 352522002 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84160 | 352522005 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84161 | 352522008 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | LCS | 1203133203 | LCS | 0 | 0 | 1 | 0 |
| SW-846:7471A | INORGANIC | MB | 1203133202 | MB | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84120 | 352522011 | FD | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84138 | 352522003 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84139 | 352522006 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84141 | 352522009 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84149 | 352522004 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84150 | 352522007 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84152 | 352522010 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84157 | 1203133204 | DUP | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84157 | 352522001 | REG | 1 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:7471A | INORGANIC | RE57-14-84159 | 352522002 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84160 | 352522005 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84161 | 352522008 | REG | 1 | 0 | 0 | 0 |
| SW-846:8260B | VOC | LCS | 1203139631 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203139632 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | LCS | 1203144004 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203144005 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | MB | 1203139626 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | MB | 1203144003 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84120 | 352522011 | FD | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84130 | 352522012 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84131 | 352522013 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84138 | 352522003 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84139 | 352522006 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84141 | 352522009 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84149 | 352522004 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84150 | 352522007 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84152 | 352522010 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84157 | 352522001 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84159 | 352522002 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84160 | 352522005 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84161 | 352522008 | REG | 62 | 3 | 0 | 0 |
| SW-846:8270D | SVOC | LCS | 1203129288 | LCS | 0 | 6 | 69 | 0 |
| SW-846:8270D | SVOC | MB | 1203129287 | MB | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84120 | 352522011 | FD | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84138 | 352522003 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84139 | 352522006 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84141 | 352522009 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84149 | 352522004 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84150 | 352522007 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84152 | 352522010 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84157 | 352522001 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84159 | 352522002 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84160 | 352522005 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84161 | 352522008 | REG | 69 | 6 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | LCS | 1203124669 | LCS | 0 | 0 | 1 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | LCS | 1203126022 | LCS | 0 | 0 | 1 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | MB | 1203124664 | MB | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | MB | 1203126017 | MB | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84119 | 1203126018 | DUP | 1 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84120 | 352522011 | FD | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84138 | 352522003 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84139 | 352522006 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84141 | 352522009 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84149 | 352522004 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84150 | 352522007 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84152 | 352522010 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84157 | 1203126019 | DUP | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84157 | 352522001 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84159 | 352522002 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84160 | 352522005 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84161 | 352522008 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84178 | 1203124666 | DUP | 1 | 0 | 0 | 0 |

3. Are any analytes missing?

No.

4. Were any holding times exceeded?

No.

5. Any contaminants in blanks?

| Blank FS ID | Blank Lab Sample | Blank Type | Analytical Method | Sample | Parameter Name | Blank Lab Result | Lab Qualifier | Blank Lab Units | Blank Lab Detection Limit |
|---|---|---|---|---|---|---|---|---|---|
| MB | 1203127181 | METHOD BLANK | SW-846:6010C | SO | Lead | 580 | J | ug/kg | 984 |
| MB | 1203127181 | METHOD BLANK | SW-846:6010C | SO | Potassium | 7070 | J | ug/kg | 24600 |
| MB | 1203127196 | METHOD BLANK | SW-846:6020 | SO | Thallium | -69.9 | J | ug/kg | 398 |

# DATA VALIDATION REPORT

| Field Sample ID | Blank Lab | Blank Type | Analytical Method | Parameter Name | Blank Lab Result | Blank Lab Units | Lab Result | Lab Qualifier | Lab Detection Limit | Detect Flag | Detect to Nondetect Factor | Detect to Estimated Factor | Use Factors |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84157 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 416 | U | 416 | N | 5 | 100 | Y |
| RE57-14-84159 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 419 | U | 419 | N | 5 | 100 | Y |
| RE57-14-84138 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 394 | U | 394 | N | 5 | 100 | Y |
| RE57-14-84149 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 418 | U | 418 | N | 5 | 100 | Y |
| RE57-14-84160 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 392 | U | 392 | N | 5 | 100 | Y |
| RE57-14-84139 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 398 | U | 398 | N | 5 | 100 | Y |
| RE57-14-84150 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 156 | J | 414 | Y | 5 | 100 | Y |
| RE57-14-84161 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 413 | U | 413 | N | 5 | 100 | Y |
| RE57-14-84141 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 407 | U | 407 | N | 5 | 100 | Y |
| RE57-14-84152 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 409 | U | 409 | N | 5 | 100 | Y |
| RE57-14-84120 | 1203127196 | METHOD BLANK | SW-846:6020 | Thallium | -69.9 | ug/kg | 389 | U | 389 | N | 5 | 100 | Y |

6. Any surrogate recoveries outside the control limits?

| Field Sample ID | Lab Sample ID | Analytical Method | Parameter Name | Analysis Lot ID | Analysis Date | Spike Recovery | Upper Limit | Lower Limit | Rejection Limit |
|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84139 | 352522006 | SW-846:8260B | Bromofluorobenzene[4-] | 1408149 | 07-31-2014 | 121 | 120 | 80 | 10 |
| RE57-14-84120 | 352522011 | SW-846:8270D | 4-Terphenyl-d14 | 1404170 | 07-21-2014 | 157 | 124 | 31 | |

7. Any MS/MSD recoveries or RPDs outside the control limits?

No.

8. Any LCS/LCSD or BS/BSD recoveries or RPDs outside the control limits?

No.

9. Any Field Duplicate RPDs outside the desired limits?

# DATA VALIDATION REPORT

No.

10. Any Lab Duplicate RPDs outside the desired limits?

| Field Sample ID | Lab Sample ID | LD Lab Sample ID | Analytical Method | Parameter Name | Sample Matrix | Lab Result | LD Lab Result | Lab Units | Detect Flag | LD Detect Flag | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84157 | 352522001 | 1203127183 | SW-846:6010C | Chromium | SO | 68300 | 54100 | ug/kg | Y | Y | 23.2 | 20 |

11. Any required reporting limits exceeded?

No.

12. Additional Validator's Comments.

13. Display Flagged Data.

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4015 | 2014-3751 | RE57-14-84120 | FD | INIT | SVOC | SW-846:8270D | Bis(2-ethylhexyl)phthalate | J | J+ | SV3b | Y | 145 | ug/kg | 0.145 | mg/kg | | | SD | 07/10/2014 | | 1404170 | VAL | Y |
| 57-4015 | 2014-3751 | RE57-14-84120 | FD | INIT | SVOC | SW-846:8270D | Butylbenzylphthalate | | J+ | SV3b | Y | 384 | ug/kg | 0.384 | mg/kg | | | SD | 07/10/2014 | | 1404170 | VAL | Y |
| 57-4015 | 2014-3751 | RE57-14-84120 | FD | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0627 | pCi/g | .0627 | pCi/g | 0.0703 | 0.0241 | SD | 07/10/2014 | | 1402959 | VAL | Y |
| 57-4015 | 2014-3751 | RE57-14-84138 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0627 | pCi/g | .0627 | pCi/g | 0.0653 | 0.0179 | SD | 07/10/2014 | | 1402959 | VAL | Y |
| 57-4016 | 2014-3751 | RE57-14-84139 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0768 | pCi/g | .0768 | pCi/g | 0.0862 | 0.0229 | SD | 07/10/2014 | | 1402959 | VAL | Y |
| 57-4018 | 2014-3751 | RE57-14-84141 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0634 | pCi/g | .0634 | pCi/g | 0.0771 | 0.0211 | SD | 07/10/2014 | | 1402959 | VAL | Y |
| 57-4016 | 2014-3751 | RE57-14-84150 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0479 | pCi/g | .0479 | pCi/g | 0.0777 | 0.022 | SD | 07/10/2014 | | 1402959 | VAL | Y |
| 57-4012 | 2014-3751 | RE57-14-84157 | REG | INIT | INORGANIC | SW-846:6010C | Chromium | N* | J | I10a | Y | 68300 | ug/kg | 68.3 | mg/kg | | | SD | 07/10/2014 | | 1403267 | VAL | Y |
| 57-4012 | 2014-3751 | RE57-14-84157 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0472 | pCi/g | .0472 | pCi/g | 0.0689 | 0.0164 | SD | 07/10/2014 | | 1402959 | VAL | Y |

| Reason Code | Description |
|---|---|
| I10a | The sample and the duplicate sample results were >=5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples. |
| J_LAB | The analytical laboratory qualified the detected result as estimated (J) because the result was less the PQL but greater than the MDL |
| NQ | The analytical laboratory did not qualifiy the analyte as not detected and/or any other standard qualifire. The analyte is detected in the sample. |

# DATA VALIDATION REPORT

| Reason Code | Description |
|---|---|
| R5 | Analyte is not detected because the amount reported is less than the MDC. |
| SV3b | The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package. |
| U_LAB | The analytical laboratory qualified the analyte as not detected. |

14. Usable Result Count.

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84120 | 57-4015 | FD | EPA:300.0 | 0 | 1 |
| RE57-14-84120 | 57-4015 | FD | HASL-300:ISOU | 0 | 3 |
| RE57-14-84120 | 57-4015 | FD | SW-846:6010C | 0 | 17 |
| RE57-14-84120 | 57-4015 | FD | SW-846:6020 | 0 | 5 |
| RE57-14-84120 | 57-4015 | FD | SW-846:6850 | 0 | 1 |
| RE57-14-84120 | 57-4015 | FD | SW-846:7471A | 0 | 1 |
| RE57-14-84120 | 57-4015 | FD | SW-846:8260B | 0 | 62 |
| RE57-14-84120 | 57-4015 | FD | SW-846:8270D | 0 | 69 |
| RE57-14-84120 | 57-4015 | FD | SW-846:9012A | 0 | 1 |
| RE57-14-84130 | 57-4018 | FTB | SW-846:8260B | 0 | 62 |
| RE57-14-84131 | 57-4014 | FTB | SW-846:8260B | 0 | 62 |
| RE57-14-84138 | 57-4015 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84138 | 57-4015 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84138 | 57-4015 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84138 | 57-4015 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84138 | 57-4015 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84138 | 57-4015 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84138 | 57-4015 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84138 | 57-4015 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84138 | 57-4015 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84139 | 57-4016 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84139 | 57-4016 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84139 | 57-4016 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84139 | 57-4016 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84139 | 57-4016 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84139 | 57-4016 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84139 | 57-4016 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84139 | 57-4016 | REG | SW-846:8270D | 0 | 69 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84139 | 57-4016 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84141 | 57-4018 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84141 | 57-4018 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84141 | 57-4018 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84141 | 57-4018 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84141 | 57-4018 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84141 | 57-4018 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84141 | 57-4018 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84141 | 57-4018 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84141 | 57-4018 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84149 | 57-4015 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84149 | 57-4015 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84149 | 57-4015 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84149 | 57-4015 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84149 | 57-4015 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84149 | 57-4015 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84149 | 57-4015 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84149 | 57-4015 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84149 | 57-4015 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84150 | 57-4016 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84150 | 57-4016 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84150 | 57-4016 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84150 | 57-4016 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84150 | 57-4016 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84150 | 57-4016 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84150 | 57-4016 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84150 | 57-4016 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84150 | 57-4016 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84152 | 57-4018 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84152 | 57-4018 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84152 | 57-4018 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84152 | 57-4018 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84152 | 57-4018 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84152 | 57-4018 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84152 | 57-4018 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84152 | 57-4018 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84152 | 57-4018 | REG | SW-846:9012A | 0 | 1 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84157 | 57-4012 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84157 | 57-4012 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84157 | 57-4012 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84157 | 57-4012 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84157 | 57-4012 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84157 | 57-4012 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84157 | 57-4012 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84157 | 57-4012 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84157 | 57-4012 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84159 | 57-4014 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84159 | 57-4014 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84159 | 57-4014 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84159 | 57-4014 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84159 | 57-4014 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84159 | 57-4014 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84159 | 57-4014 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84159 | 57-4014 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84159 | 57-4014 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84160 | 57-4015 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84160 | 57-4015 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84160 | 57-4015 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84160 | 57-4015 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84160 | 57-4015 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84160 | 57-4015 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84160 | 57-4015 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84160 | 57-4015 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84160 | 57-4015 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84161 | 57-4016 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84161 | 57-4016 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84161 | 57-4016 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84161 | 57-4016 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84161 | 57-4016 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84161 | 57-4016 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84161 | 57-4016 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84161 | 57-4016 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84161 | 57-4016 | REG | SW-846:9012A | 0 | 1 |

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

August 07, 2014

Mr. Keith Greene
Los Alamos National Laboratory
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER
Work Order: 352522
SDG: 2014-3751

Dear Mr. Greene:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on July 12, 2014, and analyzed for GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Hope Taylor for
Valerie Davis
Project Manager

Chain of Custody: 2014-3751
Enclosures

**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Work Order #: 352522**
**SDG: 2014-3751**

Table of Contents

Case Narrative.....1

Chain of Custody and Supporting Documentation.....5

Data Review Qualifier Flag Definition Sheet.....15

Volatile Analysis.....18

Case Narrative.....19

Sample Data Summary.....25

Quality Control Summary.....52

Quality Control Data.....72

Miscellaneous.....93

Semi-Volatile Analysis.....95

Case Narrative.....96

Sample Data Summary.....102

Quality Control Summary.....136

Quality Control Data.....151

Miscellaneous.....161

Perchlorates by LCMSMS Analysis.....163

Case Narrative.....164

Sample Data Summary.....170

Quality Control Summary.....182

Quality Control Data.....185

Metals Analysis.....191
Case Narrative.....192
Sample Data Summary.....197
Quality Control Summary.....210
Miscellaneous.....224
General Chem Analysis.....226
Case Narrative.....227
Sample Data Summary.....235
Quality Control Summary.....248
Radiological Analysis.....251
Sample Data Summary.....257
Quality Control Data.....269

# Case Narrative

**Case Narrative for**
**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Workorder #: 352522**
**SDG # : 2014-3751**

**August 07, 2014**

**Laboratory Identification:**

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on July 12, 2014 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C). Shipping container temperatures were checked, documented, and within specifications. There are no additional comments concerning sample receipt.

**Sample Identification** The laboratory received the following samples:

| Laboratory ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 352522012 | RE57-14-84130 |
| 352522013 | RE57-14-84131 |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package**

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Hope Taylor for
Valerie Davis
Project Manager

**List of current GEL Certifications as of 07 August 2014**

| State | Certification |
|---|---|
| Alaska | UST−110 |
| Arkansas | 88−0651 |
| CLIA | 42D0904046 |
| California NELAP | 01151CA |
| Colorado | SC00012 |
| Connecticut | PH−0169 |
| Delaware | SC000122013−10 |
| DoD ELAP/ ISO17025 A2LA | 2567.01 |
| Florida NELAP | E87156 |
| Foreign Soils Permit | P330−12−00283, P330−12−00284 |
| Georgia | SC00012 |
| Georgia SDWA | 967 |
| Hawaii | SC000122013−10 |
| Idaho Chemistry | SC00012 |
| Idaho Radiochemistry | SC00012 |
| Illinois NELAP | 200029 |
| Indiana | C−SC−01 |
| Kansas NELAP | E−10332 |
| Kentucky | 90129 |
| Louisiana NELAP | 03046 (AI33904) |
| Louisiana SDWA | LA130005 |
| Maryland | 270 |
| Massachusetts | M−SC012 |
| Michigan | 9976 |
| Mississippi | SC000122013−10 |
| Nebraska | NE−OS−26−13 |
| Nevada | SC000122014−1 |
| New Hampshire NELAP | 2054 |
| New Jersey NELAP | SC002 |
| New Mexico | SC00012 |
| New York NELAP | 11501 |
| North Carolina | 233 |
| North Carolina SDWA | 45709 |
| Oklahoma | 9904 |
| Pennsylvania NELAP | 68−00485 |
| Plant Material Permit | PDEP−12−00260 |
| South Carolina Chemistry | 10120001 |
| South Carolina GVL | 23611001 |
| South Carolina Radiochemi | 10120002 |
| Tennessee | TN 02934 |
| Texas NELAP | T104704235−14−9 |
| Utah NELAP | SC000122014−14 |
| Vermont | VT87156 |
| Virginia NELAP | 460202 |
| Washington | C780−12 |
| Wisconsin | 999887790 |

# Chain of Custody and Supporting Documentation

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

352522

COC/Lab Request #: 2014-3751



Client Contact:

Lab Agreement # : 126310011

Project Number :

Analysis Turnaround Time:
24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Site Name: Los Alamos National Laboratory

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 |
|---|---|---|---|---|---|---|
| RE57-14-84157 | Jul 10 2014 | 07:40 | SO | 1 | 1 | 1 |
| RE57-14-84159 | Jul 10 2014 | 08:20 | SO | 1 | 1 | 1 |
| RE57-14-84138 | Jul 10 2014 | 10:30 | SO | 1 | 1 | 1 |
| RE57-14-84149 | Jul 10 2014 | 09:30 | SO | 1 | 1 | 1 |
| RE57-14-84160 | Jul 10 2014 | 11:45 | SO | 1 | 1 | 1 |
| RE57-14-84139 | Jul 10 2014 | 08:00 | SO | 1 | 1 | 1 |
| RE57-14-84150 | Jul 10 2014 | 08:15 | SO | 1 | 1 | 1 |
| RE57-14-84161 | Jul 10 2014 | | SO | 1 | 1 | 1 |
| RE57-14-84141 | Jul 10 2014 | 10:20 | SO | 1 | 1 | 1 |
| RE57-14-84152 | Jul 10 2014 | 10:40 | SO | 1 | 1 | 1 |
| RE57-14-84120 | Jul 10 2014 | 09:50 | SO | 1 | 1 | 1 |
| RE57-14-84130 | Jul 10 2014 | 10:20 | SO | 1 | | |
| RE57-14-84131 | Jul 10 2014 | 08:20 | SO | 1 | | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| Sheri Sherwood | Sheri Sherwood | 7/11/14 3pm | P. Dent | Patricia Dent | 7/12/14 0900 |
| | | | | | |
| | | | | | |

GEL Laboratories LLC

# SAMPLE RECEIPT & REVIEW FORM

| | |
|---|---|
| Client: LANL | SDG/AR/COC/Work Order: 352522 |
| Received By: P. Nient | Date Received: 7-12-14 |

| Suspected Hazard Information | Yes | No | *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. |
|---|---|---|---|
| COC/Samples marked as radioactive? | | X | Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 8CPM |
| Classified Radioactive II or III by RSO? | | X | If yes, Were swipes taken of sample contatiners < action levels? |
| COC/Samples marked containing PCBs? | | X | |
| Package, COC, and/or Samples marked as beryllium or asbestos containing? | | X | If yes, samples are to be segregeated as Safety Controlled Samples, and opened by the GEL Safety Group. |
| Shipped as a DOT Hazardous? | | X | Hazard Class Shipped: UN#: |
| Samples identified as Foreign Soil? | | X | |

| | Sample Receipt Criteria | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items) |
|---|---|---|---|---|---|
| 1 | Shipping containers received intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 2 | Samples requiring cold preservation within (0 ≤ 6 deg. C)?* | X | | | Preservation Method: Ice bags Blue ice Dry ice None Other (describe) 2-4.2c *all temperatures are recorded in Celsius |
| 2a | Daily check performed and passed on IR temperature gun? | X | | | Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 130462966 |
| 3 | Chain of custody documents included with shipment? | X | | | |
| 4 | Sample containers intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 5 | Samples requiring chemical preservation at proper pH? | X | | | Sample ID's, containers affected and observed pH: If Preservation added, Lot#: |
| 6 | VOA vials free of headspace (defined as < 6mm bubble)? | X | | | Sample ID's and containers affected: |
| 7 | Are Encore containers present? | | | X | (If yes, immediately deliver to Volatiles laboratory) |
| 8 | Samples received within holding time? | X | | | ID's and tests affected: |
| 9 | Sample ID's on COC match ID's on bottles? | X | | | Sample ID's and containers affected: |
| 10 | Date & time on COC match date & time on bottles? | X | | | Sample ID's affected: |
| 11 | Number of containers received match number indicated on COC? | | | X | Sample ID's affected: Please See Continuation Sheet |
| 12 | Are sample containers identifiable as GEL provided? | | | X | |
| 13 | COC form is properly signed in relinquished/received sections? | X | | | |
| 14 | Carrier and tracking number. | X | | | Circle Applicable: FedEx Air: 5908, 5908 FedEx Ground: 1777, 1777 UPS: 2843-3, 2810-21, 2821-2, 2832-3, 2854-20, 2887-4c Field Services: 5908 1777 Courier: Other: 2876-3c, 2865-2c, 2795-2c, 2800-4c |

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials JP Date 7-16-14 Page 1 of 2

GEL Laboratories LLC **SAMPLE RECEIPT & REVIEW CONTINUATION FORM**

Client: LANL Received By: P. Wheat Date Received: 7-12-14 SDG/AR/COC/Work Order: 352522

CAMO-14-81467 rec'd (2) Containers each 1. Each broken during handing
CAMO-14-81464, WTESR-14-77970 rec'd (1) 8260b container each, Chain indicates (2) each.

WT_IPC-14-56004 rec'd (3) HEXP instead of (2) as indicated on chain of Custody. (2) SVOC, chain indicates (3).
WT_IPC-14-55973 rec'd (3) HEXP instead of (2) as indicated on chain of Custody. (1) - Ra226+228 chain indicates (4) (2) SVOC chain indicates (3).

WT_IPC-14-56093 rec'd (3) Ra226+228 Containers, Chain indicates (4).

WTRON-14-79901 rec'd (8) Gross A/B instead of (1) as indicated on chain of Custody.
WTRON-14-79957 rec'd (1) - Ra226+228 instead of (4) as indicated on chain of Custody. (4) SVOC containers instead of (3) as indicated on chain of Custody.

PD 7-12-14
~~WTESR-14-78850~~ INTESR-14-78850 Rec'd (1) PCB Container Not Listed on Chain of Custody.
RECEIVED - WTESR-14-78580 for PCB + Particle Size not on Any Chains of Custody

WT_IPC-14-56017
INT_IPC-14-56117 } For GROSS A/B Not on Chain of Custody.

PM (or PMA) review: Initials gp Date 7-16-14 Page 2 of 2

**Subject:** RE: Sample receipt issue
**From:** "Greene, Keith Robert" <kgreene@lanl.gov>
**Date:** 7/15/2014 11:15 AM
**To:** Pat Dent <Pat.Dent@gel.com>
**CC:** "team.davis" <team.davis@gel.com>, "LANL@amrad.com" <LANL@amrad.com>, "Patel, Nita" <npatel@lanl.gov>

Wtesr-14-78850 should have been for SW-TAL+B+U did you get a bottle for that? If not log it for that test. Please send 78582 to cape fear should be on request 2014-3784. 56017 should be put on request 2014-3785 needed to fill up the cooler.

---

**From:** Pat Dent [mailto:Pat.Dent@gel.com]
**Sent:** Tuesday, July 15, 2014 7:49 AM
**To:** Greene, Keith Robert
**Cc:** team.davis; LANL@amrad.com; Patel, Nita
**Subject:** Sample receipt issue

RN#2014-3748
CAMO-14-81467,81463 the lab received 2-containers 8260b containers, 1-each broken during handling, CAMO-14-81464 lab received 1-container, chain indicates 2.

RN#2014-3752
WT_IPC-14-56093 lab received 3- Ra226+228containers, chain indicates 4.

RN#2014-3766
WT_IPC-14-56004 lab received 3- HEXP containers, chain indicates 2, 2- SVOC containers, chain indicates 3.
WT_IPC-14-55973 lab received 3-HEXP containers, chain indicates 2, 1-Ra226+228, chain indicates 4, 2-SVOC chain indicates 3.

RN#2014-3767
WTRON-14-79901 lab received 8-Gross A/B containers chain indicates 1.
WTRON-14-79957 lab received 1-Ra226+228 container, chain indicates 4, 4-SVOC containers, chain indicates 3.

RN#2014-3768
WTESR-14-77970 lab received 1-8260b container, chain indicates 2.
**WTESR-14-78850 lab received 1-PCB container not listed on chain. PLEASE ADVISE!**

**RECEIVED THE FOLLOWING CONTAINERS IN LAB NOT ON ANY CHAIN OF CUSTODY PLEASE ADVISE!**
**WTESR-78582 container for PCB, container for Particle Size**
**WT_IPC-14-56017 3-containers for Gross A/B.**

Thanks!!

---

--
Patricia Dent
Project Manager Assistant
GEL Laboratories, LLC

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR0A00EC60R0

3c

521C2/ED4F/6F03

FedEx Express

J1412140522201uv

3 of 3
MPS# 0263 5908 1777 2843
Mstr# 5908 1777 2821

SATURDAY 12:00P
PRIORITY OVERNIGHT

0201

XO CHSA

29407
SC-US CHS

Part # 156148-434 FIT2 10/11 88

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

21c

521C2/ED4F/6F03

FedEx Express

J1412140522201uv

3 of 3
MPS# 0263 5908 1777 2810
Mstr# 5908 1777 2795

SATURDAY 12:00P
PRIORITY OVERNIGHT

0201

XO CHSA

29407
SC-US CHS

Part # 156148-434 FIT2 10/11 88

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR0A00EC60R0

2c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

1 of 3

TRK# 0201 5908 1777 2821

## MASTER ##

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR0A00EC60R0

3c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

2 of 3

MPS# 0263 5908 1777 2832

Mstr# 5908 1777 2821 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 23.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

20

521C2/ED4F/6F03

FedEx Express

J1412140522201uv

1 of 4

TRK# 0201 5908 1777 2854

## MASTER ##

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

4c

521C2/ED4F/6F03

FedEx Express

J1412140522201uv

4 of 4

MPS# 0263 5908 1777 2887

Mstr# 5908 1777 2854

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 20.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

3c

521C2/ED4F/6F03

FedEx Express

J1412140522011w

3 of 4

MPS# 0263 5908 1777 2876

Mstr# 5908 1777 2854

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 FIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

2c

521C2/ED4F/6F03

FedEx Express

J1412140522011w

2 of 4

MPS# 0263 5908 1777 2865

Mstr# 5908 1777 2854

0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO CHSA

29407
SC-US CHS

Part # 156148-434 FIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 45.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

2c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

1 of 3

TRK# 0201 5908 1777 2795

## MASTER ##

XO CHSA

SATURDAY 12:00P
PRIORITY OVERNIGHT

29407
SC-US CHS

Part # 156146-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 11JUL14
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991316W200

4c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

2 of 3

MPS# 0263 5908 1777 2800

Mstr# 5908 1777 2795 0201

XO CHSA

SATURDAY 12:00P
PRIORITY OVERNIGHT

29407
SC-US CHS

Part # 156146-434 RIT2 10/11

# Data Review Qualifier Flag Definition Sheet

## Data Review Qualifier Definitions

| Qualifier | Explanation |
|---|---|
| * | A quality control analyte recovery is outside of specified acceptance criteria |
| ** | Analyte is a surrogate compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL |
| A | The TIC is a suspected aldol-condensation product |
| B | Target analyte was detected in the associated blank |
| B | Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL |
| BD | Results are either below the MDC or tracer recovery is low |
| C | Analyte has been confirmed by GC/MS analysis |
| D | Results are reported from a diluted aliquot of the sample |
| d | 5-day BOD-The 2:1 depletion requirement was not met for this sample |
| E | Organics-Concentration of the target analyte exceeds the instrument calibration range |
| E | Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria |
| H | Analytical holding time was exceeded |
| h | Preparation or preservation holding time was exceeded |
| J | Value is estimated |
| N | Metals-The Matrix spike sample recovery is not within specified control limits |
| N | Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more |
| ND | Analyte concentration is not detected above the reporting limit |
| UI | Gamma Spectroscopy-Uncertain identification |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | QC Samples were not spiked with this compound |
| Z | Paint Filter Test-Particulates passed through the filter, however no free liquids were observed. |

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

# Volatile Analysis

# Case Narrative

**ChemStation Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3751**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer** |
| Analytical Method: | SW846 8260B |
| Prep Method: | SW846 5030 |
| Analytical Batch Number: | 1408149 |
| Prep Batch Number: | 1408147 |

## Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

| Sample ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 352522012 | RE57-14-84130 |
| 352522013 | RE57-14-84131 |
| 1203139626 | Method Blank (MB) |
| 1203139627 | 352522001(RE57-14-84157) Post Spike (PS) |
| 1203139628 | 352522001(RE57-14-84157) Post Spike (PS) |
| 1203139629 | 352522001(RE57-14-84157) Post Spike Duplicate (PSD) |
| 1203139630 | 352522001(RE57-14-84157) Post Spike Duplicate (PSD) |
| 1203139631 | Laboratory Control Sample (LCS) |
| 1203139632 | Laboratory Control Sample (LCS) |
| 1203144003 | Method Blank (MB) |
| 1203144004 | Laboratory Control Sample (LCS) |
| 1203144005 | Laboratory Control Sample (LCS) |

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 352522 001, 002, 003, 004, 005, 006, 007, 008, 009, 010 and 011 in this SDG were analyzed on an "dry weight" basis. Samples 352522 012 and 013 in this SDG were analyzed on a "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 21.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

**Calibration Information**

A complete list of the initial calibration data files with the correct dates and times of analysis are shown in the Calibration History report located in the Standard Data section of the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L or 20 ug/L for low level analyses. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

**Initial Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

**Continuing Calibration Verification Requirements**

All associated calibration verification standard(s) (CCV) met the acceptance criteria.

**Quality Control (QC) Information**

**Blank (MB) Statement**

The blanks analyzed with this SDG met the acceptance criteria.

**Surrogate Recoveries**

Surrogate recoveries, in sample 352522006 (RE57-14-84139), were outside the acceptance limits. Sample re-analysis confirmed matrix interference. See the Data Exception Report in the miscellaneous section of the deliverable.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**

Sample 352522001 (RE57-14-84157) was designated for spike analysis.

**Matrix Spike (PS) Recovery Statement**

The spike 1203139627 (RE57-14-84157) recoveries were not all within the acceptance limits. See the Data Exception Report in the miscellaneous section of the data package.

**Matrix Spike Duplicate (PSD) Recovery Statement**

The spike duplicate 1203139629 (RE57-14-84157) recoveries were not all within the acceptance limits. See the Data Exception Report in the miscellaneous section of the data package.

**Relative Percent Difference (RPD) Statement**

The RPD between the matrix spike pair 1203139627 (RE57-14-84157), 1203139628 (RE57-14-84157),

1203139629 (RE57-14-84157) and 1203139630 (RE57-14-84157) were not all within the acceptance limits. See the Data Exception Report in the miscellaneous section of the deliverable.

**Internal Standard (ISTD) Acceptance**
The internal standard responses in all client and quality control samples met the required acceptance criteria.

## Technical Information

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. Samples were not analyzed within the recommended holding. However, the samples were analyzed within two times the holding period. This satisfies the client criteria.

**Sample Preservation and Integrity**
All samples met the sample preservation and integrity requirements.

**Sample Dilutions/Methanol Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Sample 352522006 (RE57-14-84139) was re-analyzed due to unacceptable surrogate or internal standard recoveries in the initial analysis.

## Miscellaneous Information

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
The following DER was generated for this SDG: 1322057.

**Manual Integrations**
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

**TIC Comment**
Tentatively identified compounds (TIC) were requested for this sample delivery group/work order. Please note that non-requested target analytes that are reported on the quantitation reports will be present on the Form I. These detected analytes are included in the calibrated method and as a result will be reported on the Sample Data Summary (Form I) or Certificate of Analysis (C of A). TIC data are included on the Sample Data Summary (Form I).

**Additional Comments**
Additional comments were not required for this SDG.

**Residual Chlorine**
Residual Chlorine was not detected in any of the samples in this SDG.

**System Configuration**

The Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description | P & T Trap |
|---|---|---|---|---|---|
| VOA4.I | Agilent 6890/5973 GC/MS w/ OI 4560/Archon Autosampler | HP6890/HP5973 | DB-624 | J&W, 60m x 0.25mm x 1.4um | Trap 10 |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 − (843) 556−8171 − www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS−LANS−MTOA6−25093−GEL)

Client SDG: 2014−3751  GEL Work Order: 352522

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

H  Analytical holding time was exceeded

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

DL  Indicates that sample is diluted.
RA  Indicates that sample is re−analyzed without re−extraction.
RE  Indicates that sample is re−extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP−like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Erin Haubert  **Name: Erin Haubert**

**Date: 08 AUG 2014**  **Title: Data Validator**

# Sample Data Summary

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522001** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84157** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:57** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 14:44** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W413.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.06 | ug/kg | 0.531 | 1.06 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 78-93-3 | 2-Butanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 591-78-6 | 2-Hexanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 67-64-1 | Acetone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 71-43-2 | Benzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-86-1 | Bromobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-97-5 | Bromochloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-27-4 | Bromodichloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-25-2 | Bromoform | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-83-9 | Bromomethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-15-0 | Carbon disulfide | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-90-7 | Chlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-00-3 | Chloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 67-66-3 | Chloroform | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-87-3 | Chloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522001** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84157** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:57** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 14:44** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W413.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-95-3 | Dibromomethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 100-41-4 | Ethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-88-4 | Iodomethane | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 98-82-8 | Isopropylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-09-2 | Methylene chloride | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 100-42-5 | Styrene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-88-3 | Toluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-01-6 | Trichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 75-01-4 | Vinyl chloride | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.12 | ug/kg | 0.708 | 2.12 |
| 104-51-8 | n-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 103-65-1 | n-Propylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-47-6 | o-Xylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522002** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84159** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 17:25** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 14:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W414.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.534 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 67-64-1 | Acetone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522002** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84159** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 17:25** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 14:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W414.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.14 | ug/kg | 0.712 | 2.14 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522003** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **2.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84138** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 17:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:07** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W415.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.03 | ug/kg | 0.515 | 1.03 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 78-93-3 | 2-Butanone | HUh | 5.15 | ug/kg | 1.72 | 5.15 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 591-78-6 | 2-Hexanone | HUh | 5.15 | ug/kg | 1.72 | 5.15 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.15 | ug/kg | 1.72 | 5.15 |
| 67-64-1 | Acetone | HUh | 5.15 | ug/kg | 1.72 | 5.15 |
| 71-43-2 | Benzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 108-86-1 | Bromobenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 74-97-5 | Bromochloromethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-27-4 | Bromodichloromethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-25-2 | Bromoform | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 74-83-9 | Bromomethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-15-0 | Carbon disulfide | HUh | 5.15 | ug/kg | 1.72 | 5.15 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 108-90-7 | Chlorobenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-00-3 | Chloroethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 67-66-3 | Chloroform | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 74-87-3 | Chloromethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522003** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **2.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84138** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 17:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:07** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W415.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 74-95-3 | Dibromomethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 100-41-4 | Ethylbenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 74-88-4 | Iodomethane | HUh | 5.15 | ug/kg | 1.72 | 5.15 |
| 98-82-8 | Isopropylbenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-09-2 | Methylene chloride | HUh | 5.15 | ug/kg | 1.72 | 5.15 |
| 100-42-5 | Styrene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 108-88-3 | Toluene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 79-01-6 | Trichloroethylene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.15 | ug/kg | 1.72 | 5.15 |
| 75-01-4 | Vinyl chloride | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.06 | ug/kg | 0.687 | 2.06 |
| 104-51-8 | n-Butylbenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 103-65-1 | n-Propylbenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 95-47-6 | o-Xylene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.03 | ug/kg | 0.343 | 1.03 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522004** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84149** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 18:21** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:09** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W416.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.536 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 67-64-1 | Acetone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522004** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84149** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 18:21** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:09** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W416.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.15 | ug/kg | 0.715 | 2.15 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522005** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84160** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 18:49** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:11** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W417.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.04 | ug/kg | 0.519 | 1.04 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 78-93-3 | 2-Butanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 591-78-6 | 2-Hexanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 67-64-1 | Acetone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 71-43-2 | Benzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-86-1 | Bromobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-97-5 | Bromochloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-27-4 | Bromodichloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-25-2 | Bromoform | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-83-9 | Bromomethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-15-0 | Carbon disulfide | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-90-7 | Chlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-00-3 | Chloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 67-66-3 | Chloroform | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-87-3 | Chloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522005** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84160** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 18:49** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:11** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W417.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-95-3 | Dibromomethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 100-41-4 | Ethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-88-4 | Iodomethane | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 98-82-8 | Isopropylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-09-2 | Methylene chloride | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 100-42-5 | Styrene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-88-3 | Toluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-01-6 | Trichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 75-01-4 | Vinyl chloride | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.08 | ug/kg | 0.692 | 2.08 |
| 104-51-8 | n-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 103-65-1 | n-Propylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-47-6 | o-Xylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522006** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84139** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 19:17** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:13** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W418.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.05 | ug/kg | 0.524 | 1.05 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 78-93-3 | 2-Butanone | HUh | 5.24 | ug/kg | 1.75 | 5.24 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 591-78-6 | 2-Hexanone | HUh | 5.24 | ug/kg | 1.75 | 5.24 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.24 | ug/kg | 1.75 | 5.24 |
| 67-64-1 | Acetone | HUh | 5.24 | ug/kg | 1.75 | 5.24 |
| 71-43-2 | Benzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-86-1 | Bromobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-97-5 | Bromochloromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-27-4 | Bromodichloromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-25-2 | Bromoform | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-83-9 | Bromomethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-15-0 | Carbon disulfide | HUh | 5.24 | ug/kg | 1.75 | 5.24 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-90-7 | Chlorobenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-00-3 | Chloroethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 67-66-3 | Chloroform | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-87-3 | Chloromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522006** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84139** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 19:17** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:13** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W418.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-95-3 | Dibromomethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 100-41-4 | Ethylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 74-88-4 | Iodomethane | HUh | 5.24 | ug/kg | 1.75 | 5.24 |
| 98-82-8 | Isopropylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-09-2 | Methylene chloride | HUh | 5.24 | ug/kg | 1.75 | 5.24 |
| 100-42-5 | Styrene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 108-88-3 | Toluene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 79-01-6 | Trichloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.24 | ug/kg | 1.75 | 5.24 |
| 75-01-4 | Vinyl chloride | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.10 | ug/kg | 0.699 | 2.10 |
| 104-51-8 | n-Butylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 103-65-1 | n-Propylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 95-47-6 | o-Xylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.349 | 1.05 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522007** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **13.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84150** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 19:46** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W419.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.16 | ug/kg | 0.578 | 1.16 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 78-93-3 | 2-Butanone | HUh | 5.78 | ug/kg | 1.93 | 5.78 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 591-78-6 | 2-Hexanone | HUh | 5.78 | ug/kg | 1.93 | 5.78 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.78 | ug/kg | 1.93 | 5.78 |
| 67-64-1 | Acetone | HUh | 5.78 | ug/kg | 1.93 | 5.78 |
| 71-43-2 | Benzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 108-86-1 | Bromobenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 74-97-5 | Bromochloromethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-27-4 | Bromodichloromethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-25-2 | Bromoform | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 74-83-9 | Bromomethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-15-0 | Carbon disulfide | HUh | 5.78 | ug/kg | 1.93 | 5.78 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 108-90-7 | Chlorobenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-00-3 | Chloroethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 67-66-3 | Chloroform | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 74-87-3 | Chloromethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522007** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **13.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84150** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 19:46** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W419.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 74-95-3 | Dibromomethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 100-41-4 | Ethylbenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 74-88-4 | Iodomethane | HUh | 5.78 | ug/kg | 1.93 | 5.78 |
| 98-82-8 | Isopropylbenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-09-2 | Methylene chloride | HUh | 5.78 | ug/kg | 1.93 | 5.78 |
| 100-42-5 | Styrene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 108-88-3 | Toluene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 79-01-6 | Trichloroethylene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.78 | ug/kg | 1.93 | 5.78 |
| 75-01-4 | Vinyl chloride | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.31 | ug/kg | 0.771 | 2.31 |
| 104-51-8 | n-Butylbenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 103-65-1 | n-Propylbenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 95-47-6 | o-Xylene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.16 | ug/kg | 0.385 | 1.16 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522008** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84161** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 20:14** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:17** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W420.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.04 | ug/kg | 0.519 | 1.04 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 78-93-3 | 2-Butanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 591-78-6 | 2-Hexanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 67-64-1 | Acetone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 71-43-2 | Benzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-86-1 | Bromobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-97-5 | Bromochloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-27-4 | Bromodichloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-25-2 | Bromoform | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-83-9 | Bromomethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-15-0 | Carbon disulfide | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-90-7 | Chlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-00-3 | Chloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 67-66-3 | Chloroform | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-87-3 | Chloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522008** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84161** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 20:14** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:17** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W420.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-95-3 | Dibromomethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 100-41-4 | Ethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-88-4 | Iodomethane | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 98-82-8 | Isopropylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-09-2 | Methylene chloride | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 100-42-5 | Styrene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-88-3 | Toluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-01-6 | Trichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 75-01-4 | Vinyl chloride | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.08 | ug/kg | 0.692 | 2.08 |
| 104-51-8 | n-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 103-65-1 | n-Propylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-47-6 | o-Xylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522009** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84141** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 20:41** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:19** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W421.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.11 | ug/kg | 0.557 | 1.11 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 78-93-3 | 2-Butanone | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 591-78-6 | 2-Hexanone | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 67-64-1 | Acetone | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 71-43-2 | Benzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-86-1 | Bromobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-97-5 | Bromochloromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-27-4 | Bromodichloromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-25-2 | Bromoform | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-83-9 | Bromomethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-15-0 | Carbon disulfide | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-90-7 | Chlorobenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-00-3 | Chloroethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 67-66-3 | Chloroform | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-87-3 | Chloromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522009** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84141** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 20:41** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:19** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W421.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-95-3 | Dibromomethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 100-41-4 | Ethylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 74-88-4 | Iodomethane | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 98-82-8 | Isopropylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-09-2 | Methylene chloride | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 100-42-5 | Styrene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 108-88-3 | Toluene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 79-01-6 | Trichloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.57 | ug/kg | 1.86 | 5.57 |
| 75-01-4 | Vinyl chloride | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.23 | ug/kg | 0.743 | 2.23 |
| 104-51-8 | n-Butylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 103-65-1 | n-Propylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 95-47-6 | o-Xylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.11 | ug/kg | 0.371 | 1.11 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522010** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84152** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 21:10** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:21** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W422.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.05 | ug/kg | 0.526 | 1.05 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 78-93-3 | 2-Butanone | HUh | 5.26 | ug/kg | 1.75 | 5.26 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 591-78-6 | 2-Hexanone | HUh | 5.26 | ug/kg | 1.75 | 5.26 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.26 | ug/kg | 1.75 | 5.26 |
| 67-64-1 | Acetone | HUh | 5.26 | ug/kg | 1.75 | 5.26 |
| 71-43-2 | Benzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-86-1 | Bromobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-97-5 | Bromochloromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-27-4 | Bromodichloromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-25-2 | Bromoform | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-83-9 | Bromomethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-15-0 | Carbon disulfide | HUh | 5.26 | ug/kg | 1.75 | 5.26 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-90-7 | Chlorobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-00-3 | Chloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 67-66-3 | Chloroform | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-87-3 | Chloromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522010** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84152** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 21:10** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:21** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W422.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-95-3 | Dibromomethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 100-41-4 | Ethylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-88-4 | Iodomethane | HUh | 5.26 | ug/kg | 1.75 | 5.26 |
| 98-82-8 | Isopropylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-09-2 | Methylene chloride | HUh | 5.26 | ug/kg | 1.75 | 5.26 |
| 100-42-5 | Styrene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-88-3 | Toluene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 79-01-6 | Trichloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.26 | ug/kg | 1.75 | 5.26 |
| 75-01-4 | Vinyl chloride | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.11 | ug/kg | 0.702 | 2.11 |
| 104-51-8 | n-Butylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 103-65-1 | n-Propylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 95-47-6 | o-Xylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522011** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **7.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84120** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 21:38** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:23** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W423.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.08 | ug/kg | 0.539 | 1.08 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 78-93-3 | 2-Butanone | HUh | 5.39 | ug/kg | 1.80 | 5.39 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 591-78-6 | 2-Hexanone | HUh | 5.39 | ug/kg | 1.80 | 5.39 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.39 | ug/kg | 1.80 | 5.39 |
| 67-64-1 | Acetone | HUh | 5.39 | ug/kg | 1.80 | 5.39 |
| 71-43-2 | Benzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 108-86-1 | Bromobenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 74-97-5 | Bromochloromethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-27-4 | Bromodichloromethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-25-2 | Bromoform | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 74-83-9 | Bromomethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-15-0 | Carbon disulfide | HUh | 5.39 | ug/kg | 1.80 | 5.39 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 108-90-7 | Chlorobenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-00-3 | Chloroethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 67-66-3 | Chloroform | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 74-87-3 | Chloromethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522011** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **7.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84120** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 21:38** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:23** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W423.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 74-95-3 | Dibromomethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 100-41-4 | Ethylbenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 74-88-4 | Iodomethane | HUh | 5.39 | ug/kg | 1.80 | 5.39 |
| 98-82-8 | Isopropylbenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-09-2 | Methylene chloride | HUh | 5.39 | ug/kg | 1.80 | 5.39 |
| 100-42-5 | Styrene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 108-88-3 | Toluene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 79-01-6 | Trichloroethylene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.39 | ug/kg | 1.80 | 5.39 |
| 75-01-4 | Vinyl chloride | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.16 | ug/kg | 0.719 | 2.16 |
| 104-51-8 | n-Butylbenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 103-65-1 | n-Propylbenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 95-47-6 | o-Xylene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.08 | ug/kg | 0.359 | 1.08 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522012** | **Date Received:** | **07/12/2014 09:00** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84130** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:00** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:24** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W411.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522012** | **Date Received:** | **07/12/2014 09:00** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84130** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:00** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:24** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W411.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown hydrocarbon | 17.448 | 15.8 | ug/kg | 0 | J |
| | unknown hydrocarbon | 18.569 | 5.64 | ug/kg | 0 | J |
| | unknown hydrocarbon | 18.642 | 5.06 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522013** | **Date Received:** | **07/12/2014 09:00** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84131** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:29** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:26** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W412.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522013** | **Date Received:** | **07/12/2014 09:00** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84131** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:29** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 15:26** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W412.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown hydrocarbon | 17.448 | 51.8 | ug/kg | 0 | J |
| | unknown hydrocarbon | 18.569 | 71.5 | ug/kg | 0 | J |
| | unknown hydrocarbon | 18.643 | 25.5 | ug/kg | 0 | J |

# Quality Control Summary

**Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3751**

**Matrix Type: SOLID**

| Sample ID | Client ID | DCED4 %REC | TOL %REC | BFB %REC |
|---|---|---|---|---|
| 1203139631 | LCS for batch 1408147 | 98 | 95 | 101 |
| 1203139632 | LCS for batch 1408147 | 98 | 96 | 100 |
| 1203139626 | MB for batch 1408147 | 101 | 99 | 100 |
| 352522012 | RE57-14-84130 | 104 | 101 | 102 |
| 352522013 | RE57-14-84131 | 105 | 100 | 100 |
| 352522001 | RE57-14-84157 | 103 | 105 | 116 |
| 352522002 | RE57-14-84159 | 109 | 101 | 101 |
| 352522003 | RE57-14-84138 | 107 | 100 | 99 |
| 352522004 | RE57-14-84149 | 109 | 104 | 114 |
| 352522005 | RE57-14-84160 | 107 | 101 | 104 |
| 352522006 | RE57-14-84139 | 109 | 109 | 121 * |
| 352522007 | RE57-14-84150 | 108 | 101 | 105 |
| 352522008 | RE57-14-84161 | 111 | 99 | 103 |
| 352522009 | RE57-14-84141 | 109 | 107 | 119 |
| 352522010 | RE57-14-84152 | 109 | 103 | 108 |
| 352522011 | RE57-14-84120 | 112 | 103 | 106 |
| 1203139627 | RE57-14-84157PS | 103 | 103 | 108 |
| 1203139629 | RE57-14-84157PSD | 102 | 103 | 109 |
| 1203144004 | LCS for batch 1408147 | 97 | 96 | 98 |
| 1203144005 | LCS for batch 1408147 | 100 | 98 | 101 |
| 1203144003 | MB for batch 1408147 | 102 | 101 | 101 |
| 1203139628 | RE57-14-84157PS | 106 | 101 | 114 |
| 1203139630 | RE57-14-84157PSD | 107 | 104 | 114 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| DCED4 | = 1,2-Dichloroethane-d4 | (76%-122%) |
| TOL | = Toluene-d8 | (80%-120%) |
| BFB | = Bromofluorobenzene | (80%-120%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157PS**
**Lab Sample ID** **1203139627**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/31/2014 22:06**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PS | m,p-Xylenes | 100 | 0.00 | HUh | 85.0 | 85 | 62-124 |
| 67-64-1 | PS | Acetone | 250 | 0.00 | HUh | 165 | 66 | 42-147 |
| 74-88-4 | PS | Iodomethane | 250 | 0.00 | HUh | 203 | 81 | 68-121 |
| 75-15-0 | PS | Carbon disulfide | 250 | 0.00 | HUh | 217 | 87 | 64-147 |
| 78-93-3 | PS | 2-Butanone | 250 | 0.00 | HUh | 147 | 59 | 44-145 |
| 108-10-1 | PS | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 186 | 74 | 71-133 |
| 591-78-6 | PS | 2-Hexanone | 250 | 0.00 | HUh | 73.3 | 29 * | 47-147 |
| 75-71-8 | PS | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 33.3 | 67 | 46-134 |
| 74-87-3 | PS | Chloromethane | 50.0 | 0.00 | HUh | 38.0 | 76 | 54-139 |
| 75-01-4 | PS | Vinyl chloride | 50.0 | 0.00 | HUh | 43.6 | 87 | 47-141 |
| 74-83-9 | PS | Bromomethane | 50.0 | 0.00 | HUh | 37.3 | 75 | 47-135 |
| 75-00-3 | PS | Chloroethane | 50.0 | 0.00 | HUh | 44.3 | 89 | 52-129 |
| 75-69-4 | PS | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 45.6 | 91 | 61-126 |
| 75-35-4 | PS | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 46.9 | 94 | 67-135 |
| 75-09-2 | PS | Methylene chloride | 50.0 | 0.00 | HUh | 44.0 | 88 | 68-123 |
| 156-60-5 | PS | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 46.0 | 92 | 67-129 |
| 75-34-3 | PS | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 46.7 | 93 | 70-125 |
| 156-59-2 | PS | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 45.9 | 92 | 70-125 |
| 594-20-7 | PS | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 46.0 | 92 | 67-129 |
| 74-97-5 | PS | Bromochloromethane | 50.0 | 0.00 | HUh | 48.5 | 97 | 73-123 |
| 67-66-3 | PS | Chloroform | 50.0 | 0.00 | HUh | 48.8 | 98 | 70-123 |
| 71-55-6 | PS | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 47.4 | 95 | 71-128 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157PS**
**Lab Sample ID** **1203139627**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/31/2014 22:06**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PS | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 44.9 | 90 | 68-129 |
| 56-23-5 | PS | Carbon tetrachloride | 50.0 | 0.00 | HUh | 46.8 | 94 | 70-129 |
| 107-06-2 | PS | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 47.6 | 95 | 67-119 |
| 71-43-2 | PS | Benzene | 50.0 | 0.00 | HUh | 45.4 | 91 | 67-124 |
| 79-01-6 | PS | Trichloroethylene | 50.0 | 0.00 | HUh | 46.3 | 93 | 68-130 |
| 78-87-5 | PS | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 46.1 | 92 | 69-122 |
| 74-95-3 | PS | Dibromomethane | 50.0 | 0.00 | HUh | 48.9 | 98 | 73-120 |
| 75-27-4 | PS | Bromodichloromethane | 50.0 | 0.00 | HUh | 40.9 | 82 | 67-124 |
| 10061-01-5 | PS | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 36.1 | 72 | 67-127 |
| 108-88-3 | PS | Toluene | 50.0 | 0.00 | HUh | 44.5 | 89 | 64-124 |
| 10061-02-6 | PS | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 40.6 | 81 | 68-122 |
| 79-00-5 | PS | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 45.8 | 92 | 73-121 |
| 142-28-9 | PS | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 46.6 | 93 | 69-119 |
| 127-18-4 | PS | Tetrachloroethylene | 50.0 | 0.00 | HUh | 43.8 | 88 | 64-123 |
| 124-48-1 | PS | Dibromochloromethane | 50.0 | 0.00 | HUh | 39.0 | 78 | 66-122 |
| 106-93-4 | PS | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 44.7 | 89 | 73-125 |
| 108-90-7 | PS | Chlorobenzene | 50.0 | 0.00 | HUh | 42.0 | 84 | 68-120 |
| 100-41-4 | PS | Ethylbenzene | 50.0 | 0.00 | HUh | 44.5 | 89 | 63-122 |
| 95-47-6 | PS | o-Xylene | 50.0 | 0.00 | HUh | 44.9 | 90 | 64-122 |
| 100-42-5 | PS | Styrene | 50.0 | 0.00 | HUh | 23.4 | 47 * | 70-126 |
| 75-25-2 | PS | Bromoform | 50.0 | 0.00 | HUh | 35.0 | 70 | 54-131 |
| 98-82-8 | PS | Isopropylbenzene | 50.0 | 0.00 | HUh | 49.4 | 99 | 64-132 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157PS**
**Lab Sample ID** **1203139627**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/31/2014 22:06**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 50.1 | 100 | 68-132 |
| 96-18-4 | PS | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 52.1 | 104 | 66-131 |
| 108-86-1 | PS | Bromobenzene | 50.0 | 0.00 | HUh | 44.2 | 88 | 67-124 |
| 103-65-1 | PS | n-Propylbenzene | 50.0 | 0.00 | HUh | 44.7 | 89 | 60-127 |
| 108-67-8 | PS | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 47.0 | 94 | 62-129 |
| 95-49-8 | PS | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 44.3 | 89 | 63-125 |
| 106-43-4 | PS | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 43.0 | 86 | 63-124 |
| 98-06-6 | PS | tert-Butylbenzene | 50.0 | 0.00 | HUh | 47.6 | 95 | 64-131 |
| 95-63-6 | PS | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 43.6 | 87 | 63-126 |
| 135-98-8 | PS | sec-Butylbenzene | 50.0 | 0.00 | HUh | 45.5 | 91 | 59-133 |
| 99-87-6 | PS | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 41.6 | 83 | 58-130 |
| 541-73-1 | PS | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 38.3 | 77 | 62-125 |
| 106-46-7 | PS | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 36.8 | 74 | 62-122 |
| 104-51-8 | PS | n-Butylbenzene | 50.0 | 0.00 | HUh | 39.6 | 79 | 55-133 |
| 96-12-8 | PS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 39.1 | 78 | 54-133 |
| 630-20-6 | PS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 46.1 | 92 | 72-126 |
| 95-50-1 | PS | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 37.9 | 76 | 63-123 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157PSD**
**Lab Sample ID** **1203139629**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/31/2014 22:34**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PSD | m,p-Xylenes | 100 | 0.00 | HUh | 81.8 | 82 | 62-124 | 4 | 0-20 |
| 67-64-1 | PSD | Acetone | 250 | 0.00 | HUh | 158 | 63 | 42-147 | 5 | 0-20 |
| 74-88-4 | PSD | Iodomethane | 250 | 0.00 | HUh | 206 | 83 | 68-121 | 2 | 0-20 |
| 75-15-0 | PSD | Carbon disulfide | 250 | 0.00 | HUh | 215 | 86 | 64-147 | 1 | 0-20 |
| 78-93-3 | PSD | 2-Butanone | 250 | 0.00 | HUh | 140 | 56 | 44-145 | 5 | 0-20 |
| 108-10-1 | PSD | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 190 | 76 | 71-133 | 2 | 0-20 |
| 591-78-6 | PSD | 2-Hexanone | 250 | 0.00 | HUh | 62.7 | 25 * | 47-147 | 16 | 0-20 |
| 75-71-8 | PSD | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 34.3 | 69 | 46-134 | 3 | 0-20 |
| 74-87-3 | PSD | Chloromethane | 50.0 | 0.00 | HUh | 39.1 | 78 | 54-139 | 3 | 0-20 |
| 75-01-4 | PSD | Vinyl chloride | 50.0 | 0.00 | HUh | 45.9 | 92 | 47-141 | 5 | 0-20 |
| 74-83-9 | PSD | Bromomethane | 50.0 | 0.00 | HUh | 38.6 | 77 | 47-135 | 3 | 0-20 |
| 75-00-3 | PSD | Chloroethane | 50.0 | 0.00 | HUh | 45.0 | 90 | 52-129 | 2 | 0-20 |
| 75-69-4 | PSD | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 46.4 | 93 | 61-126 | 2 | 0-20 |
| 75-35-4 | PSD | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 46.8 | 94 | 67-135 | 0 | 0-20 |
| 75-09-2 | PSD | Methylene chloride | 50.0 | 0.00 | HUh | 42.5 | 85 | 68-123 | 3 | 0-20 |
| 156-60-5 | PSD | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 46.1 | 92 | 67-129 | 0 | 0-20 |
| 75-34-3 | PSD | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 46.8 | 94 | 70-125 | 0 | 0-20 |
| 156-59-2 | PSD | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 45.5 | 91 | 70-125 | 1 | 0-20 |
| 594-20-7 | PSD | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.6 | 97 | 67-129 | 5 | 0-20 |
| 74-97-5 | PSD | Bromochloromethane | 50.0 | 0.00 | HUh | 49.2 | 98 | 73-123 | 1 | 0-20 |
| 67-66-3 | PSD | Chloroform | 50.0 | 0.00 | HUh | 48.5 | 97 | 70-123 | 1 | 0-20 |
| 71-55-6 | PSD | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 48.0 | 96 | 71-128 | 1 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157PSD**
**Lab Sample ID** **1203139629**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/31/2014 22:34**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PSD | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 45.1 | 90 | 68-129 | 0 | 0-20 |
| 56-23-5 | PSD | Carbon tetrachloride | 50.0 | 0.00 | HUh | 47.3 | 95 | 70-129 | 1 | 0-20 |
| 107-06-2 | PSD | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 45.8 | 92 | 67-119 | 4 | 0-20 |
| 71-43-2 | PSD | Benzene | 50.0 | 0.00 | HUh | 44.9 | 90 | 67-124 | 1 | 0-20 |
| 79-01-6 | PSD | Trichloroethylene | 50.0 | 0.00 | HUh | 44.9 | 90 | 68-130 | 3 | 0-20 |
| 78-87-5 | PSD | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 45.5 | 91 | 69-122 | 1 | 0-20 |
| 74-95-3 | PSD | Dibromomethane | 50.0 | 0.00 | HUh | 47.3 | 95 | 73-120 | 3 | 0-20 |
| 75-27-4 | PSD | Bromodichloromethane | 50.0 | 0.00 | HUh | 39.6 | 79 | 67-124 | 3 | 0-20 |
| 10061-01-5 | PSD | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 35.6 | 71 | 67-127 | 1 | 0-20 |
| 108-88-3 | PSD | Toluene | 50.0 | 0.00 | HUh | 43.5 | 87 | 64-124 | 2 | 0-20 |
| 10061-02-6 | PSD | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 38.8 | 78 | 68-122 | 5 | 0-20 |
| 79-00-5 | PSD | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 44.9 | 90 | 73-121 | 2 | 0-20 |
| 142-28-9 | PSD | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 44.7 | 89 | 69-119 | 4 | 0-20 |
| 127-18-4 | PSD | Tetrachloroethylene | 50.0 | 0.00 | HUh | 43.0 | 86 | 64-123 | 2 | 0-20 |
| 124-48-1 | PSD | Dibromochloromethane | 50.0 | 0.00 | HUh | 36.4 | 73 | 66-122 | 7 | 0-20 |
| 106-93-4 | PSD | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 43.2 | 86 | 73-125 | 3 | 0-20 |
| 108-90-7 | PSD | Chlorobenzene | 50.0 | 0.00 | HUh | 40.3 | 81 | 68-120 | 4 | 0-20 |
| 100-41-4 | PSD | Ethylbenzene | 50.0 | 0.00 | HUh | 42.3 | 85 | 63-122 | 5 | 0-20 |
| 95-47-6 | PSD | o-Xylene | 50.0 | 0.00 | HUh | 42.9 | 86 | 64-122 | 5 | 0-20 |
| 100-42-5 | PSD | Styrene | 50.0 | 0.00 | HUh | 18.3 | 37 * | 70-126 | 24 * | 0-20 |
| 75-25-2 | PSD | Bromoform | 50.0 | 0.00 | HUh | 31.9 | 64 | 54-131 | 9 | 0-20 |
| 98-82-8 | PSD | Isopropylbenzene | 50.0 | 0.00 | HUh | 45.4 | 91 | 64-132 | 8 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157PSD**
**Lab Sample ID** **1203139629**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/31/2014 22:34**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PSD | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 48.2 | 96 | 68-132 | 4 | 0-20 |
| 96-18-4 | PSD | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 51.1 | 102 | 66-131 | 2 | 0-20 |
| 108-86-1 | PSD | Bromobenzene | 50.0 | 0.00 | HUh | 41.2 | 82 | 67-124 | 7 | 0-20 |
| 103-65-1 | PSD | n-Propylbenzene | 50.0 | 0.00 | HUh | 40.8 | 82 | 60-127 | 9 | 0-20 |
| 108-67-8 | PSD | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 43.1 | 86 | 62-129 | 9 | 0-20 |
| 95-49-8 | PSD | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 40.9 | 82 | 63-125 | 8 | 0-20 |
| 106-43-4 | PSD | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 38.9 | 78 | 63-124 | 10 | 0-20 |
| 98-06-6 | PSD | tert-Butylbenzene | 50.0 | 0.00 | HUh | 45.1 | 90 | 64-131 | 5 | 0-20 |
| 95-63-6 | PSD | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 40.0 | 80 | 63-126 | 9 | 0-20 |
| 135-98-8 | PSD | sec-Butylbenzene | 50.0 | 0.00 | HUh | 41.6 | 83 | 59-133 | 9 | 0-20 |
| 99-87-6 | PSD | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 38.0 | 76 | 58-130 | 9 | 0-20 |
| 541-73-1 | PSD | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 35.4 | 71 | 62-125 | 8 | 0-20 |
| 106-46-7 | PSD | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 33.6 | 67 | 62-122 | 9 | 0-20 |
| 104-51-8 | PSD | n-Butylbenzene | 50.0 | 0.00 | HUh | 35.0 | 70 | 55-133 | 12 | 0-20 |
| 96-12-8 | PSD | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 40.2 | 80 | 54-133 | 3 | 0-20 |
| 630-20-6 | PSD | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 43.8 | 88 | 72-126 | 5 | 0-20 |
| 95-50-1 | PSD | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 35.1 | 70 | 63-123 | 8 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157PS**
**Lab Sample ID** **1203139628**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **08/01/2014 18:11**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PS | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 286 | 114 | 68-146 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Sample Type:** | **Post Spike Duplicate** |
| **Client ID:** | **RE57-14-84157PSD** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203139630** | **%Moisture:** | **5.8** |
| **Instrument:** | **VOA4.I** | **Analysis Date:** | **08/01/2014 18:39** |
| **Analyst:** | **ACJ** | **Prep Batch ID:** | **1408147** |
| **Purge Vol:** | **5 mL** | **Batch ID:** | **1408149** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PSD | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 224 | 90 | 68-146 | 24 * | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1408147**
**Lab Sample ID** **1203139631**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 12:43**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 93.1 | 93 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 244 | 98 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 249 | 100 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 258 | 103 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 227 | 91 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 225 | 90 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 230 | 92 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 38.8 | 78 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 40.5 | 81 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 48.9 | 98 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 43.1 | 86 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 46.4 | 93 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 47.4 | 95 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 48.8 | 98 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 44.2 | 88 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 49.5 | 99 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 49.1 | 98 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 47.7 | 95 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 51.7 | 103 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 49.4 | 99 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 50.0 | 100 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 51.3 | 103 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1408147**
**Lab Sample ID** **1203139631**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 12:43**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 48.2 | 96 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 53.2 | 106 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 47.2 | 94 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 47.8 | 96 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 48.6 | 97 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 48.1 | 96 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 47.5 | 95 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 52.0 | 104 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 52.6 | 105 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 45.3 | 91 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 49.1 | 98 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 45.4 | 91 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 44.6 | 89 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 44.9 | 90 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 53.9 | 108 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 47.0 | 94 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 45.4 | 91 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 46.9 | 94 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 48.5 | 97 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 49.1 | 98 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 54.8 | 110 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 48.1 | 96 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1408147**
**Lab Sample ID** **1203139631**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 12:43**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 47.5 | 95 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 45.7 | 91 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 46.6 | 93 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 45.4 | 91 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 48.5 | 97 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 45.7 | 91 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 46.1 | 92 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 49.0 | 98 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 46.5 | 93 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 47.8 | 96 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 47.8 | 96 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 45.1 | 90 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 43.8 | 88 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 46.4 | 93 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 47.1 | 94 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 49.3 | 99 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 45.1 | 90 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1408147**
**Lab Sample ID** **1203139632**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 13:39**
**Dilution: 1**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 270 | 108 | 76-130 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1408147**
**Lab Sample ID** **1203144004**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/01/2014 11:25**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 95.4 | 95 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 263 | 105 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 249 | 99 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 256 | 102 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 243 | 97 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 244 | 98 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 241 | 96 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 36.2 | 72 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 38.1 | 76 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 46.3 | 93 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 41.5 | 83 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 46.6 | 93 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 49.0 | 98 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 49.2 | 98 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 44.3 | 89 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 50.6 | 101 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 49.3 | 99 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 49.3 | 99 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 54.4 | 109 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 51.3 | 103 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 50.2 | 100 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 53.4 | 107 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1408147**
**Lab Sample ID** **1203144004**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/01/2014 11:25**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 50.7 | 101 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 55.4 | 111 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 47.7 | 95 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 49.0 | 98 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 51.5 | 103 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 49.2 | 98 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 49.1 | 98 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 53.1 | 106 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 53.0 | 106 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 47.3 | 95 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 50.9 | 102 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 46.4 | 93 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 45.3 | 91 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 49.4 | 99 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 56.4 | 113 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 48.7 | 97 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 47.4 | 95 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 48.3 | 97 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 48.8 | 98 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 49.4 | 99 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 57.2 | 114 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 49.4 | 99 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1408147**
**Lab Sample ID** **1203144004**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/01/2014 11:25**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 47.6 | 95 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 48.9 | 98 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 47.9 | 96 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 46.9 | 94 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 49.4 | 99 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 46.0 | 92 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 47.2 | 94 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 50.7 | 101 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 47.3 | 95 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 49.1 | 98 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 49.7 | 99 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 47.2 | 94 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 45.9 | 92 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 48.2 | 96 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 52.3 | 105 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 51.2 | 102 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 47.0 | 94 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1408147**
**Lab Sample ID** **1203144005**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/01/2014 11:53**
**Dilution: 1**
**Prep Batch ID:** **1408147**
**Batch ID:** **1408149**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 200 | 80 | 76-130 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1408147** | **Instrument ID:** | **VOA4.I** | **Data File:** | **073114V4\4W407BA.D** |
| **Lab Sample ID:** | **1203139626** | **Prep Date:** | **07/31/2014 08:30** | **Analyzed:** | **07/31/14 14:08** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1408147 | 1203139631 | 073114V4\4W404LA.D | 07/31/14 | 1243 |
| 02 | LCS for batch 1408147 | 1203139632 | 073114V4\4W406SA.D | 07/31/14 | 1339 |
| 03 | RE57-14-84130 | 352522012 | 073114V4\4W411.D | 07/31/14 | 1600 |
| 04 | RE57-14-84131 | 352522013 | 073114V4\4W412.D | 07/31/14 | 1629 |
| 05 | RE57-14-84157 | 352522001 | 073114V4\4W413.D | 07/31/14 | 1657 |
| 06 | RE57-14-84159 | 352522002 | 073114V4\4W414.D | 07/31/14 | 1725 |
| 07 | RE57-14-84138 | 352522003 | 073114V4\4W415.D | 07/31/14 | 1753 |
| 08 | RE57-14-84149 | 352522004 | 073114V4\4W416.D | 07/31/14 | 1821 |
| 09 | RE57-14-84160 | 352522005 | 073114V4\4W417.D | 07/31/14 | 1849 |
| 10 | RE57-14-84139 | 352522006 | 073114V4\4W418.D | 07/31/14 | 1917 |
| 11 | RE57-14-84150 | 352522007 | 073114V4\4W419.D | 07/31/14 | 1946 |
| 12 | RE57-14-84161 | 352522008 | 073114V4\4W420.D | 07/31/14 | 2014 |
| 13 | RE57-14-84141 | 352522009 | 073114V4\4W421.D | 07/31/14 | 2041 |
| 14 | RE57-14-84152 | 352522010 | 073114V4\4W422.D | 07/31/14 | 2110 |
| 15 | RE57-14-84120 | 352522011 | 073114V4\4W423.D | 07/31/14 | 2138 |
| 16 | RE57-14-84157PS | 1203139627 | 073114V4\4W424.D | 07/31/14 | 2206 |
| 17 | RE57-14-84157PSD | 1203139629 | 073114V4\4W425.D | 07/31/14 | 2234 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1408147** | **Instrument ID:** | **VOA4.I** | **Data File:** | **080114V4\4W507BA.D** |
| **Lab Sample ID:** | **1203144003** | **Prep Date:** | **08/01/2014 08:30** | **Analyzed:** | **08/01/14 12:21** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 19 | LCS for batch 1408147 | 1203144004 | 080114V4\4W505LA.D | 08/01/14 | 1125 |
| 20 | LCS for batch 1408147 | 1203144005 | 080114V4\4W506SA.D | 08/01/14 | 1153 |
| 21 | RE57-14-84157PS | 1203139628 | 080114V4\4W519.D | 08/01/14 | 1811 |
| 22 | RE57-14-84157PSD | 1203139630 | 080114V4\4W520.D | 08/01/14 | 1839 |

# Quality Control Data

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139626** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 14:08** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W407BA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139626** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 14:08** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W407BA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139627** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 22:06** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 14:45** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W424.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 49.0 | ug/kg | 0.353 | 1.06 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 50.3 | ug/kg | 0.353 | 1.06 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 53.2 | ug/kg | 0.353 | 1.06 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 48.6 | ug/kg | 0.353 | 1.06 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 49.5 | ug/kg | 0.353 | 1.06 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 49.8 | ug/kg | 0.353 | 1.06 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 47.7 | ug/kg | 0.353 | 1.06 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 55.2 | ug/kg | 0.353 | 1.06 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 46.3 | ug/kg | 0.353 | 1.06 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 41.5 | ug/kg | 0.531 | 1.06 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 47.4 | ug/kg | 0.353 | 1.06 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 40.3 | ug/kg | 0.353 | 1.06 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 50.5 | ug/kg | 0.353 | 1.06 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 48.9 | ug/kg | 0.353 | 1.06 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 49.9 | ug/kg | 0.353 | 1.06 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 40.7 | ug/kg | 0.353 | 1.06 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 49.5 | ug/kg | 0.353 | 1.06 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 39.0 | ug/kg | 0.353 | 1.06 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 48.9 | ug/kg | 0.353 | 1.06 |
| 78-93-3 | 2-Butanone | Hh | 156 | ug/kg | 1.77 | 5.31 |
| 95-49-8 | 2-Chlorotoluene | Hh | 47.0 | ug/kg | 0.353 | 1.06 |
| 591-78-6 | 2-Hexanone | Hh | 77.8 | ug/kg | 1.77 | 5.31 |
| 106-43-4 | 4-Chlorotoluene | Hh | 45.7 | ug/kg | 0.353 | 1.06 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 44.2 | ug/kg | 0.353 | 1.06 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 197 | ug/kg | 1.77 | 5.31 |
| 67-64-1 | Acetone | Hh | 175 | ug/kg | 1.77 | 5.31 |
| 71-43-2 | Benzene | Hh | 48.1 | ug/kg | 0.353 | 1.06 |
| 108-86-1 | Bromobenzene | Hh | 46.9 | ug/kg | 0.353 | 1.06 |
| 74-97-5 | Bromochloromethane | Hh | 51.5 | ug/kg | 0.353 | 1.06 |
| 75-27-4 | Bromodichloromethane | Hh | 43.4 | ug/kg | 0.353 | 1.06 |
| 75-25-2 | Bromoform | Hh | 37.2 | ug/kg | 0.353 | 1.06 |
| 74-83-9 | Bromomethane | Hh | 39.5 | ug/kg | 0.353 | 1.06 |
| 75-15-0 | Carbon disulfide | Hh | 231 | ug/kg | 1.77 | 5.31 |
| 56-23-5 | Carbon tetrachloride | Hh | 49.6 | ug/kg | 0.353 | 1.06 |
| 108-90-7 | Chlorobenzene | Hh | 44.5 | ug/kg | 0.353 | 1.06 |
| 75-00-3 | Chloroethane | Hh | 47.0 | ug/kg | 0.353 | 1.06 |
| 67-66-3 | Chloroform | Hh | 51.8 | ug/kg | 0.353 | 1.06 |
| 74-87-3 | Chloromethane | Hh | 40.3 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139627** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 22:06** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 14:45** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W424.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 41.4 | ug/kg | 0.353 | 1.06 |
| 74-95-3 | Dibromomethane | Hh | 51.9 | ug/kg | 0.353 | 1.06 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 35.3 | ug/kg | 0.353 | 1.06 |
| 100-41-4 | Ethylbenzene | Hh | 47.2 | ug/kg | 0.353 | 1.06 |
| 74-88-4 | Iodomethane | Hh | 215 | ug/kg | 1.77 | 5.31 |
| 98-82-8 | Isopropylbenzene | Hh | 52.4 | ug/kg | 0.353 | 1.06 |
| 75-09-2 | Methylene chloride | Hh | 46.7 | ug/kg | 1.77 | 5.31 |
| 100-42-5 | Styrene | Hh | 24.8 | ug/kg | 0.353 | 1.06 |
| 127-18-4 | Tetrachloroethylene | Hh | 46.5 | ug/kg | 0.353 | 1.06 |
| 108-88-3 | Toluene | Hh | 47.3 | ug/kg | 0.353 | 1.06 |
| 79-01-6 | Trichloroethylene | Hh | 49.2 | ug/kg | 0.353 | 1.06 |
| 75-69-4 | Trichlorofluoromethane | Hh | 48.4 | ug/kg | 0.353 | 1.06 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 75-01-4 | Vinyl chloride | Hh | 46.3 | ug/kg | 0.353 | 1.06 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 48.7 | ug/kg | 0.353 | 1.06 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 38.3 | ug/kg | 0.353 | 1.06 |
| 179601-23-1 | m,p-Xylenes | Hh | 90.2 | ug/kg | 0.708 | 2.12 |
| 104-51-8 | n-Butylbenzene | Hh | 42.0 | ug/kg | 0.353 | 1.06 |
| 103-65-1 | n-Propylbenzene | Hh | 47.4 | ug/kg | 0.353 | 1.06 |
| 95-47-6 | o-Xylene | Hh | 47.7 | ug/kg | 0.353 | 1.06 |
| 135-98-8 | sec-Butylbenzene | Hh | 48.3 | ug/kg | 0.353 | 1.06 |
| 98-06-6 | tert-Butylbenzene | Hh | 50.5 | ug/kg | 0.353 | 1.06 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 48.8 | ug/kg | 0.353 | 1.06 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 43.1 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139628** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 18:11** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 16:04** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W519.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.06 | ug/kg | 0.531 | 1.06 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 78-93-3 | 2-Butanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 591-78-6 | 2-Hexanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 67-64-1 | Acetone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 71-43-2 | Benzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-86-1 | Bromobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-97-5 | Bromochloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-27-4 | Bromodichloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-25-2 | Bromoform | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-83-9 | Bromomethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-15-0 | Carbon disulfide | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-90-7 | Chlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-00-3 | Chloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 67-66-3 | Chloroform | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-87-3 | Chloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139628** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 18:11** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 16:04** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W519.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-95-3 | Dibromomethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 100-41-4 | Ethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-88-4 | Iodomethane | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 98-82-8 | Isopropylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-09-2 | Methylene chloride | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 100-42-5 | Styrene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-88-3 | Toluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-01-6 | Trichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 303 | ug/kg | 1.77 | 5.31 |
| 75-01-4 | Vinyl chloride | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.12 | ug/kg | 0.708 | 2.12 |
| 104-51-8 | n-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 103-65-1 | n-Propylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-47-6 | o-Xylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139629** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 22:34** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 14:46** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W425.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 46.5 | ug/kg | 0.353 | 1.06 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 51.0 | ug/kg | 0.353 | 1.06 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 51.2 | ug/kg | 0.353 | 1.06 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 47.7 | ug/kg | 0.353 | 1.06 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 49.7 | ug/kg | 0.353 | 1.06 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 49.7 | ug/kg | 0.353 | 1.06 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 47.8 | ug/kg | 0.353 | 1.06 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 54.2 | ug/kg | 0.353 | 1.06 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 42.4 | ug/kg | 0.353 | 1.06 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 42.7 | ug/kg | 0.531 | 1.06 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 45.8 | ug/kg | 0.353 | 1.06 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 37.2 | ug/kg | 0.353 | 1.06 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 48.6 | ug/kg | 0.353 | 1.06 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 48.3 | ug/kg | 0.353 | 1.06 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 45.7 | ug/kg | 0.353 | 1.06 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 37.6 | ug/kg | 0.353 | 1.06 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 47.4 | ug/kg | 0.353 | 1.06 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 35.7 | ug/kg | 0.353 | 1.06 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 51.5 | ug/kg | 0.353 | 1.06 |
| 78-93-3 | 2-Butanone | Hh | 149 | ug/kg | 1.77 | 5.31 |
| 95-49-8 | 2-Chlorotoluene | Hh | 43.4 | ug/kg | 0.353 | 1.06 |
| 591-78-6 | 2-Hexanone | Hh | 66.6 | ug/kg | 1.77 | 5.31 |
| 106-43-4 | 4-Chlorotoluene | Hh | 41.3 | ug/kg | 0.353 | 1.06 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 40.3 | ug/kg | 0.353 | 1.06 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 202 | ug/kg | 1.77 | 5.31 |
| 67-64-1 | Acetone | Hh | 167 | ug/kg | 1.77 | 5.31 |
| 71-43-2 | Benzene | Hh | 47.7 | ug/kg | 0.353 | 1.06 |
| 108-86-1 | Bromobenzene | Hh | 43.7 | ug/kg | 0.353 | 1.06 |
| 74-97-5 | Bromochloromethane | Hh | 52.2 | ug/kg | 0.353 | 1.06 |
| 75-27-4 | Bromodichloromethane | Hh | 42.0 | ug/kg | 0.353 | 1.06 |
| 75-25-2 | Bromoform | Hh | 33.9 | ug/kg | 0.353 | 1.06 |
| 74-83-9 | Bromomethane | Hh | 40.9 | ug/kg | 0.353 | 1.06 |
| 75-15-0 | Carbon disulfide | Hh | 228 | ug/kg | 1.77 | 5.31 |
| 56-23-5 | Carbon tetrachloride | Hh | 50.2 | ug/kg | 0.353 | 1.06 |
| 108-90-7 | Chlorobenzene | Hh | 42.8 | ug/kg | 0.353 | 1.06 |
| 75-00-3 | Chloroethane | Hh | 47.8 | ug/kg | 0.353 | 1.06 |
| 67-66-3 | Chloroform | Hh | 51.5 | ug/kg | 0.353 | 1.06 |
| 74-87-3 | Chloromethane | Hh | 41.5 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139629** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 22:34** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 14:46** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W425.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 38.7 | ug/kg | 0.353 | 1.06 |
| 74-95-3 | Dibromomethane | Hh | 50.2 | ug/kg | 0.353 | 1.06 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 36.4 | ug/kg | 0.353 | 1.06 |
| 100-41-4 | Ethylbenzene | Hh | 44.9 | ug/kg | 0.353 | 1.06 |
| 74-88-4 | Iodomethane | Hh | 219 | ug/kg | 1.77 | 5.31 |
| 98-82-8 | Isopropylbenzene | Hh | 48.2 | ug/kg | 0.353 | 1.06 |
| 75-09-2 | Methylene chloride | Hh | 45.1 | ug/kg | 1.77 | 5.31 |
| 100-42-5 | Styrene | Hh | 19.5 | ug/kg | 0.353 | 1.06 |
| 127-18-4 | Tetrachloroethylene | Hh | 45.6 | ug/kg | 0.353 | 1.06 |
| 108-88-3 | Toluene | Hh | 46.1 | ug/kg | 0.353 | 1.06 |
| 79-01-6 | Trichloroethylene | Hh | 47.6 | ug/kg | 0.353 | 1.06 |
| 75-69-4 | Trichlorofluoromethane | Hh | 49.2 | ug/kg | 0.353 | 1.06 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 75-01-4 | Vinyl chloride | Hh | 48.7 | ug/kg | 0.353 | 1.06 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 48.3 | ug/kg | 0.353 | 1.06 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 37.7 | ug/kg | 0.353 | 1.06 |
| 179601-23-1 | m,p-Xylenes | Hh | 86.8 | ug/kg | 0.708 | 2.12 |
| 104-51-8 | n-Butylbenzene | Hh | 37.1 | ug/kg | 0.353 | 1.06 |
| 103-65-1 | n-Propylbenzene | Hh | 43.2 | ug/kg | 0.353 | 1.06 |
| 95-47-6 | o-Xylene | Hh | 45.5 | ug/kg | 0.353 | 1.06 |
| 135-98-8 | sec-Butylbenzene | Hh | 44.1 | ug/kg | 0.353 | 1.06 |
| 98-06-6 | tert-Butylbenzene | Hh | 47.9 | ug/kg | 0.353 | 1.06 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 48.9 | ug/kg | 0.353 | 1.06 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 41.2 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139630** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 18:39** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 16:05** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W520.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.06 | ug/kg | 0.531 | 1.06 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 78-93-3 | 2-Butanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 591-78-6 | 2-Hexanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 67-64-1 | Acetone | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 71-43-2 | Benzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-86-1 | Bromobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-97-5 | Bromochloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-27-4 | Bromodichloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-25-2 | Bromoform | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-83-9 | Bromomethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-15-0 | Carbon disulfide | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-90-7 | Chlorobenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-00-3 | Chloroethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 67-66-3 | Chloroform | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-87-3 | Chloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139630** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 18:39** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 16:05** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W520.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-95-3 | Dibromomethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 100-41-4 | Ethylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 74-88-4 | Iodomethane | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 98-82-8 | Isopropylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-09-2 | Methylene chloride | HUh | 5.31 | ug/kg | 1.77 | 5.31 |
| 100-42-5 | Styrene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 108-88-3 | Toluene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 79-01-6 | Trichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 238 | ug/kg | 1.77 | 5.31 |
| 75-01-4 | Vinyl chloride | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.12 | ug/kg | 0.708 | 2.12 |
| 104-51-8 | n-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 103-65-1 | n-Propylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 95-47-6 | o-Xylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.353 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139631** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 12:43** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W404LA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 49.3 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 51.3 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 47.5 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 45.4 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 49.1 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 48.8 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 48.2 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 45.7 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 46.5 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 47.1 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 47.0 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 47.2 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 48.1 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 48.5 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 44.6 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 43.8 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 51.7 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 227 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 45.7 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 230 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 46.1 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 47.8 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 225 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | | 244 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 47.8 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 46.6 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 49.4 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 52.0 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 54.8 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 43.1 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 258 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 53.2 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 45.4 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 46.4 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 50.0 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 40.5 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139631** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 12:43** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W404LA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 53.9 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 47.5 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 38.8 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 46.9 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 249 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 48.1 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 44.2 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 49.1 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 45.3 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 48.6 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 47.4 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 48.9 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 47.7 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 52.6 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 93.1 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 46.4 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 45.4 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 48.5 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 47.8 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 49.0 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 49.5 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 49.1 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139632** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 13:39** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W406SA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139632** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 13:39** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V4\4W406SA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 270 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203144003** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 12:21** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W507BA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203144003** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 12:21** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W507BA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203144004** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 11:25** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W505LA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 51.2 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 53.4 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 47.6 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 46.4 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 49.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 49.2 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 50.7 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 48.9 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 47.3 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 52.3 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 48.7 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 47.0 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 47.7 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 49.2 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 47.2 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 45.3 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 45.9 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 54.4 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 243 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 46.0 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 241 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 47.2 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 49.7 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 244 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | | 263 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 49.0 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 47.9 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 51.3 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 53.1 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 57.2 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 41.5 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 256 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 55.4 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 47.4 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 46.6 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 50.2 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 38.1 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203144004** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 11:25** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W505LA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 56.4 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 49.1 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 36.2 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 48.3 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 249 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 44.3 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 49.4 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 47.3 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 51.5 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 49.0 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 46.3 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 49.3 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 53.0 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 95.4 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 48.2 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 46.9 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 48.8 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 49.1 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 50.7 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 50.6 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 50.9 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203144005** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 11:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W506SA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203144005** | | | | |
| **Client Sample:** | **QC for batch 1408147** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1408147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1408149** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **08/01/2014 11:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/01/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080114V4\4W506SA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 200 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 07-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| VOA GC/MS | SW846 8260B | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1408149 | See Below | | |

**Potentially affected work order(s)(SDG): 352522(2014-3751)**

**Application Issues:**

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Sample Analyzed out of Holding

Failed Yield for Surrogates

Failed Recovery for MSD/PSD

Sample Prepped out of Holding

Sample Logged out of Holding

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. QC samples 1203139627MS and 1203139629MSD were below the spike recovery acceptance limits for Styrene 2-Hexanone.<br><br>2. QC samples 1203139627MS and 1203139629MSD were outside the %RPD acceptance limits for Styrene. QC samples 1203139628MS and 1203139630MSD were outside the %RPD acceptance limits for Trichlorotrifluoroethane.<br><br>3. The following samples were prepped and analyzed beyond the fourteenth day of collection:<br><br>352522001,002,003,004,005,006,007,008,009,010,011,012,013<br><br>1203139627MS, 1203139628MS, 1203139629MSD, 1203139630MSD<br><br>4. Sample 352522006 was outside the surrogate recovery acceptance limits for Bromofluorobenzene (121.06%, limits 80-120%). | 1,2. Narrate and report data. The MS/MSD recovered in a similar manner.<br><br>3. Narrate and report data. The samples were prepped and analyzed within the client required two times the holding time.<br><br>4. Narrate and report data. The sample was analyzed twice with similar results. It is believed matrix interference has been demonstrated. |

**Originator's Name:**

Amy Jamison 07-AUG-14

**Data Validator/Group Leader:**

Erin Haubert 08-AUG-14

# Semi-Volatile Analysis

# Case Narrative

**Semi-Volatile Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3751**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry** |
| Analytical Method: | SW846 3541/8270D |
| Prep Method: | SW846 3541 |
| Analytical Batch Number: | 1404170 |
| Prep Batch Number: | 1404169 |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3541/8270D:

| Sample ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 1203129287 | MB for batch 1404169 |
| 1203129288 | Laboratory Control Sample (LCS) |
| 1203129289 | 352522001(RE57-14-84157) Matrix Spike (MS) |
| 1203129290 | 352522001(RE57-14-84157) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 32.

Raw data reports are processed and reviewed by the analyst using the data analysis software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP).

**Calibration Information**

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Methodologies referenced N-Nitroso-diphenylamine. However, as stated in EPA Methodology, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, showed that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

**Initial Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG) in this batch. A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

**CCV Requirements**
All Calibration Verification Standards (CCV) did not meet the acceptance criteria as outlined in Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. This SDG satisfied the 8270D outlier acceptance criteria. Detected concentrations of these analytes should be considered as estimated.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG in this batch met the acceptance criteria.

**Surrogate Recoveries**
Sample 352522011 (RE57-14-84120) recovered the surrogate standard p-Terphenyl-d14 at 157%. The limits are 31-124%. Since there were no target analytes detected in the sample, the biased high surrogate recovery had no adverse impact on the data and the results have been reported.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Sample 352522001 (RE57-14-84157) was selected for analysis as the matrix spike and matrix spike duplicate.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
The RPD values between the MS and MSD met the acceptance limits.

**Internal Standard (ISTD) Acceptance**
Samples 352522005 (RE57-14-84160), 352522006 (RE57-14-84139), 352522007 (RE57-14-84150), 352522008 (RE57-14-84161) and 352522009 (RE57-14-84141) failed ISTD acceptance criteria. The samples were

re-analyzed and passed ISTD acceptance criteria. The re-analysis data are reported. Samples 352522010 (RE57-14-84152) and 352522011 (RE57-14-84120) failed ISTD acceptance criteria. The samples were re-analyzed and confirmed the failure. The re-analysis data are reported. The initial analysis raw data have been placed in the Miscellaneous Section of the data package. Sample 352522004 (RE57-14-84149) failed ISTD acceptance criteria. The sample was re-analyzed and confirmed the failure. The initial analysis data are reported. The MS and MSD, 1203129289 (RE57-14-84157) and 1203129290 (RE57-14-84157), failed ISTD acceptance criteria. Since the associated parent sample 352522001 displayed a similar low, but passing, response, the failures were attributed to sample matrix interference. The data results have been reported.

**Technical Information:**

**Holding Time Specifications**
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. All reported compound mass spectra met the detection specifications in the method.

**Sample Dilutions**
The samples in this SDG in this batch did not require dilutions.

**Sample Re-extraction/Re-analysis**
Samples 352522004 (RE57-14-84149), 352522005 (RE57-14-84160), 352522006 (RE57-14-84139), 352522007 (RE57-14-84150), 352522008 (RE57-14-84161), 352522009 (RE57-14-84141), 352522010 (RE57-14-84152) and 352522011 (RE57-14-84120) were re-analyzed due to internal standard response failures.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
The following DER was generated for sample 352522011 (RE57-14-84120): 1316298.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Manual integrations, if any, are included with the raw data.

**TIC Comment**
Tentatively identified compounds (TIC) may be requested for samples 1203129287 (MB), 352522001 (RE57-14-84157), 352522002 (RE57-14-84159), 352522003 (RE57-14-84138), 352522004 (RE57-14-84149), 352522005 (RE57-14-84160), 352522006 (RE57-14-84139), 352522007 (RE57-14-84150), 352522008 (RE57-14-84161), 352522009 (RE57-14-84141), 352522010 (RE57-14-84152) and 352522011 (RE57-14-84120) in this delivery group/work order. Please note that non-requested calibrated analytes detected in a client sample may be reported on the Form 1/Certificate of Analysis as TICs. TIC data, if requested, are included on the Sample Data Summary (Form 1) and are also included with the sample raw data.

**Additional Comments**
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to rounding differences in the calculation, the data reported in the Surrogate Recovery Report may differ slightly from the raw data. Due to software issue, the raw data may not correctly display the updated SPC limits. Please see Sample Data Summary Report and Surrogate Recovery Report for the correct surrogate acceptance limits.

**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the reviewer name associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**System Configuration**

The Semi-Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description |
|---|---|---|---|---|
| MSD5.I | Agilent 6890/5973 GC/MS w/ 7683 Autosampler | HP6890/HP5973 | DB-5MS | 25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane) |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3751  GEL Work Order: 352522

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Barbara Bailey  **Name: Barbara Bailey**

**Date: 08 AUG 2014**  **Title: Data Validator**

# Sample Data Summary

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522001** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84157** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 10:59** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1808.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 353 | ug/kg | 106 | 353 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 353 | ug/kg | 106 | 353 |
| 122-66-7 | Azobenzene | U | 353 | ug/kg | 106 | 353 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 353 | ug/kg | 106 | 353 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 353 | ug/kg | 106 | 353 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 353 | ug/kg | 106 | 353 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 353 | ug/kg | 106 | 353 |
| 120-83-2 | 2,4-Dichlorophenol | U | 353 | ug/kg | 106 | 353 |
| 105-67-9 | 2,4-Dimethylphenol | U | 353 | ug/kg | 106 | 353 |
| 51-28-5 | 2,4-Dinitrophenol | U | 707 | ug/kg | 106 | 707 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 353 | ug/kg | 106 | 353 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 353 | ug/kg | 106 | 353 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 95-57-8 | 2-Chlorophenol | U | 353 | ug/kg | 106 | 353 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 353 | ug/kg | 106 | 353 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 88-75-5 | 2-Nitrophenol | U | 353 | ug/kg | 106 | 353 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 353 | ug/kg | 106 | 353 |
| 101-55-3 | 4-Bromophenylphenylether | U | 353 | ug/kg | 106 | 353 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 353 | ug/kg | 141 | 353 |
| 106-47-8 | 4-Chloroaniline | U | 353 | ug/kg | 106 | 353 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 353 | ug/kg | 106 | 353 |
| 100-02-7 | 4-Nitrophenol | U | 353 | ug/kg | 106 | 353 |
| 83-32-9 | Acenaphthene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 208-96-8 | Acenaphthylene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 62-53-3 | Aniline | U | 353 | ug/kg | 106 | 353 |
| 120-12-7 | Anthracene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 56-55-3 | Benzo(a)anthracene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 50-32-8 | Benzo(a)pyrene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 65-85-0 | Benzoic acid | U | 707 | ug/kg | 177 | 707 |
| 100-51-6 | Benzyl alcohol | U | 353 | ug/kg | 106 | 353 |
| 85-68-7 | Butylbenzylphthalate | U | 353 | ug/kg | 106 | 353 |
| 218-01-9 | Chrysene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 84-74-2 | Di-n-butylphthalate | U | 353 | ug/kg | 106 | 353 |
| 117-84-0 | Di-n-octylphthalate | U | 353 | ug/kg | 106 | 353 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522001** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84157** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 10:59** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1808.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 132-64-9 | Dibenzofuran | U | 353 | ug/kg | 106 | 353 |
| 84-66-2 | Diethylphthalate | U | 353 | ug/kg | 106 | 353 |
| 131-11-3 | Dimethylphthalate | U | 353 | ug/kg | 106 | 353 |
| 122-39-4 | Diphenylamine | U | 353 | ug/kg | 106 | 353 |
| 206-44-0 | Fluoranthene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 86-73-7 | Fluorene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 118-74-1 | Hexachlorobenzene | U | 353 | ug/kg | 106 | 353 |
| 87-68-3 | Hexachlorobutadiene | U | 353 | ug/kg | 106 | 353 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 353 | ug/kg | 106 | 353 |
| 67-72-1 | Hexachloroethane | U | 353 | ug/kg | 106 | 353 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 78-59-1 | Isophorone | U | 353 | ug/kg | 106 | 353 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 353 | ug/kg | 106 | 353 |
| 621-64-7 | N-Nitrosodipropylamine | U | 353 | ug/kg | 106 | 353 |
| 91-20-3 | Naphthalene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 98-95-3 | Nitrobenzene | U | 353 | ug/kg | 106 | 353 |
| 87-86-5 | Pentachlorophenol | U | 353 | ug/kg | 106 | 353 |
| 85-01-8 | Phenanthrene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 108-95-2 | Phenol | U | 353 | ug/kg | 106 | 353 |
| 129-00-0 | Pyrene | U | 35.3 | ug/kg | 10.6 | 35.3 |
| 110-86-1 | Pyridine | U | 353 | ug/kg | 106 | 353 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 353 | ug/kg | 106 | 353 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 353 | ug/kg | 106 | 353 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 353 | ug/kg | 106 | 353 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 353 | ug/kg | 106 | 353 |
| 65794-96-9 | m,p-Cresols | U | 353 | ug/kg | 106 | 353 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 353 | ug/kg | 106 | 353 |
| 95-48-7 | o-Cresol | U | 353 | ug/kg | 106 | 353 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 353 | ug/kg | 117 | 353 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 353 | ug/kg | 106 | 353 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.977 | 355 | ug/kg | 0 | J |
| | unknown | 3.401 | 145 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522001** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84157** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 10:59** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1808.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.658 | 5760 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.263 | 491 | ug/kg | 96 | NJ |
| 017351-34-7 | 14-Pentadecenoic acid | 13.139 | 282 | ug/kg | 96 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.235 | 316 | ug/kg | 96 | NJ |
| 000638-67-5 | Tricosane | 13.868 | 532 | ug/kg | 90 | NJ |
| 000506-12-7 | Heptadecanoic acid | 14.159 | 159 | ug/kg | 91 | NJ |
| 006912-07-8 | Hexadecane, 5-butyl- | 14.897 | 1500 | ug/kg | 91 | NJ |
| | unknown | 15.287 | 149 | ug/kg | 0 | J |
| 000112-95-8 | Eicosane | 15.511 | 156 | ug/kg | 92 | NJ |
| 000593-49-7 | Heptacosane | 16.23 | 1040 | ug/kg | 98 | NJ |
| 005337-61-1 | 2-Octadecyl-propane-1,3-diol | 16.54 | 492 | ug/kg | 86 | NJ |
| | unknown | 17.054 | 143 | ug/kg | 0 | J |
| | unknown | 17.42 | 501 | ug/kg | 0 | J |
| 055045-13-1 | Tetradecane, 6,9-dimethyl- | 18.006 | 514 | ug/kg | 87 | NJ |
| 007390-81-0 | Oxirane, hexadecyl- | 19.625 | 765 | ug/kg | 91 | NJ |
| 054833-48-6 | Heptadecane, 2,6,10,15-tetramethyl | 20.344 | 1530 | ug/kg | 91 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522002** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84159** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:33** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1811.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 122-66-7 | Azobenzene | U | 355 | ug/kg | 107 | 355 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 120-83-2 | 2,4-Dichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 105-67-9 | 2,4-Dimethylphenol | U | 355 | ug/kg | 107 | 355 |
| 51-28-5 | 2,4-Dinitrophenol | U | 710 | ug/kg | 107 | 710 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 355 | ug/kg | 107 | 355 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 355 | ug/kg | 107 | 355 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 95-57-8 | 2-Chlorophenol | U | 355 | ug/kg | 107 | 355 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 355 | ug/kg | 107 | 355 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 88-75-5 | 2-Nitrophenol | U | 355 | ug/kg | 107 | 355 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 355 | ug/kg | 107 | 355 |
| 101-55-3 | 4-Bromophenylphenylether | U | 355 | ug/kg | 107 | 355 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 355 | ug/kg | 142 | 355 |
| 106-47-8 | 4-Chloroaniline | U | 355 | ug/kg | 107 | 355 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 355 | ug/kg | 107 | 355 |
| 100-02-7 | 4-Nitrophenol | U | 355 | ug/kg | 107 | 355 |
| 83-32-9 | Acenaphthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 208-96-8 | Acenaphthylene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 62-53-3 | Aniline | U | 355 | ug/kg | 107 | 355 |
| 120-12-7 | Anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 56-55-3 | Benzo(a)anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 50-32-8 | Benzo(a)pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 65-85-0 | Benzoic acid | U | 710 | ug/kg | 178 | 710 |
| 100-51-6 | Benzyl alcohol | U | 355 | ug/kg | 107 | 355 |
| 85-68-7 | Butylbenzylphthalate | U | 355 | ug/kg | 107 | 355 |
| 218-01-9 | Chrysene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 84-74-2 | Di-n-butylphthalate | U | 355 | ug/kg | 107 | 355 |
| 117-84-0 | Di-n-octylphthalate | U | 355 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522002** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84159** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:33** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1811.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 132-64-9 | Dibenzofuran | U | 355 | ug/kg | 107 | 355 |
| 84-66-2 | Diethylphthalate | U | 355 | ug/kg | 107 | 355 |
| 131-11-3 | Dimethylphthalate | U | 355 | ug/kg | 107 | 355 |
| 122-39-4 | Diphenylamine | U | 355 | ug/kg | 107 | 355 |
| 206-44-0 | Fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 86-73-7 | Fluorene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 118-74-1 | Hexachlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 87-68-3 | Hexachlorobutadiene | U | 355 | ug/kg | 107 | 355 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 355 | ug/kg | 107 | 355 |
| 67-72-1 | Hexachloroethane | U | 355 | ug/kg | 107 | 355 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 78-59-1 | Isophorone | U | 355 | ug/kg | 107 | 355 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 355 | ug/kg | 107 | 355 |
| 621-64-7 | N-Nitrosodipropylamine | U | 355 | ug/kg | 107 | 355 |
| 91-20-3 | Naphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 98-95-3 | Nitrobenzene | U | 355 | ug/kg | 107 | 355 |
| 87-86-5 | Pentachlorophenol | U | 355 | ug/kg | 107 | 355 |
| 85-01-8 | Phenanthrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 108-95-2 | Phenol | U | 355 | ug/kg | 107 | 355 |
| 129-00-0 | Pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 110-86-1 | Pyridine | U | 355 | ug/kg | 107 | 355 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 355 | ug/kg | 107 | 355 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 355 | ug/kg | 107 | 355 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 355 | ug/kg | 107 | 355 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 355 | ug/kg | 107 | 355 |
| 65794-96-9 | m,p-Cresols | U | 355 | ug/kg | 107 | 355 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 355 | ug/kg | 107 | 355 |
| 95-48-7 | o-Cresol | U | 355 | ug/kg | 107 | 355 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 355 | ug/kg | 117 | 355 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 355 | ug/kg | 107 | 355 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.973 | 902 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.687 | 5520 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522002** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84159** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:33** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1811.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000057-10-3 | n-Hexadecanoic acid | 12.258 | 649 | ug/kg | 96 | NJ |
| | unknown | 13.23 | 197 | ug/kg | 0 | J |
| | unknown | 13.882 | 162 | ug/kg | 0 | J |
| | unknown | 14.33 | 159 | ug/kg | 0 | J |
| 006971-40-0 | 17-Pentatriacontene | 14.897 | 987 | ug/kg | 87 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522003** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **2.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84138** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:05** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1812.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 342 | ug/kg | 103 | 342 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 342 | ug/kg | 103 | 342 |
| 122-66-7 | Azobenzene | U | 342 | ug/kg | 103 | 342 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 342 | ug/kg | 103 | 342 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 342 | ug/kg | 103 | 342 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 342 | ug/kg | 103 | 342 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 342 | ug/kg | 103 | 342 |
| 120-83-2 | 2,4-Dichlorophenol | U | 342 | ug/kg | 103 | 342 |
| 105-67-9 | 2,4-Dimethylphenol | U | 342 | ug/kg | 103 | 342 |
| 51-28-5 | 2,4-Dinitrophenol | U | 684 | ug/kg | 103 | 684 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 342 | ug/kg | 103 | 342 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 342 | ug/kg | 103 | 342 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 95-57-8 | 2-Chlorophenol | U | 342 | ug/kg | 103 | 342 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 342 | ug/kg | 103 | 342 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 88-75-5 | 2-Nitrophenol | U | 342 | ug/kg | 103 | 342 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 342 | ug/kg | 103 | 342 |
| 101-55-3 | 4-Bromophenylphenylether | U | 342 | ug/kg | 103 | 342 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 342 | ug/kg | 137 | 342 |
| 106-47-8 | 4-Chloroaniline | U | 342 | ug/kg | 103 | 342 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 342 | ug/kg | 103 | 342 |
| 100-02-7 | 4-Nitrophenol | U | 342 | ug/kg | 103 | 342 |
| 83-32-9 | Acenaphthene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 208-96-8 | Acenaphthylene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 62-53-3 | Aniline | U | 342 | ug/kg | 103 | 342 |
| 120-12-7 | Anthracene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 56-55-3 | Benzo(a)anthracene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 50-32-8 | Benzo(a)pyrene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 65-85-0 | Benzoic acid | U | 684 | ug/kg | 171 | 684 |
| 100-51-6 | Benzyl alcohol | U | 342 | ug/kg | 103 | 342 |
| 85-68-7 | Butylbenzylphthalate | U | 342 | ug/kg | 103 | 342 |
| 218-01-9 | Chrysene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 84-74-2 | Di-n-butylphthalate | U | 342 | ug/kg | 103 | 342 |
| 117-84-0 | Di-n-octylphthalate | U | 342 | ug/kg | 103 | 342 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522003** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **2.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84138** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:05** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1812.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 132-64-9 | Dibenzofuran | U | 342 | ug/kg | 103 | 342 |
| 84-66-2 | Diethylphthalate | U | 342 | ug/kg | 103 | 342 |
| 131-11-3 | Dimethylphthalate | U | 342 | ug/kg | 103 | 342 |
| 122-39-4 | Diphenylamine | U | 342 | ug/kg | 103 | 342 |
| 206-44-0 | Fluoranthene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 86-73-7 | Fluorene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 118-74-1 | Hexachlorobenzene | U | 342 | ug/kg | 103 | 342 |
| 87-68-3 | Hexachlorobutadiene | U | 342 | ug/kg | 103 | 342 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 342 | ug/kg | 103 | 342 |
| 67-72-1 | Hexachloroethane | U | 342 | ug/kg | 103 | 342 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 78-59-1 | Isophorone | U | 342 | ug/kg | 103 | 342 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 342 | ug/kg | 103 | 342 |
| 621-64-7 | N-Nitrosodipropylamine | U | 342 | ug/kg | 103 | 342 |
| 91-20-3 | Naphthalene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 98-95-3 | Nitrobenzene | U | 342 | ug/kg | 103 | 342 |
| 87-86-5 | Pentachlorophenol | U | 342 | ug/kg | 103 | 342 |
| 85-01-8 | Phenanthrene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 108-95-2 | Phenol | U | 342 | ug/kg | 103 | 342 |
| 129-00-0 | Pyrene | U | 34.2 | ug/kg | 10.3 | 34.2 |
| 110-86-1 | Pyridine | U | 342 | ug/kg | 103 | 342 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 342 | ug/kg | 103 | 342 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 342 | ug/kg | 103 | 342 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 342 | ug/kg | 103 | 342 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 342 | ug/kg | 103 | 342 |
| 65794-96-9 | m,p-Cresols | U | 342 | ug/kg | 103 | 342 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 342 | ug/kg | 103 | 342 |
| 95-48-7 | o-Cresol | U | 342 | ug/kg | 103 | 342 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 342 | ug/kg | 113 | 342 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 342 | ug/kg | 103 | 342 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.992 | 365 | ug/kg | 0 | J |
| | unknown | 3.387 | 160 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522003** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **2.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84138** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:05** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1812.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.654 | 5840 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.254 | 359 | ug/kg | 95 | NJ |
| 001599-67-3 | 1-Docosene | 14.892 | 760 | ug/kg | 99 | NJ |
| | unknown | 18.006 | 162 | ug/kg | 0 | J |
| | unknown | 19.106 | 165 | ug/kg | 0 | J |
| | unknown | 22.025 | 2330 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522004** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84149** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:36** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1813.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 357 | ug/kg | 107 | 357 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 357 | ug/kg | 107 | 357 |
| 122-66-7 | Azobenzene | U | 357 | ug/kg | 107 | 357 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 357 | ug/kg | 107 | 357 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 357 | ug/kg | 107 | 357 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 357 | ug/kg | 107 | 357 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 357 | ug/kg | 107 | 357 |
| 120-83-2 | 2,4-Dichlorophenol | U | 357 | ug/kg | 107 | 357 |
| 105-67-9 | 2,4-Dimethylphenol | U | 357 | ug/kg | 107 | 357 |
| 51-28-5 | 2,4-Dinitrophenol | U | 714 | ug/kg | 107 | 714 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 357 | ug/kg | 107 | 357 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 357 | ug/kg | 107 | 357 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 95-57-8 | 2-Chlorophenol | U | 357 | ug/kg | 107 | 357 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 357 | ug/kg | 107 | 357 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 88-75-5 | 2-Nitrophenol | U | 357 | ug/kg | 107 | 357 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 357 | ug/kg | 107 | 357 |
| 101-55-3 | 4-Bromophenylphenylether | U | 357 | ug/kg | 107 | 357 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 357 | ug/kg | 143 | 357 |
| 106-47-8 | 4-Chloroaniline | U | 357 | ug/kg | 107 | 357 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 357 | ug/kg | 107 | 357 |
| 100-02-7 | 4-Nitrophenol | U | 357 | ug/kg | 107 | 357 |
| 83-32-9 | Acenaphthene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 208-96-8 | Acenaphthylene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 62-53-3 | Aniline | U | 357 | ug/kg | 107 | 357 |
| 120-12-7 | Anthracene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 56-55-3 | Benzo(a)anthracene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 50-32-8 | Benzo(a)pyrene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 65-85-0 | Benzoic acid | U | 714 | ug/kg | 178 | 714 |
| 100-51-6 | Benzyl alcohol | U | 357 | ug/kg | 107 | 357 |
| 85-68-7 | Butylbenzylphthalate | J | 339 | ug/kg | 107 | 357 |
| 218-01-9 | Chrysene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 84-74-2 | Di-n-butylphthalate | U | 357 | ug/kg | 107 | 357 |
| 117-84-0 | Di-n-octylphthalate | U | 357 | ug/kg | 107 | 357 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522004** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84149** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:36** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1813.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 132-64-9 | Dibenzofuran | U | 357 | ug/kg | 107 | 357 |
| 84-66-2 | Diethylphthalate | U | 357 | ug/kg | 107 | 357 |
| 131-11-3 | Dimethylphthalate | U | 357 | ug/kg | 107 | 357 |
| 122-39-4 | Diphenylamine | U | 357 | ug/kg | 107 | 357 |
| 206-44-0 | Fluoranthene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 86-73-7 | Fluorene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 118-74-1 | Hexachlorobenzene | U | 357 | ug/kg | 107 | 357 |
| 87-68-3 | Hexachlorobutadiene | U | 357 | ug/kg | 107 | 357 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 357 | ug/kg | 107 | 357 |
| 67-72-1 | Hexachloroethane | U | 357 | ug/kg | 107 | 357 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 78-59-1 | Isophorone | U | 357 | ug/kg | 107 | 357 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 357 | ug/kg | 107 | 357 |
| 621-64-7 | N-Nitrosodipropylamine | U | 357 | ug/kg | 107 | 357 |
| 91-20-3 | Naphthalene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 98-95-3 | Nitrobenzene | U | 357 | ug/kg | 107 | 357 |
| 87-86-5 | Pentachlorophenol | U | 357 | ug/kg | 107 | 357 |
| 85-01-8 | Phenanthrene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 108-95-2 | Phenol | U | 357 | ug/kg | 107 | 357 |
| 129-00-0 | Pyrene | U | 35.7 | ug/kg | 10.7 | 35.7 |
| 110-86-1 | Pyridine | U | 357 | ug/kg | 107 | 357 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 357 | ug/kg | 107 | 357 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 357 | ug/kg | 107 | 357 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 357 | ug/kg | 107 | 357 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | J | 130 | ug/kg | 107 | 357 |
| 65794-96-9 | m,p-Cresols | U | 357 | ug/kg | 107 | 357 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 357 | ug/kg | 107 | 357 |
| 95-48-7 | o-Cresol | U | 357 | ug/kg | 107 | 357 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 357 | ug/kg | 118 | 357 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 357 | ug/kg | 107 | 357 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.977 | 392 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.658 | 4320 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522004** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84149** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:36** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1813.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 8.035 | 174 | ug/kg | 0 | J |
| 000544-63-8 | Tetradecanoic acid | 11.187 | 219 | ug/kg | 93 | NJ |
| 002091-29-4 | 9-Hexadecenoic acid | 12.22 | 319 | ug/kg | 97 | NJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.268 | 2590 | ug/kg | 98 | NJ |
| 000060-33-3 | 9,12-Octadecadienoic acid (Z,Z)- | 13.116 | 186 | ug/kg | 93 | NJ |
| 000112-79-8 | 9-Octadecenoic acid, (E)- | 13.144 | 738 | ug/kg | 91 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.235 | 640 | ug/kg | 93 | NJ |
| 004860-03-1 | Hexadecane, 1-chloro- | 14.897 | 1430 | ug/kg | 87 | NJ |
| | unknown | 22.94 | 590 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522005** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84160** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:14** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2105.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 122-66-7 | Azobenzene | U | 346 | ug/kg | 104 | 346 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 120-83-2 | 2,4-Dichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 105-67-9 | 2,4-Dimethylphenol | U | 346 | ug/kg | 104 | 346 |
| 51-28-5 | 2,4-Dinitrophenol | U | 692 | ug/kg | 104 | 692 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 346 | ug/kg | 104 | 346 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 346 | ug/kg | 104 | 346 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 95-57-8 | 2-Chlorophenol | U | 346 | ug/kg | 104 | 346 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 346 | ug/kg | 104 | 346 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 88-75-5 | 2-Nitrophenol | U | 346 | ug/kg | 104 | 346 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 346 | ug/kg | 104 | 346 |
| 101-55-3 | 4-Bromophenylphenylether | U | 346 | ug/kg | 104 | 346 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 346 | ug/kg | 138 | 346 |
| 106-47-8 | 4-Chloroaniline | U | 346 | ug/kg | 104 | 346 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 346 | ug/kg | 104 | 346 |
| 100-02-7 | 4-Nitrophenol | U | 346 | ug/kg | 104 | 346 |
| 83-32-9 | Acenaphthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 208-96-8 | Acenaphthylene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 62-53-3 | Aniline | U | 346 | ug/kg | 104 | 346 |
| 120-12-7 | Anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 56-55-3 | Benzo(a)anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 50-32-8 | Benzo(a)pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 65-85-0 | Benzoic acid | U | 692 | ug/kg | 173 | 692 |
| 100-51-6 | Benzyl alcohol | U | 346 | ug/kg | 104 | 346 |
| 85-68-7 | Butylbenzylphthalate | U | 346 | ug/kg | 104 | 346 |
| 218-01-9 | Chrysene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 84-74-2 | Di-n-butylphthalate | U | 346 | ug/kg | 104 | 346 |
| 117-84-0 | Di-n-octylphthalate | U | 346 | ug/kg | 104 | 346 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522005** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84160** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:14** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2105.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 132-64-9 | Dibenzofuran | U | 346 | ug/kg | 104 | 346 |
| 84-66-2 | Diethylphthalate | U | 346 | ug/kg | 104 | 346 |
| 131-11-3 | Dimethylphthalate | U | 346 | ug/kg | 104 | 346 |
| 122-39-4 | Diphenylamine | U | 346 | ug/kg | 104 | 346 |
| 206-44-0 | Fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 86-73-7 | Fluorene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 118-74-1 | Hexachlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 87-68-3 | Hexachlorobutadiene | U | 346 | ug/kg | 104 | 346 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 346 | ug/kg | 104 | 346 |
| 67-72-1 | Hexachloroethane | U | 346 | ug/kg | 104 | 346 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 78-59-1 | Isophorone | U | 346 | ug/kg | 104 | 346 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 346 | ug/kg | 104 | 346 |
| 621-64-7 | N-Nitrosodipropylamine | U | 346 | ug/kg | 104 | 346 |
| 91-20-3 | Naphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 98-95-3 | Nitrobenzene | U | 346 | ug/kg | 104 | 346 |
| 87-86-5 | Pentachlorophenol | U | 346 | ug/kg | 104 | 346 |
| 85-01-8 | Phenanthrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 108-95-2 | Phenol | U | 346 | ug/kg | 104 | 346 |
| 129-00-0 | Pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 110-86-1 | Pyridine | U | 346 | ug/kg | 104 | 346 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 346 | ug/kg | 104 | 346 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 346 | ug/kg | 104 | 346 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 346 | ug/kg | 104 | 346 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 346 | ug/kg | 104 | 346 |
| 65794-96-9 | m,p-Cresols | U | 346 | ug/kg | 104 | 346 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 346 | ug/kg | 104 | 346 |
| 95-48-7 | o-Cresol | U | 346 | ug/kg | 104 | 346 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 346 | ug/kg | 114 | 346 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 346 | ug/kg | 104 | 346 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.968 | 1080 | ug/kg | 0 | J |
| | unknown | 3.349 | 140 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522005** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84160** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:14** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2105.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.611 | 5550 | ug/kg | | AJ |
| | unknown | 12.23 | 164 | ug/kg | 0 | J |
| 000629-96-9 | 1-Eicosanol | 14.839 | 820 | ug/kg | 90 | NJ |
| | unknown | 15.478 | 166 | ug/kg | 0 | J |
| | unknown | 16.187 | 155 | ug/kg | 0 | J |
| | unknown | 17.373 | 157 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522006** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84139** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:45** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2106.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 122-66-7 | Azobenzene | U | 348 | ug/kg | 105 | 348 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 348 | ug/kg | 105 | 348 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 348 | ug/kg | 105 | 348 |
| 120-83-2 | 2,4-Dichlorophenol | U | 348 | ug/kg | 105 | 348 |
| 105-67-9 | 2,4-Dimethylphenol | U | 348 | ug/kg | 105 | 348 |
| 51-28-5 | 2,4-Dinitrophenol | U | 697 | ug/kg | 105 | 697 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 348 | ug/kg | 105 | 348 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 348 | ug/kg | 105 | 348 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 95-57-8 | 2-Chlorophenol | U | 348 | ug/kg | 105 | 348 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 348 | ug/kg | 105 | 348 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 88-75-5 | 2-Nitrophenol | U | 348 | ug/kg | 105 | 348 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 348 | ug/kg | 105 | 348 |
| 101-55-3 | 4-Bromophenylphenylether | U | 348 | ug/kg | 105 | 348 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 348 | ug/kg | 139 | 348 |
| 106-47-8 | 4-Chloroaniline | U | 348 | ug/kg | 105 | 348 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 348 | ug/kg | 105 | 348 |
| 100-02-7 | 4-Nitrophenol | U | 348 | ug/kg | 105 | 348 |
| 83-32-9 | Acenaphthene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 208-96-8 | Acenaphthylene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 62-53-3 | Aniline | U | 348 | ug/kg | 105 | 348 |
| 120-12-7 | Anthracene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 56-55-3 | Benzo(a)anthracene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 50-32-8 | Benzo(a)pyrene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 65-85-0 | Benzoic acid | U | 697 | ug/kg | 174 | 697 |
| 100-51-6 | Benzyl alcohol | U | 348 | ug/kg | 105 | 348 |
| 85-68-7 | Butylbenzylphthalate | U | 348 | ug/kg | 105 | 348 |
| 218-01-9 | Chrysene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 84-74-2 | Di-n-butylphthalate | U | 348 | ug/kg | 105 | 348 |
| 117-84-0 | Di-n-octylphthalate | U | 348 | ug/kg | 105 | 348 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522006** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84139** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:45** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2106.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 132-64-9 | Dibenzofuran | U | 348 | ug/kg | 105 | 348 |
| 84-66-2 | Diethylphthalate | U | 348 | ug/kg | 105 | 348 |
| 131-11-3 | Dimethylphthalate | U | 348 | ug/kg | 105 | 348 |
| 122-39-4 | Diphenylamine | U | 348 | ug/kg | 105 | 348 |
| 206-44-0 | Fluoranthene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 86-73-7 | Fluorene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 118-74-1 | Hexachlorobenzene | U | 348 | ug/kg | 105 | 348 |
| 87-68-3 | Hexachlorobutadiene | U | 348 | ug/kg | 105 | 348 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 348 | ug/kg | 105 | 348 |
| 67-72-1 | Hexachloroethane | U | 348 | ug/kg | 105 | 348 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 78-59-1 | Isophorone | U | 348 | ug/kg | 105 | 348 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 348 | ug/kg | 105 | 348 |
| 621-64-7 | N-Nitrosodipropylamine | U | 348 | ug/kg | 105 | 348 |
| 91-20-3 | Naphthalene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 98-95-3 | Nitrobenzene | U | 348 | ug/kg | 105 | 348 |
| 87-86-5 | Pentachlorophenol | U | 348 | ug/kg | 105 | 348 |
| 85-01-8 | Phenanthrene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 108-95-2 | Phenol | U | 348 | ug/kg | 105 | 348 |
| 129-00-0 | Pyrene | U | 34.8 | ug/kg | 10.5 | 34.8 |
| 110-86-1 | Pyridine | U | 348 | ug/kg | 105 | 348 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 348 | ug/kg | 105 | 348 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 348 | ug/kg | 105 | 348 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 348 | ug/kg | 105 | 348 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 348 | ug/kg | 105 | 348 |
| 65794-96-9 | m,p-Cresols | U | 348 | ug/kg | 105 | 348 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 348 | ug/kg | 105 | 348 |
| 95-48-7 | o-Cresol | U | 348 | ug/kg | 105 | 348 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 348 | ug/kg | 115 | 348 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 348 | ug/kg | 105 | 348 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.954 | 417 | ug/kg | 0 | J |
| | unknown | 3.339 | 147 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522006** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **4.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84139** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:45** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2106.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.601 | 6150 | ug/kg | | AJ |
| | unknown | 5.03 | 506 | ug/kg | 0 | J |
| | unknown | 5.887 | 163 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.235 | 295 | ug/kg | 93 | NJ |
| | unknown | 12.449 | 172 | ug/kg | 0 | J |
| 054125-39-2 | trans-2,3-Epoxydecane | 13.844 | 500 | ug/kg | 90 | NJ |
| | unknown | 14.497 | 298 | ug/kg | 0 | J |
| 001599-67-3 | 1-Docosene | 14.839 | 1180 | ug/kg | 98 | NJ |
| | unknown | 16.182 | 1220 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522007** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **13.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84150** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 13:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2107.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 385 | ug/kg | 116 | 385 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 385 | ug/kg | 116 | 385 |
| 122-66-7 | Azobenzene | U | 385 | ug/kg | 116 | 385 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 385 | ug/kg | 116 | 385 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 385 | ug/kg | 116 | 385 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 385 | ug/kg | 116 | 385 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 385 | ug/kg | 116 | 385 |
| 120-83-2 | 2,4-Dichlorophenol | U | 385 | ug/kg | 116 | 385 |
| 105-67-9 | 2,4-Dimethylphenol | U | 385 | ug/kg | 116 | 385 |
| 51-28-5 | 2,4-Dinitrophenol | U | 770 | ug/kg | 116 | 770 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 385 | ug/kg | 116 | 385 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 385 | ug/kg | 116 | 385 |
| 91-58-7 | 2-Chloronaphthalene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 95-57-8 | 2-Chlorophenol | U | 385 | ug/kg | 116 | 385 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 385 | ug/kg | 116 | 385 |
| 91-57-6 | 2-Methylnaphthalene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 88-75-5 | 2-Nitrophenol | U | 385 | ug/kg | 116 | 385 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 385 | ug/kg | 116 | 385 |
| 101-55-3 | 4-Bromophenylphenylether | U | 385 | ug/kg | 116 | 385 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 385 | ug/kg | 154 | 385 |
| 106-47-8 | 4-Chloroaniline | U | 385 | ug/kg | 116 | 385 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 385 | ug/kg | 116 | 385 |
| 100-02-7 | 4-Nitrophenol | U | 385 | ug/kg | 116 | 385 |
| 83-32-9 | Acenaphthene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 208-96-8 | Acenaphthylene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 62-53-3 | Aniline | U | 385 | ug/kg | 116 | 385 |
| 120-12-7 | Anthracene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 56-55-3 | Benzo(a)anthracene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 50-32-8 | Benzo(a)pyrene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 205-99-2 | Benzo(b)fluoranthene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 191-24-2 | Benzo(ghi)perylene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 207-08-9 | Benzo(k)fluoranthene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 65-85-0 | Benzoic acid | U | 770 | ug/kg | 193 | 770 |
| 100-51-6 | Benzyl alcohol | U | 385 | ug/kg | 116 | 385 |
| 85-68-7 | Butylbenzylphthalate | U | 385 | ug/kg | 116 | 385 |
| 218-01-9 | Chrysene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 84-74-2 | Di-n-butylphthalate | U | 385 | ug/kg | 116 | 385 |
| 117-84-0 | Di-n-octylphthalate | U | 385 | ug/kg | 116 | 385 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522007** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **13.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84150** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 13:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2107.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 132-64-9 | Dibenzofuran | U | 385 | ug/kg | 116 | 385 |
| 84-66-2 | Diethylphthalate | U | 385 | ug/kg | 116 | 385 |
| 131-11-3 | Dimethylphthalate | U | 385 | ug/kg | 116 | 385 |
| 122-39-4 | Diphenylamine | U | 385 | ug/kg | 116 | 385 |
| 206-44-0 | Fluoranthene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 86-73-7 | Fluorene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 118-74-1 | Hexachlorobenzene | U | 385 | ug/kg | 116 | 385 |
| 87-68-3 | Hexachlorobutadiene | U | 385 | ug/kg | 116 | 385 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 385 | ug/kg | 116 | 385 |
| 67-72-1 | Hexachloroethane | U | 385 | ug/kg | 116 | 385 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 78-59-1 | Isophorone | U | 385 | ug/kg | 116 | 385 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 385 | ug/kg | 116 | 385 |
| 621-64-7 | N-Nitrosodipropylamine | U | 385 | ug/kg | 116 | 385 |
| 91-20-3 | Naphthalene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 98-95-3 | Nitrobenzene | U | 385 | ug/kg | 116 | 385 |
| 87-86-5 | Pentachlorophenol | U | 385 | ug/kg | 116 | 385 |
| 85-01-8 | Phenanthrene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 108-95-2 | Phenol | U | 385 | ug/kg | 116 | 385 |
| 129-00-0 | Pyrene | U | 38.5 | ug/kg | 11.6 | 38.5 |
| 110-86-1 | Pyridine | U | 385 | ug/kg | 116 | 385 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 385 | ug/kg | 116 | 385 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 385 | ug/kg | 116 | 385 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 385 | ug/kg | 116 | 385 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 385 | ug/kg | 116 | 385 |
| 65794-96-9 | m,p-Cresols | U | 385 | ug/kg | 116 | 385 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 385 | ug/kg | 116 | 385 |
| 95-48-7 | o-Cresol | U | 385 | ug/kg | 116 | 385 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 385 | ug/kg | 127 | 385 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 385 | ug/kg | 116 | 385 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.944 | 267 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.673 | 5850 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 08:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522007** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **13.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84150** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 13:16** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2107.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.901 | 180 | ug/kg | 0 | J |
| | unknown | 5.025 | 159 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.235 | 341 | ug/kg | 92 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.206 | 296 | ug/kg | 93 | NJ |
| 000112-92-5 | 1-Octadecanol | 13.811 | 405 | ug/kg | 86 | NJ |
| | unknown | 14.13 | 936 | ug/kg | 0 | J |
| 001599-67-3 | 1-Docosene | 14.839 | 1680 | ug/kg | 99 | NJ |
| | unknown | 15.244 | 940 | ug/kg | 0 | J |
| | unknown | 16.182 | 998 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522008** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84161** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 13:47** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2108.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 345 | ug/kg | 104 | 345 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 345 | ug/kg | 104 | 345 |
| 122-66-7 | Azobenzene | U | 345 | ug/kg | 104 | 345 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 345 | ug/kg | 104 | 345 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 345 | ug/kg | 104 | 345 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 345 | ug/kg | 104 | 345 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 345 | ug/kg | 104 | 345 |
| 120-83-2 | 2,4-Dichlorophenol | U | 345 | ug/kg | 104 | 345 |
| 105-67-9 | 2,4-Dimethylphenol | U | 345 | ug/kg | 104 | 345 |
| 51-28-5 | 2,4-Dinitrophenol | U | 691 | ug/kg | 104 | 691 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 345 | ug/kg | 104 | 345 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 345 | ug/kg | 104 | 345 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 95-57-8 | 2-Chlorophenol | U | 345 | ug/kg | 104 | 345 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 345 | ug/kg | 104 | 345 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 88-75-5 | 2-Nitrophenol | U | 345 | ug/kg | 104 | 345 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 345 | ug/kg | 104 | 345 |
| 101-55-3 | 4-Bromophenylphenylether | U | 345 | ug/kg | 104 | 345 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 345 | ug/kg | 138 | 345 |
| 106-47-8 | 4-Chloroaniline | U | 345 | ug/kg | 104 | 345 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 345 | ug/kg | 104 | 345 |
| 100-02-7 | 4-Nitrophenol | U | 345 | ug/kg | 104 | 345 |
| 83-32-9 | Acenaphthene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 208-96-8 | Acenaphthylene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 62-53-3 | Aniline | U | 345 | ug/kg | 104 | 345 |
| 120-12-7 | Anthracene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 56-55-3 | Benzo(a)anthracene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 50-32-8 | Benzo(a)pyrene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 65-85-0 | Benzoic acid | U | 691 | ug/kg | 173 | 691 |
| 100-51-6 | Benzyl alcohol | U | 345 | ug/kg | 104 | 345 |
| 85-68-7 | Butylbenzylphthalate | U | 345 | ug/kg | 104 | 345 |
| 218-01-9 | Chrysene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 84-74-2 | Di-n-butylphthalate | U | 345 | ug/kg | 104 | 345 |
| 117-84-0 | Di-n-octylphthalate | U | 345 | ug/kg | 104 | 345 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522008** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84161** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 13:47** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2108.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 132-64-9 | Dibenzofuran | U | 345 | ug/kg | 104 | 345 |
| 84-66-2 | Diethylphthalate | U | 345 | ug/kg | 104 | 345 |
| 131-11-3 | Dimethylphthalate | U | 345 | ug/kg | 104 | 345 |
| 122-39-4 | Diphenylamine | U | 345 | ug/kg | 104 | 345 |
| 206-44-0 | Fluoranthene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 86-73-7 | Fluorene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 118-74-1 | Hexachlorobenzene | U | 345 | ug/kg | 104 | 345 |
| 87-68-3 | Hexachlorobutadiene | U | 345 | ug/kg | 104 | 345 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 345 | ug/kg | 104 | 345 |
| 67-72-1 | Hexachloroethane | U | 345 | ug/kg | 104 | 345 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 78-59-1 | Isophorone | U | 345 | ug/kg | 104 | 345 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 345 | ug/kg | 104 | 345 |
| 621-64-7 | N-Nitrosodipropylamine | U | 345 | ug/kg | 104 | 345 |
| 91-20-3 | Naphthalene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 98-95-3 | Nitrobenzene | U | 345 | ug/kg | 104 | 345 |
| 87-86-5 | Pentachlorophenol | U | 345 | ug/kg | 104 | 345 |
| 85-01-8 | Phenanthrene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 108-95-2 | Phenol | U | 345 | ug/kg | 104 | 345 |
| 129-00-0 | Pyrene | U | 34.5 | ug/kg | 10.4 | 34.5 |
| 110-86-1 | Pyridine | U | 345 | ug/kg | 104 | 345 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 345 | ug/kg | 104 | 345 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 345 | ug/kg | 104 | 345 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 345 | ug/kg | 104 | 345 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 345 | ug/kg | 104 | 345 |
| 65794-96-9 | m,p-Cresols | U | 345 | ug/kg | 104 | 345 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 345 | ug/kg | 104 | 345 |
| 95-48-7 | o-Cresol | U | 345 | ug/kg | 104 | 345 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 345 | ug/kg | 114 | 345 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 345 | ug/kg | 104 | 345 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.958 | 512 | ug/kg | 0 | J |
| | unknown | 3.349 | 150 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522008** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **3.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84161** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 13:47** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.06 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2108.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.615 | 5840 | ug/kg | | AJ |
| 000544-63-8 | Tetradecanoic acid | 12.235 | 239 | ug/kg | 96 | NJ |
| 000112-80-1 | Oleic Acid | 13.111 | 191 | ug/kg | 89 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.211 | 175 | ug/kg | 98 | NJ |
| | unknown | 14.663 | 423 | ug/kg | 0 | J |
| 1000130-97-9 | E-15-Heptadecenal | 14.839 | 1360 | ug/kg | 95 | NJ |
| | unknown | 16.187 | 342 | ug/kg | 0 | J |
| | unknown | 17.373 | 698 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522009** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84141** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 14:18** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2109.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 122-66-7 | Azobenzene | U | 371 | ug/kg | 111 | 371 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 371 | ug/kg | 111 | 371 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 371 | ug/kg | 111 | 371 |
| 120-83-2 | 2,4-Dichlorophenol | U | 371 | ug/kg | 111 | 371 |
| 105-67-9 | 2,4-Dimethylphenol | U | 371 | ug/kg | 111 | 371 |
| 51-28-5 | 2,4-Dinitrophenol | U | 742 | ug/kg | 111 | 742 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 371 | ug/kg | 111 | 371 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 371 | ug/kg | 111 | 371 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 95-57-8 | 2-Chlorophenol | U | 371 | ug/kg | 111 | 371 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 371 | ug/kg | 111 | 371 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 88-75-5 | 2-Nitrophenol | U | 371 | ug/kg | 111 | 371 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 371 | ug/kg | 111 | 371 |
| 101-55-3 | 4-Bromophenylphenylether | U | 371 | ug/kg | 111 | 371 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 371 | ug/kg | 148 | 371 |
| 106-47-8 | 4-Chloroaniline | U | 371 | ug/kg | 111 | 371 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 371 | ug/kg | 111 | 371 |
| 100-02-7 | 4-Nitrophenol | U | 371 | ug/kg | 111 | 371 |
| 83-32-9 | Acenaphthene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 208-96-8 | Acenaphthylene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 62-53-3 | Aniline | U | 371 | ug/kg | 111 | 371 |
| 120-12-7 | Anthracene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 56-55-3 | Benzo(a)anthracene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 50-32-8 | Benzo(a)pyrene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 65-85-0 | Benzoic acid | U | 742 | ug/kg | 185 | 742 |
| 100-51-6 | Benzyl alcohol | U | 371 | ug/kg | 111 | 371 |
| 85-68-7 | Butylbenzylphthalate | U | 371 | ug/kg | 111 | 371 |
| 218-01-9 | Chrysene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 84-74-2 | Di-n-butylphthalate | U | 371 | ug/kg | 111 | 371 |
| 117-84-0 | Di-n-octylphthalate | U | 371 | ug/kg | 111 | 371 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522009** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84141** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 14:18** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2109.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 132-64-9 | Dibenzofuran | U | 371 | ug/kg | 111 | 371 |
| 84-66-2 | Diethylphthalate | U | 371 | ug/kg | 111 | 371 |
| 131-11-3 | Dimethylphthalate | U | 371 | ug/kg | 111 | 371 |
| 122-39-4 | Diphenylamine | U | 371 | ug/kg | 111 | 371 |
| 206-44-0 | Fluoranthene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 86-73-7 | Fluorene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 118-74-1 | Hexachlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 87-68-3 | Hexachlorobutadiene | U | 371 | ug/kg | 111 | 371 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 371 | ug/kg | 111 | 371 |
| 67-72-1 | Hexachloroethane | U | 371 | ug/kg | 111 | 371 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 78-59-1 | Isophorone | U | 371 | ug/kg | 111 | 371 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 371 | ug/kg | 111 | 371 |
| 621-64-7 | N-Nitrosodipropylamine | U | 371 | ug/kg | 111 | 371 |
| 91-20-3 | Naphthalene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 98-95-3 | Nitrobenzene | U | 371 | ug/kg | 111 | 371 |
| 87-86-5 | Pentachlorophenol | U | 371 | ug/kg | 111 | 371 |
| 85-01-8 | Phenanthrene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 108-95-2 | Phenol | U | 371 | ug/kg | 111 | 371 |
| 129-00-0 | Pyrene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 110-86-1 | Pyridine | U | 371 | ug/kg | 111 | 371 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 371 | ug/kg | 111 | 371 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 371 | ug/kg | 111 | 371 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 371 | ug/kg | 111 | 371 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 371 | ug/kg | 111 | 371 |
| 65794-96-9 | m,p-Cresols | U | 371 | ug/kg | 111 | 371 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 371 | ug/kg | 111 | 371 |
| 95-48-7 | o-Cresol | U | 371 | ug/kg | 111 | 371 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 371 | ug/kg | 122 | 371 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 371 | ug/kg | 111 | 371 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.935 | 668 | ug/kg | 0 | J |
| | unknown | 3.501 | 194 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522009** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **10.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84141** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 14:18** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2109.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.73 | 3600 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.235 | 403 | ug/kg | 96 | NJ |
| | unknown | 13.111 | 150 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.206 | 213 | ug/kg | 95 | NJ |
| 005454-48-8 | Bromoacetic acid, hexadecyl ester | 13.806 | 438 | ug/kg | 91 | NJ |
| | unknown | 14.497 | 238 | ug/kg | 0 | J |
| 000296-56-0 | Cycloeicosane | 14.839 | 1470 | ug/kg | 94 | NJ |
| 1000309-12-6 | Sulfurous acid, pentadecyl 2-propy | 16.182 | 552 | ug/kg | 91 | NJ |
| | unknown | 17.002 | 282 | ug/kg | 0 | J |
| | unknown | 17.373 | 247 | ug/kg | 0 | J |
| 000112-95-8 | Eicosane | 17.949 | 592 | ug/kg | 87 | NJ |
| | unknown | 19.559 | 5160 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522010** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84152** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 14:50** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2110.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 122-66-7 | Azobenzene | U | 351 | ug/kg | 105 | 351 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 120-83-2 | 2,4-Dichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 105-67-9 | 2,4-Dimethylphenol | U | 351 | ug/kg | 105 | 351 |
| 51-28-5 | 2,4-Dinitrophenol | U | 702 | ug/kg | 105 | 702 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 351 | ug/kg | 105 | 351 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 351 | ug/kg | 105 | 351 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 95-57-8 | 2-Chlorophenol | U | 351 | ug/kg | 105 | 351 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 351 | ug/kg | 105 | 351 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 88-75-5 | 2-Nitrophenol | U | 351 | ug/kg | 105 | 351 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 351 | ug/kg | 105 | 351 |
| 101-55-3 | 4-Bromophenylphenylether | U | 351 | ug/kg | 105 | 351 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 351 | ug/kg | 140 | 351 |
| 106-47-8 | 4-Chloroaniline | U | 351 | ug/kg | 105 | 351 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 351 | ug/kg | 105 | 351 |
| 100-02-7 | 4-Nitrophenol | U | 351 | ug/kg | 105 | 351 |
| 83-32-9 | Acenaphthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 208-96-8 | Acenaphthylene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 62-53-3 | Aniline | U | 351 | ug/kg | 105 | 351 |
| 120-12-7 | Anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 56-55-3 | Benzo(a)anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 50-32-8 | Benzo(a)pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 65-85-0 | Benzoic acid | | 2830 | ug/kg | 175 | 702 |
| 100-51-6 | Benzyl alcohol | U | 351 | ug/kg | 105 | 351 |
| 85-68-7 | Butylbenzylphthalate | U | 351 | ug/kg | 105 | 351 |
| 218-01-9 | Chrysene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 84-74-2 | Di-n-butylphthalate | U | 351 | ug/kg | 105 | 351 |
| 117-84-0 | Di-n-octylphthalate | U | 351 | ug/kg | 105 | 351 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522010** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84152** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 14:50** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2110.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 132-64-9 | Dibenzofuran | U | 351 | ug/kg | 105 | 351 |
| 84-66-2 | Diethylphthalate | U | 351 | ug/kg | 105 | 351 |
| 131-11-3 | Dimethylphthalate | U | 351 | ug/kg | 105 | 351 |
| 122-39-4 | Diphenylamine | U | 351 | ug/kg | 105 | 351 |
| 206-44-0 | Fluoranthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 86-73-7 | Fluorene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 118-74-1 | Hexachlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 87-68-3 | Hexachlorobutadiene | U | 351 | ug/kg | 105 | 351 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 351 | ug/kg | 105 | 351 |
| 67-72-1 | Hexachloroethane | U | 351 | ug/kg | 105 | 351 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 78-59-1 | Isophorone | U | 351 | ug/kg | 105 | 351 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 351 | ug/kg | 105 | 351 |
| 621-64-7 | N-Nitrosodipropylamine | U | 351 | ug/kg | 105 | 351 |
| 91-20-3 | Naphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 98-95-3 | Nitrobenzene | U | 351 | ug/kg | 105 | 351 |
| 87-86-5 | Pentachlorophenol | U | 351 | ug/kg | 105 | 351 |
| 85-01-8 | Phenanthrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 108-95-2 | Phenol | U | 351 | ug/kg | 105 | 351 |
| 129-00-0 | Pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 110-86-1 | Pyridine | U | 351 | ug/kg | 105 | 351 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 351 | ug/kg | 105 | 351 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 351 | ug/kg | 105 | 351 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 351 | ug/kg | 105 | 351 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 351 | ug/kg | 105 | 351 |
| 65794-96-9 | m,p-Cresols | U | 351 | ug/kg | 105 | 351 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 351 | ug/kg | 105 | 351 |
| 95-48-7 | o-Cresol | U | 351 | ug/kg | 105 | 351 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 351 | ug/kg | 116 | 351 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 351 | ug/kg | 105 | 351 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.944 | 401 | ug/kg | 0 | J |
| | unknown | 3.387 | 189 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 10:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522010** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84152** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 14:50** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2110.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.649 | 7000 | ug/kg | | AJ |
| | unknown | 5.434 | 406 | ug/kg | 0 | J |
| 001792-81-0 | cis-1,2-Cyclohexanediol | 6.168 | 1540 | ug/kg | 97 | NJ |
| 000120-80-9 | 1,2-Benzenediol | 7.296 | 261 | ug/kg | 95 | NJ |
| 000090-01-7 | Salicyl Alcohol | 7.977 | 326 | ug/kg | 95 | NJ |
| | unknown | 8.153 | 537 | ug/kg | 0 | J |
| 002416-20-8 | Hexadecenoic acid, Z-11- | 12.192 | 459 | ug/kg | 90 | NJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.244 | 1080 | ug/kg | 96 | NJ |
| 000060-33-3 | 9,12-Octadecadienoic acid (Z,Z)- | 13.101 | 1200 | ug/kg | 93 | NJ |
| | unknown | 13.125 | 879 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.216 | 477 | ug/kg | 98 | NJ |
| | unknown | 13.696 | 220 | ug/kg | 0 | J |
| 000295-65-8 | Cyclohexadecane | 13.811 | 475 | ug/kg | 92 | NJ |
| | unknown | 14.13 | 192 | ug/kg | 0 | J |
| 074685-30-6 | 5-Eicosene, (E)- | 14.839 | 2130 | ug/kg | 99 | NJ |
| 000112-85-6 | Docosanoic acid | 15.244 | 142 | ug/kg | 92 | NJ |
| | unknown | 15.463 | 286 | ug/kg | 0 | J |
| 1000151-22-6 | Cyclodocosane, ethyl- | 16.182 | 497 | ug/kg | 90 | NJ |
| | unknown | 16.968 | 168 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522011** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **7.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84120** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 15:21** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2111.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 122-66-7 | Azobenzene | U | 359 | ug/kg | 108 | 359 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 359 | ug/kg | 108 | 359 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 359 | ug/kg | 108 | 359 |
| 120-83-2 | 2,4-Dichlorophenol | U | 359 | ug/kg | 108 | 359 |
| 105-67-9 | 2,4-Dimethylphenol | U | 359 | ug/kg | 108 | 359 |
| 51-28-5 | 2,4-Dinitrophenol | U | 718 | ug/kg | 108 | 718 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 359 | ug/kg | 108 | 359 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 359 | ug/kg | 108 | 359 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 95-57-8 | 2-Chlorophenol | U | 359 | ug/kg | 108 | 359 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 359 | ug/kg | 108 | 359 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 88-75-5 | 2-Nitrophenol | U | 359 | ug/kg | 108 | 359 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 359 | ug/kg | 108 | 359 |
| 101-55-3 | 4-Bromophenylphenylether | U | 359 | ug/kg | 108 | 359 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 359 | ug/kg | 144 | 359 |
| 106-47-8 | 4-Chloroaniline | U | 359 | ug/kg | 108 | 359 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 359 | ug/kg | 108 | 359 |
| 100-02-7 | 4-Nitrophenol | U | 359 | ug/kg | 108 | 359 |
| 83-32-9 | Acenaphthene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 208-96-8 | Acenaphthylene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 62-53-3 | Aniline | U | 359 | ug/kg | 108 | 359 |
| 120-12-7 | Anthracene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 56-55-3 | Benzo(a)anthracene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 50-32-8 | Benzo(a)pyrene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 65-85-0 | Benzoic acid | U | 718 | ug/kg | 180 | 718 |
| 100-51-6 | Benzyl alcohol | U | 359 | ug/kg | 108 | 359 |
| 85-68-7 | Butylbenzylphthalate | | 384 | ug/kg | 108 | 359 |
| 218-01-9 | Chrysene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 84-74-2 | Di-n-butylphthalate | U | 359 | ug/kg | 108 | 359 |
| 117-84-0 | Di-n-octylphthalate | U | 359 | ug/kg | 108 | 359 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522011** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **7.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84120** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 15:21** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2111.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 132-64-9 | Dibenzofuran | U | 359 | ug/kg | 108 | 359 |
| 84-66-2 | Diethylphthalate | U | 359 | ug/kg | 108 | 359 |
| 131-11-3 | Dimethylphthalate | U | 359 | ug/kg | 108 | 359 |
| 122-39-4 | Diphenylamine | U | 359 | ug/kg | 108 | 359 |
| 206-44-0 | Fluoranthene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 86-73-7 | Fluorene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 118-74-1 | Hexachlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 87-68-3 | Hexachlorobutadiene | U | 359 | ug/kg | 108 | 359 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 359 | ug/kg | 108 | 359 |
| 67-72-1 | Hexachloroethane | U | 359 | ug/kg | 108 | 359 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 78-59-1 | Isophorone | U | 359 | ug/kg | 108 | 359 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 359 | ug/kg | 108 | 359 |
| 621-64-7 | N-Nitrosodipropylamine | U | 359 | ug/kg | 108 | 359 |
| 91-20-3 | Naphthalene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 98-95-3 | Nitrobenzene | U | 359 | ug/kg | 108 | 359 |
| 87-86-5 | Pentachlorophenol | U | 359 | ug/kg | 108 | 359 |
| 85-01-8 | Phenanthrene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 108-95-2 | Phenol | U | 359 | ug/kg | 108 | 359 |
| 129-00-0 | Pyrene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 110-86-1 | Pyridine | U | 359 | ug/kg | 108 | 359 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 359 | ug/kg | 108 | 359 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 359 | ug/kg | 108 | 359 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 359 | ug/kg | 108 | 359 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | J | 145 | ug/kg | 108 | 359 |
| 65794-96-9 | m,p-Cresols | U | 359 | ug/kg | 108 | 359 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 359 | ug/kg | 108 | 359 |
| 95-48-7 | o-Cresol | U | 359 | ug/kg | 108 | 359 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 359 | ug/kg | 119 | 359 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 359 | ug/kg | 108 | 359 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.958 | 488 | ug/kg | 0 | J |
| | unknown | 3.382 | 164 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 09:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352522011** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **7.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84120** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 15:21** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.b\s5G2111.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.625 | 5730 | ug/kg | | AJ |
| | unknown | 5.025 | 456 | ug/kg | 0 | J |
| 000121-33-5 | Vanillin | 8.996 | 150 | ug/kg | 93 | NJ |
| 000544-63-8 | Tetradecanoic acid | 11.158 | 413 | ug/kg | 90 | NJ |
| | unknown | 11.773 | 260 | ug/kg | 0 | J |
| | unknown | 12.149 | 482 | ug/kg | 0 | J |
| 002416-20-8 | Hexadecenoic acid, Z-11- | 12.192 | 279 | ug/kg | 98 | NJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.239 | 1100 | ug/kg | 90 | NJ |
| 000593-45-3 | Octadecane | 12.935 | 2140 | ug/kg | 92 | NJ |
| 000060-33-3 | 9,12-Octadecadienoic acid (Z,Z)- | 13.092 | 161 | ug/kg | 87 | NJ |
| 000112-80-1 | Oleic Acid | 13.116 | 551 | ug/kg | 91 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.211 | 1220 | ug/kg | 96 | NJ |
| | unknown | 13.806 | 2960 | ug/kg | 0 | J |
| 001599-67-3 | 1-Docosene | 14.839 | 725 | ug/kg | 99 | NJ |
| 035599-77-0 | Tridecane, 1-iodo- | 16.182 | 457 | ug/kg | 91 | NJ |

# Quality Control Summary

**Semi-Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3751**

**Matrix Type: SOLID**

| Sample ID | Client ID | 2FP %REC | PHL %REC | NBZ %REC | FBP %REC | TBP %REC | TPH %REC |
|---|---|---|---|---|---|---|---|
| 1203129287 | MB for batch 1404169 | 57 | 56 | 58 | 60 | 53 | 61 |
| 1203129288 | LCS for batch 1404169 | 71 | 67 | 61 | 67 | 64 | 63 |
| 352522001 | RE57-14-84157 | 69 | 66 | 60 | 69 | 58 | 73 |
| 1203129289 | RE57-14-84157MS | 73 | 69 | 60 | 69 | 59 | 82 |
| 1203129290 | RE57-14-84157MSD | 70 | 68 | 60 | 68 | 61 | 89 |
| 352522002 | RE57-14-84159 | 70 | 66 | 63 | 66 | 63 | 84 |
| 352522003 | RE57-14-84138 | 70 | 67 | 61 | 66 | 60 | 71 |
| 352522004 | RE57-14-84149 | 54 | 55 | 48 | 61 | 59 | 110 |
| 352522005 | RE57-14-84160 | 69 | 57 | 66 | 65 | 67 | 75 |
| 352522006 | RE57-14-84139 | 73 | 73 | 59 | 60 | 63 | 81 |
| 352522007 | RE57-14-84150 | 66 | 65 | 65 | 64 | 69 | 81 |
| 352522008 | RE57-14-84161 | 76 | 75 | 71 | 74 | 72 | 80 |
| 352522009 | RE57-14-84141 | 76 | 77 | 66 | 68 | 69 | 76 |
| 352522010 | RE57-14-84152 | 84 | 88 | 75 | 75 | 76 | 103 |
| 352522011 | RE57-14-84120 | 72 | 74 | 44 | 51 | 68 | 157 * |

| Surrogate | | Acceptance Limits |
|---|---|---|
| 2FP | = 2-Fluorophenol | (23%-107%) |
| PHL | = Phenol-d5 | (25%-108%) |
| NBZ | = Nitrobenzene-d5 | (21%-103%) |
| FBP | = 2-Fluorobiphenyl | (25%-100%) |
| TBP | = 2,4,6-Tribromophenol | (20%-122%) |
| TPH | = p-Terphenyl-d14 | (31%-124%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1404169**
**Lab Sample ID** **1203129288**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 10:19**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 62-75-9 | LCS | N-Methyl-N-nitrosomethylam | 1670 | 0.0 | 994 | 60 | 31-84 |
| 110-86-1 | LCS | Pyridine | 1670 | 0.0 | 837 | 50 | 29-85 |
| 62-53-3 | LCS | Aniline | 1670 | 0.0 | 1060 | 64 | 34-101 |
| 108-95-2 | LCS | Phenol | 1670 | 0.0 | 1100 | 66 | 38-98 |
| 111-44-4 | LCS | bis(2-Chloroethyl) ether | 1670 | 0.0 | 1020 | 61 | 35-96 |
| 95-57-8 | LCS | 2-Chlorophenol | 1670 | 0.0 | 1170 | 70 | 38-100 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 1670 | 0.0 | 1050 | 63 | 39-110 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 1670 | 0.0 | 1100 | 66 | 40-110 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 1670 | 0.0 | 1140 | 68 | 39-93 |
| 108-60-1 | LCS | bis(2-Chloro-1-methylethyl)et | 1670 | 0.0 | 862 | 52 | 27-109 |
| 100-51-6 | LCS | Benzyl alcohol | 1670 | 0.0 | 1180 | 71 | 35-95 |
| 95-48-7 | LCS | o-Cresol | 1670 | 0.0 | 1250 | 75 | 37-97 |
| 65794-96-9 | LCS | m,p-Cresols | 1670 | 0.0 | 1410 | 84 | 39-115 |
| 621-64-7 | LCS | N-Nitrosodipropylamine | 1670 | 0.0 | 1280 | 77 | 34-106 |
| 67-72-1 | LCS | Hexachloroethane | 1670 | 0.0 | 1150 | 69 | 34-98 |
| 98-95-3 | LCS | Nitrobenzene | 1670 | 0.0 | 1010 | 60 | 35-99 |
| 78-59-1 | LCS | Isophorone | 1670 | 0.0 | 1120 | 68 | 36-98 |
| 88-75-5 | LCS | 2-Nitrophenol | 1670 | 0.0 | 1020 | 61 | 35-106 |
| 105-67-9 | LCS | 2,4-Dimethylphenol | 1670 | 0.0 | 1030 | 62 | 35-102 |
| 111-91-1 | LCS | bis(2-Chloroethoxy)methane | 1670 | 0.0 | 974 | 58 | 37-98 |
| 120-83-2 | LCS | 2,4-Dichlorophenol | 1670 | 0.0 | 1030 | 62 | 35-110 |
| 65-85-0 | LCS | Benzoic acid | 3330 | 0.0 | 1430 | 43 | 27-99 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1404169**
**Lab Sample ID** **1203129288**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 10:19**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 106-47-8 | LCS | 4-Chloroaniline | 1670 | 0.0 | 889 | 53 | 32-106 |
| 87-68-3 | LCS | Hexachlorobutadiene | 1670 | 0.0 | 1000 | 60 | 32-104 |
| 59-50-7 | LCS | 4-Chloro-3-methylphenol | 1670 | 0.0 | 1210 | 73 | 35-104 |
| 91-57-6 | LCS | 2-Methylnaphthalene | 1670 | 0.0 | 1000 | 60 | 36-107 |
| 91-20-3 | LCS | Naphthalene | 1670 | 0.0 | 1050 | 63 | 38-106 |
| 77-47-4 | LCS | Hexachlorocyclopentadiene | 1670 | 0.0 | 781 | 47 | 24-84 |
| 88-06-2 | LCS | 2,4,6-Trichlorophenol | 1670 | 0.0 | 1120 | 67 | 36-98 |
| 95-95-4 | LCS | 2,4,5-Trichlorophenol | 1670 | 0.0 | 1130 | 68 | 41-103 |
| 91-58-7 | LCS | 2-Chloronaphthalene | 1670 | 0.0 | 1130 | 68 | 39-101 |
| 88-74-4 | LCS | 2-Nitroaniline<br>*o-Nitroaniline* | 1670 | 0.0 | 1080 | 65 | 34-116 |
| 99-09-2 | LCS | 3-Nitroaniline<br>*m-Nitroaniline* | 1670 | 0.0 | 894 | 54 | 32-113 |
| 131-11-3 | LCS | Dimethylphthalate | 1670 | 0.0 | 1190 | 71 | 41-105 |
| 606-20-2 | LCS | 2,6-Dinitrotoluene | 1670 | 0.0 | 1150 | 69 | 41-103 |
| 121-14-2 | LCS | 2,4-Dinitrotoluene | 1670 | 0.0 | 1120 | 67 | 43-109 |
| 208-96-8 | LCS | Acenaphthylene | 1670 | 0.0 | 1160 | 70 | 38-103 |
| 83-32-9 | LCS | Acenaphthene | 1670 | 0.0 | 1090 | 65 | 36-105 |
| 51-28-5 | LCS | 2,4-Dinitrophenol | 1670 | 0.0 | 505 | 30 | 22-83 |
| 132-64-9 | LCS | Dibenzofuran | 1670 | 0.0 | 1090 | 65 | 38-104 |
| 84-66-2 | LCS | Diethylphthalate | 1670 | 0.0 | 1220 | 73 | 42-109 |
| 100-02-7 | LCS | 4-Nitrophenol | 1670 | 0.0 | 917 | 55 | 23-114 |
| 86-73-7 | LCS | Fluorene | 1670 | 0.0 | 1110 | 66 | 39-102 |
| 7005-72-3 | LCS | 4-Chlorophenylphenylether | 1670 | 0.0 | 1160 | 70 | 41-104 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1404169**
**Lab Sample ID** **1203129288**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 10:19**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 100-01-6 | LCS | 4-Nitroaniline<br>*p-Nitroaniline* | 1670 | 0.0 | 1090 | 65 | 35-150 |
| 534-52-1 | LCS | 2-Methyl-4,6-dinitrophenol | 1670 | 0.0 | 861 | 52 | 33-103 |
| 122-39-4 | LCS | Diphenylamine | 1670 | 0.0 | 1100 | 66 | 40-101 |
| 122-66-7 | LCS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1670 | 0.0 | 1250 | 75 | 33-102 |
| 101-55-3 | LCS | 4-Bromophenylphenylether | 1670 | 0.0 | 1080 | 65 | 42-110 |
| 118-74-1 | LCS | Hexachlorobenzene | 1670 | 0.0 | 1150 | 69 | 41-108 |
| 87-86-5 | LCS | Pentachlorophenol | 1670 | 0.0 | 973 | 58 | 31-93 |
| 85-01-8 | LCS | Phenanthrene | 1670 | 0.0 | 1130 | 68 | 43-105 |
| 120-12-7 | LCS | Anthracene | 1670 | 0.0 | 1150 | 69 | 43-104 |
| 84-74-2 | LCS | Di-n-butylphthalate | 1670 | 0.0 | 1340 | 80 | 46-112 |
| 206-44-0 | LCS | Fluoranthene | 1670 | 0.0 | 1310 | 78 | 44-106 |
| 129-00-0 | LCS | Pyrene | 1670 | 0.0 | 969 | 58 | 33-99 |
| 85-68-7 | LCS | Butylbenzylphthalate | 1670 | 0.0 | 1260 | 76 | 37-107 |
| 117-81-7 | LCS | bis(2-Ethylhexyl)phthalate | 1670 | 0.0 | 1310 | 79 | 41-104 |
| 56-55-3 | LCS | Benzo(a)anthracene | 1670 | 0.0 | 1230 | 74 | 46-108 |
| 218-01-9 | LCS | Chrysene | 1670 | 0.0 | 1250 | 75 | 47-107 |
| 117-84-0 | LCS | Di-n-octylphthalate | 1670 | 0.0 | 1570 | 94 | 41-110 |
| 205-99-2 | LCS | Benzo(b)fluoranthene | 1670 | 0.0 | 1170 | 70 | 42-111 |
| 207-08-9 | LCS | Benzo(k)fluoranthene | 1670 | 0.0 | 1150 | 69 | 43-103 |
| 50-32-8 | LCS | Benzo(a)pyrene | 1670 | 0.0 | 1200 | 72 | 45-109 |
| 193-39-5 | LCS | Indeno(1,2,3-cd)pyrene | 1670 | 0.0 | 1090 | 66 | 45-115 |
| 53-70-3 | LCS | Dibenzo(a,h)anthracene | 1670 | 0.0 | 1250 | 75 | 39-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **LCS for batch 1404169**
**Lab Sample ID** **1203129288**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 10:19**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 191-24-2 | LCS | Benzo(ghi)perylene | 1670 | 0.0 | 1030 | 62 | 43-115 |
| 91-94-1 | LCS | 3,3'-Dichlorobenzidine | 1670 | 0.0 | 1280 | 77 | 32-111 |
| 120-82-1 | LCS | 1,2,4-Trichlorobenzene | 1670 | 0.0 | 1060 | 64 | 37-98 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157MS**
**Lab Sample ID** **1203129289**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/18/2014 11:30**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MS | N-Methyl-N-nitrosomethylam | 1770 | 0.00 | U | 1110 | 63 | 24-86 |
| 110-86-1 | MS | Pyridine | 1770 | 0.00 | U | 846 | 48 | 24-87 |
| 62-53-3 | MS | Aniline | 1770 | 0.00 | U | 1230 | 69 | 28-91 |
| 108-95-2 | MS | Phenol | 1770 | 0.00 | U | 1390 | 79 | 28-108 |
| 111-44-4 | MS | bis(2-Chloroethyl) ether | 1770 | 0.00 | U | 1130 | 64 | 25-102 |
| 95-57-8 | MS | 2-Chlorophenol | 1770 | 0.00 | U | 1360 | 77 | 28-108 |
| 541-73-1 | MS | 1,3-Dichlorobenzene | 1770 | 0.00 | U | 1040 | 59 | 24-96 |
| 106-46-7 | MS | 1,4-Dichlorobenzene | 1770 | 0.00 | U | 1090 | 62 | 24-97 |
| 95-50-1 | MS | 1,2-Dichlorobenzene | 1770 | 0.00 | U | 1130 | 64 | 25-99 |
| 108-60-1 | MS | bis(2-Chloro-1-methylethyl)et | 1770 | 0.00 | U | 947 | 54 | 25-105 |
| 100-51-6 | MS | Benzyl alcohol | 1770 | 0.00 | U | 1350 | 76 | 21-109 |
| 95-48-7 | MS | o-Cresol | 1770 | 0.00 | U | 1550 | 87 | 27-105 |
| 65794-96-9 | MS | m,p-Cresols | 1770 | 0.00 | U | 1680 | 95 | 32-123 |
| 621-64-7 | MS | N-Nitrosodipropylamine | 1770 | 0.00 | U | 1430 | 81 | 23-117 |
| 67-72-1 | MS | Hexachloroethane | 1770 | 0.00 | U | 1120 | 64 | 24-102 |
| 98-95-3 | MS | Nitrobenzene | 1770 | 0.00 | U | 1070 | 61 | 25-104 |
| 78-59-1 | MS | Isophorone | 1770 | 0.00 | U | 1210 | 68 | 24-108 |
| 88-75-5 | MS | 2-Nitrophenol | 1770 | 0.00 | U | 1120 | 63 | 24-106 |
| 105-67-9 | MS | 2,4-Dimethylphenol | 1770 | 0.00 | U | 1190 | 67 | 30-109 |
| 111-91-1 | MS | bis(2-Chloroethoxy)methane | 1770 | 0.00 | U | 1080 | 61 | 27-104 |
| 120-83-2 | MS | 2,4-Dichlorophenol | 1770 | 0.00 | U | 1210 | 68 | 31-103 |
| 65-85-0 | MS | Benzoic acid | 3540 | 0.00 | U | 2080 | 59 | 15-115 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157MS**
**Lab Sample ID** **1203129289**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/18/2014 11:30**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MS | 4-Chloroaniline | 1770 | 0.00 | U | 981 | 55 | 27-100 |
| 87-68-3 | MS | Hexachlorobutadiene | 1770 | 0.00 | U | 1010 | 57 | 24-105 |
| 59-50-7 | MS | 4-Chloro-3-methylphenol | 1770 | 0.00 | U | 1300 | 73 | 32-112 |
| 91-57-6 | MS | 2-Methylnaphthalene | 1770 | 0.00 | U | 1080 | 61 | 23-107 |
| 91-20-3 | MS | Naphthalene | 1770 | 0.00 | U | 1100 | 62 | 21-107 |
| 77-47-4 | MS | Hexachlorocyclopentadiene | 1770 | 0.00 | U | 938 | 53 | 12-106 |
| 88-06-2 | MS | 2,4,6-Trichlorophenol | 1770 | 0.00 | U | 1250 | 70 | 32-103 |
| 95-95-4 | MS | 2,4,5-Trichlorophenol | 1770 | 0.00 | U | 1210 | 68 | 38-109 |
| 91-58-7 | MS | 2-Chloronaphthalene | 1770 | 0.00 | U | 1220 | 69 | 27-109 |
| 88-74-4 | MS | 2-Nitroaniline<br>*o-Nitroaniline* | 1770 | 0.00 | U | 1080 | 61 | 37-114 |
| 99-09-2 | MS | 3-Nitroaniline<br>*m-Nitroaniline* | 1770 | 0.00 | U | 777 | 44 | 31-110 |
| 131-11-3 | MS | Dimethylphthalate | 1770 | 0.00 | U | 1270 | 72 | 38-110 |
| 606-20-2 | MS | 2,6-Dinitrotoluene | 1770 | 0.00 | U | 1180 | 67 | 36-107 |
| 121-14-2 | MS | 2,4-Dinitrotoluene | 1770 | 0.00 | U | 1110 | 63 | 36-115 |
| 208-96-8 | MS | Acenaphthylene | 1770 | 0.00 | U | 1240 | 70 | 32-103 |
| 83-32-9 | MS | Acenaphthene | 1770 | 0.00 | U | 1120 | 64 | 28-102 |
| 51-28-5 | MS | 2,4-Dinitrophenol | 1770 | 0.00 | U | 759 | 43 | 19-101 |
| 132-64-9 | MS | Dibenzofuran | 1770 | 0.00 | U | 1140 | 64 | 28-117 |
| 84-66-2 | MS | Diethylphthalate | 1770 | 0.00 | U | 1230 | 69 | 40-113 |
| 100-02-7 | MS | 4-Nitrophenol | 1770 | 0.00 | U | 923 | 52 | 12-128 |
| 86-73-7 | MS | Fluorene | 1770 | 0.00 | U | 1100 | 62 | 30-115 |
| 7005-72-3 | MS | 4-Chlorophenylphenylether | 1770 | 0.00 | U | 1180 | 67 | 37-110 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157MS**
**Lab Sample ID** **1203129289**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/18/2014 11:30**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MS | 4-Nitroaniline<br>*p-Nitroaniline* | 1770 | 0.00 | U | 919 | 52 | 36-141 |
| 534-52-1 | MS | 2-Methyl-4,6-dinitrophenol | 1770 | 0.00 | U | 1190 | 67 | 14-116 |
| 122-39-4 | MS | Diphenylamine | 1770 | 0.00 | U | 1270 | 72 | 34-111 |
| 122-66-7 | MS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1770 | 0.00 | U | 1480 | 84 | 35-105 |
| 101-55-3 | MS | 4-Bromophenylphenylether | 1770 | 0.00 | U | 1260 | 72 | 37-112 |
| 118-74-1 | MS | Hexachlorobenzene | 1770 | 0.00 | U | 1300 | 73 | 34-111 |
| 87-86-5 | MS | Pentachlorophenol | 1770 | 0.00 | U | 1210 | 68 | 22-108 |
| 85-01-8 | MS | Phenanthrene | 1770 | 0.00 | U | 1230 | 70 | 28-119 |
| 120-12-7 | MS | Anthracene | 1770 | 0.00 | U | 1250 | 70 | 36-104 |
| 84-74-2 | MS | Di-n-butylphthalate | 1770 | 0.00 | U | 1440 | 82 | 42-119 |
| 206-44-0 | MS | Fluoranthene | 1770 | 0.00 | U | 1360 | 77 | 32-115 |
| 129-00-0 | MS | Pyrene | 1770 | 0.00 | U | 1350 | 77 | 25-119 |
| 85-68-7 | MS | Butylbenzylphthalate | 1770 | 0.00 | U | 1630 | 92 | 33-121 |
| 117-81-7 | MS | bis(2-Ethylhexyl)phthalate | 1770 | 0.00 | U | 1590 | 90 | 33-124 |
| 56-55-3 | MS | Benzo(a)anthracene | 1770 | 0.00 | U | 1390 | 78 | 27-120 |
| 218-01-9 | MS | Chrysene | 1770 | 0.00 | U | 1400 | 79 | 33-114 |
| 117-84-0 | MS | Di-n-octylphthalate | 1770 | 0.00 | U | 1430 | 81 | 36-115 |
| 205-99-2 | MS | Benzo(b)fluoranthene | 1770 | 0.00 | U | 1540 | 87 | 30-119 |
| 207-08-9 | MS | Benzo(k)fluoranthene | 1770 | 0.00 | U | 1500 | 85 | 31-125 |
| 50-32-8 | MS | Benzo(a)pyrene | 1770 | 0.00 | U | 1350 | 76 | 31-116 |
| 193-39-5 | MS | Indeno(1,2,3-cd)pyrene | 1770 | 0.00 | U | 915 | 52 | 29-117 |
| 53-70-3 | MS | Dibenzo(a,h)anthracene | 1770 | 0.00 | U | 1050 | 59 | 26-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Sample Type:** | **Matrix Spike** |
| **Client ID:** | **RE57-14-84157MS** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203129289** | **%Moisture:** | **5.8** |
| **Instrument:** | **MSD5.I** | **Analysis Date:** | **07/18/2014 11:30** |
| **Analyst:** | **RMB** | **Prep Batch ID:** | **1404169** |
| **Inj. Vol:** | **1 uL** | **Batch ID:** | **1404170** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MS | Benzo(ghi)perylene | 1770 | 0.00 | U | 919 | 52 | 30-109 |
| 91-94-1 | MS | 3,3'-Dichlorobenzidine | 1770 | 0.00 | U | 818 | 46 | 28-105 |
| 120-82-1 | MS | 1,2,4-Trichlorobenzene | 1770 | 0.00 | U | 1110 | 63 | 25-102 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157MSD**
**Lab Sample ID** **1203129290**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/18/2014 12:02**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MSD | N-Methyl-N-nitrosomethylam | 1770 | 0.00 | U | 1080 | 61 | 24-86 | 3 | 0-30 |
| 110-86-1 | MSD | Pyridine | 1770 | 0.00 | U | 893 | 51 | 24-87 | 5 | 0-30 |
| 62-53-3 | MSD | Aniline | 1770 | 0.00 | U | 1160 | 66 | 28-91 | 5 | 0-30 |
| 108-95-2 | MSD | Phenol | 1770 | 0.00 | U | 1390 | 79 | 28-108 | 0 | 0-30 |
| 111-44-4 | MSD | bis(2-Chloroethyl) ether | 1770 | 0.00 | U | 1110 | 63 | 25-102 | 1 | 0-30 |
| 95-57-8 | MSD | 2-Chlorophenol | 1770 | 0.00 | U | 1370 | 77 | 28-108 | 0 | 0-30 |
| 541-73-1 | MSD | 1,3-Dichlorobenzene | 1770 | 0.00 | U | 1020 | 58 | 24-96 | 1 | 0-30 |
| 106-46-7 | MSD | 1,4-Dichlorobenzene | 1770 | 0.00 | U | 1060 | 60 | 24-97 | 3 | 0-30 |
| 95-50-1 | MSD | 1,2-Dichlorobenzene | 1770 | 0.00 | U | 1120 | 63 | 25-99 | 1 | 0-30 |
| 108-60-1 | MSD | bis(2-Chloro-1-methylethyl)et | 1770 | 0.00 | U | 895 | 51 | 25-105 | 6 | 0-30 |
| 100-51-6 | MSD | Benzyl alcohol | 1770 | 0.00 | U | 1360 | 77 | 21-109 | 1 | 0-30 |
| 95-48-7 | MSD | o-Cresol | 1770 | 0.00 | U | 1480 | 84 | 27-105 | 4 | 0-30 |
| 65794-96-9 | MSD | m,p-Cresols | 1770 | 0.00 | U | 1710 | 97 | 32-123 | 2 | 0-30 |
| 621-64-7 | MSD | N-Nitrosodipropylamine | 1770 | 0.00 | U | 1400 | 79 | 23-117 | 2 | 0-30 |
| 67-72-1 | MSD | Hexachloroethane | 1770 | 0.00 | U | 1160 | 66 | 24-102 | 3 | 0-30 |
| 98-95-3 | MSD | Nitrobenzene | 1770 | 0.00 | U | 1080 | 61 | 25-104 | 0 | 0-30 |
| 78-59-1 | MSD | Isophorone | 1770 | 0.00 | U | 1220 | 69 | 24-108 | 1 | 0-30 |
| 88-75-5 | MSD | 2-Nitrophenol | 1770 | 0.00 | U | 1150 | 65 | 24-106 | 3 | 0-30 |
| 105-67-9 | MSD | 2,4-Dimethylphenol | 1770 | 0.00 | U | 1190 | 67 | 30-109 | 1 | 0-30 |
| 111-91-1 | MSD | bis(2-Chloroethoxy)methane | 1770 | 0.00 | U | 1070 | 61 | 27-104 | 1 | 0-30 |
| 120-83-2 | MSD | 2,4-Dichlorophenol | 1770 | 0.00 | U | 1240 | 70 | 31-103 | 3 | 0-30 |
| 65-85-0 | MSD | Benzoic acid | 3540 | 0.00 | U | 2020 | 57 | 15-115 | 3 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157MSD**
**Lab Sample ID** **1203129290**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/18/2014 12:02**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MSD | 4-Chloroaniline | 1770 | 0.00 | U | 1040 | 59 | 27-100 | 6 | 0-30 |
| 87-68-3 | MSD | Hexachlorobutadiene | 1770 | 0.00 | U | 1040 | 59 | 24-105 | 3 | 0-30 |
| 59-50-7 | MSD | 4-Chloro-3-methylphenol | 1770 | 0.00 | U | 1390 | 79 | 32-112 | 7 | 0-30 |
| 91-57-6 | MSD | 2-Methylnaphthalene | 1770 | 0.00 | U | 1130 | 64 | 23-107 | 4 | 0-30 |
| 91-20-3 | MSD | Naphthalene | 1770 | 0.00 | U | 1130 | 64 | 21-107 | 3 | 0-30 |
| 77-47-4 | MSD | Hexachlorocyclopentadiene | 1770 | 0.00 | U | 719 | 41 | 12-106 | 26 | 0-30 |
| 88-06-2 | MSD | 2,4,6-Trichlorophenol | 1770 | 0.00 | U | 1250 | 71 | 32-103 | 1 | 0-30 |
| 95-95-4 | MSD | 2,4,5-Trichlorophenol | 1770 | 0.00 | U | 1220 | 69 | 38-109 | 1 | 0-30 |
| 91-58-7 | MSD | 2-Chloronaphthalene | 1770 | 0.00 | U | 1220 | 69 | 27-109 | 0 | 0-30 |
| 88-74-4 | MSD | 2-Nitroaniline<br>*o-Nitroaniline* | 1770 | 0.00 | U | 1130 | 64 | 37-114 | 5 | 0-30 |
| 99-09-2 | MSD | 3-Nitroaniline<br>*m-Nitroaniline* | 1770 | 0.00 | U | 859 | 49 | 31-110 | 10 | 0-30 |
| 131-11-3 | MSD | Dimethylphthalate | 1770 | 0.00 | U | 1300 | 74 | 38-110 | 3 | 0-30 |
| 606-20-2 | MSD | 2,6-Dinitrotoluene | 1770 | 0.00 | U | 1200 | 68 | 36-107 | 1 | 0-30 |
| 121-14-2 | MSD | 2,4-Dinitrotoluene | 1770 | 0.00 | U | 1160 | 65 | 36-115 | 4 | 0-30 |
| 208-96-8 | MSD | Acenaphthylene | 1770 | 0.00 | U | 1220 | 69 | 32-103 | 2 | 0-30 |
| 83-32-9 | MSD | Acenaphthene | 1770 | 0.00 | U | 1150 | 65 | 28-102 | 2 | 0-30 |
| 51-28-5 | MSD | 2,4-Dinitrophenol | 1770 | 0.00 | U | 763 | 43 | 19-101 | 1 | 0-30 |
| 132-64-9 | MSD | Dibenzofuran | 1770 | 0.00 | U | 1140 | 65 | 28-117 | 0 | 0-30 |
| 84-66-2 | MSD | Diethylphthalate | 1770 | 0.00 | U | 1280 | 72 | 40-113 | 4 | 0-30 |
| 100-02-7 | MSD | 4-Nitrophenol | 1770 | 0.00 | U | 910 | 52 | 12-128 | 1 | 0-30 |
| 86-73-7 | MSD | Fluorene | 1770 | 0.00 | U | 1130 | 64 | 30-115 | 3 | 0-30 |
| 7005-72-3 | MSD | 4-Chlorophenylphenylether | 1770 | 0.00 | U | 1210 | 68 | 37-110 | 3 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157MSD**
**Lab Sample ID** **1203129290**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/18/2014 12:02**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MSD | 4-Nitroaniline<br>*p-Nitroaniline* | 1770 | 0.00 | U | 973 | 55 | 36-141 | 6 | 0-30 |
| 534-52-1 | MSD | 2-Methyl-4,6-dinitrophenol | 1770 | 0.00 | U | 1150 | 65 | 14-116 | 3 | 0-30 |
| 122-39-4 | MSD | Diphenylamine | 1770 | 0.00 | U | 1290 | 73 | 34-111 | 2 | 0-30 |
| 122-66-7 | MSD | Azobenzene<br>*1,2-Diphenylhydrazine* | 1770 | 0.00 | U | 1440 | 82 | 35-105 | 2 | 0-30 |
| 101-55-3 | MSD | 4-Bromophenylphenylether | 1770 | 0.00 | U | 1250 | 71 | 37-112 | 1 | 0-30 |
| 118-74-1 | MSD | Hexachlorobenzene | 1770 | 0.00 | U | 1290 | 73 | 34-111 | 1 | 0-30 |
| 87-86-5 | MSD | Pentachlorophenol | 1770 | 0.00 | U | 1220 | 69 | 22-108 | 1 | 0-30 |
| 85-01-8 | MSD | Phenanthrene | 1770 | 0.00 | U | 1260 | 71 | 28-119 | 2 | 0-30 |
| 120-12-7 | MSD | Anthracene | 1770 | 0.00 | U | 1260 | 71 | 36-104 | 1 | 0-30 |
| 84-74-2 | MSD | Di-n-butylphthalate | 1770 | 0.00 | U | 1460 | 83 | 42-119 | 1 | 0-30 |
| 206-44-0 | MSD | Fluoranthene | 1770 | 0.00 | U | 1370 | 77 | 32-115 | 0 | 0-30 |
| 129-00-0 | MSD | Pyrene | 1770 | 0.00 | U | 1460 | 83 | 25-119 | 8 | 0-30 |
| 85-68-7 | MSD | Butylbenzylphthalate | 1770 | 0.00 | U | 1690 | 96 | 33-121 | 4 | 0-30 |
| 117-81-7 | MSD | bis(2-Ethylhexyl)phthalate | 1770 | 0.00 | U | 1660 | 94 | 33-124 | 4 | 0-30 |
| 56-55-3 | MSD | Benzo(a)anthracene | 1770 | 0.00 | U | 1410 | 80 | 27-120 | 2 | 0-30 |
| 218-01-9 | MSD | Chrysene | 1770 | 0.00 | U | 1400 | 79 | 33-114 | 0 | 0-30 |
| 117-84-0 | MSD | Di-n-octylphthalate | 1770 | 0.00 | U | 1360 | 77 | 36-115 | 5 | 0-30 |
| 205-99-2 | MSD | Benzo(b)fluoranthene | 1770 | 0.00 | U | 1610 | 91 | 30-119 | 5 | 0-30 |
| 207-08-9 | MSD | Benzo(k)fluoranthene | 1770 | 0.00 | U | 1570 | 89 | 31-125 | 4 | 0-30 |
| 50-32-8 | MSD | Benzo(a)pyrene | 1770 | 0.00 | U | 1360 | 77 | 31-116 | 1 | 0-30 |
| 193-39-5 | MSD | Indeno(1,2,3-cd)pyrene | 1770 | 0.00 | U | 1130 | 64 | 29-117 | 21 | 0-30 |
| 53-70-3 | MSD | Dibenzo(a,h)anthracene | 1770 | 0.00 | U | 1340 | 76 | 26-128 | 24 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3751**
**Client ID:** **RE57-14-84157MSD**
**Lab Sample ID** **1203129290**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **5.8**
**Analysis Date:** **07/18/2014 12:02**
**Prep Batch ID:** **1404169**
**Batch ID:** **1404170**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MSD | Benzo(ghi)perylene | 1770 | 0.00 | U | 1140 | 64 | 30-109 | 21 | 0-30 |
| 91-94-1 | MSD | 3,3'-Dichlorobenzidine | 1770 | 0.00 | U | 729 | 41 | 28-105 | 12 | 0-30 |
| 120-82-1 | MSD | 1,2,4-Trichlorobenzene | 1770 | 0.00 | U | 1120 | 63 | 25-102 | 0 | 0-30 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1404169** | **Instrument ID:** | **MSD5.I** | **Data File:** | **s071814.b\s5G1806.D** |
| **Lab Sample ID:** | **1203129287** | **Prep Date:** | **07/17/2014 17:40** | **Analyzed:** | **07/18/14 09:48** |
| **Column:** | **DB-5ms** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1404169 | 1203129288 | s071814.b\s5G1807.D | 07/18/14 | 1019 |
| 02 | RE57-14-84157 | 352522001 | s071814.b\s5G1808.D | 07/18/14 | 1059 |
| 03 | RE57-14-84157MS | 1203129289 | s071814.b\s5G1809.D | 07/18/14 | 1130 |
| 04 | RE57-14-84157MSD | 1203129290 | s071814.b\s5G1810.D | 07/18/14 | 1202 |
| 05 | RE57-14-84159 | 352522002 | s071814.b\s5G1811.D | 07/18/14 | 1233 |
| 06 | RE57-14-84138 | 352522003 | s071814.b\s5G1812.D | 07/18/14 | 1305 |
| 07 | RE57-14-84149 | 352522004 | s071814.b\s5G1813.D | 07/18/14 | 1336 |
| 08 | RE57-14-84160 | 352522005 | s072114.b\s5G2105.D | 07/21/14 | 1214 |
| 09 | RE57-14-84139 | 352522006 | s072114.b\s5G2106.D | 07/21/14 | 1245 |
| 10 | RE57-14-84150 | 352522007 | s072114.b\s5G2107.D | 07/21/14 | 1316 |
| 11 | RE57-14-84161 | 352522008 | s072114.b\s5G2108.D | 07/21/14 | 1347 |
| 12 | RE57-14-84141 | 352522009 | s072114.b\s5G2109.D | 07/21/14 | 1418 |
| 13 | RE57-14-84152 | 352522010 | s072114.b\s5G2110.D | 07/21/14 | 1450 |
| 14 | RE57-14-84120 | 352522011 | s072114.b\s5G2111.D | 07/21/14 | 1521 |

# Quality Control Data

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203129287** | | | | |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1404169** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:48** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1806.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 122-66-7 | Azobenzene | U | 333 | ug/kg | 99.9 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | U | 333 | ug/kg | 99.9 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | U | 666 | ug/kg | 99.9 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 333 | ug/kg | 99.9 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 333 | ug/kg | 99.9 | 333 |
| 91-58-7 | 2-Chloronaphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 95-57-8 | 2-Chlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 91-57-6 | 2-Methylnaphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 88-75-5 | 2-Nitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 333 | ug/kg | 99.9 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | U | 333 | ug/kg | 99.9 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 333 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | U | 333 | ug/kg | 99.9 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 333 | ug/kg | 99.9 | 333 |
| 100-02-7 | 4-Nitrophenol | U | 333 | ug/kg | 99.9 | 333 |
| 83-32-9 | Acenaphthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 208-96-8 | Acenaphthylene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 62-53-3 | Aniline | U | 333 | ug/kg | 99.9 | 333 |
| 120-12-7 | Anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 65-85-0 | Benzoic acid | U | 666 | ug/kg | 167 | 666 |
| 100-51-6 | Benzyl alcohol | U | 333 | ug/kg | 99.9 | 333 |
| 85-68-7 | Butylbenzylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 218-01-9 | Chrysene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 117-84-0 | Di-n-octylphthalate | U | 333 | ug/kg | 99.9 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203129287** | | | | |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1404169** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:48** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1806.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 132-64-9 | Dibenzofuran | U | 333 | ug/kg | 99.9 | 333 |
| 84-66-2 | Diethylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 131-11-3 | Dimethylphthalate | U | 333 | ug/kg | 99.9 | 333 |
| 122-39-4 | Diphenylamine | U | 333 | ug/kg | 99.9 | 333 |
| 206-44-0 | Fluoranthene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 86-73-7 | Fluorene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 118-74-1 | Hexachlorobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 87-68-3 | Hexachlorobutadiene | U | 333 | ug/kg | 99.9 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 333 | ug/kg | 99.9 | 333 |
| 67-72-1 | Hexachloroethane | U | 333 | ug/kg | 99.9 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 78-59-1 | Isophorone | U | 333 | ug/kg | 99.9 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 333 | ug/kg | 99.9 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | U | 333 | ug/kg | 99.9 | 333 |
| 91-20-3 | Naphthalene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 98-95-3 | Nitrobenzene | U | 333 | ug/kg | 99.9 | 333 |
| 87-86-5 | Pentachlorophenol | U | 333 | ug/kg | 99.9 | 333 |
| 85-01-8 | Phenanthrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 108-95-2 | Phenol | U | 333 | ug/kg | 99.9 | 333 |
| 129-00-0 | Pyrene | U | 33.3 | ug/kg | 9.99 | 33.3 |
| 110-86-1 | Pyridine | U | 333 | ug/kg | 99.9 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 333 | ug/kg | 99.9 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 333 | ug/kg | 99.9 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 333 | ug/kg | 99.9 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 333 | ug/kg | 99.9 | 333 |
| 65794-96-9 | m,p-Cresols | U | 333 | ug/kg | 99.9 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 333 | ug/kg | 99.9 | 333 |
| 95-48-7 | o-Cresol | U | 333 | ug/kg | 99.9 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 333 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 333 | ug/kg | 99.9 | 333 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.644 | 4400 | ug/kg | | AJ |
| 074685-33-9 | 3-Eicosene, (E)- | 14.954 | 296 | ug/kg | 86 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203129287** | | | | |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1404169** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:48** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1806.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 17.044 | 150 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203129288** | | | | |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1404169** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 10:19** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1807.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1060 | ug/kg | 100 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1140 | ug/kg | 100 | 333 |
| 122-66-7 | Azobenzene | | 1250 | ug/kg | 100 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 1050 | ug/kg | 100 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1100 | ug/kg | 100 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1130 | ug/kg | 100 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1120 | ug/kg | 100 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | | 1030 | ug/kg | 100 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | | 1030 | ug/kg | 100 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | J | 505 | ug/kg | 100 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1120 | ug/kg | 100 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1150 | ug/kg | 100 | 333 |
| 91-58-7 | 2-Chloronaphthalene | | 1130 | ug/kg | 10.0 | 33.3 |
| 95-57-8 | 2-Chlorophenol | | 1170 | ug/kg | 100 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 861 | ug/kg | 100 | 333 |
| 91-57-6 | 2-Methylnaphthalene | | 1000 | ug/kg | 10.0 | 33.3 |
| 88-75-5 | 2-Nitrophenol | | 1020 | ug/kg | 100 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1280 | ug/kg | 100 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | | 1080 | ug/kg | 100 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1210 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | | 889 | ug/kg | 100 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1160 | ug/kg | 100 | 333 |
| 100-02-7 | 4-Nitrophenol | | 917 | ug/kg | 100 | 333 |
| 83-32-9 | Acenaphthene | | 1090 | ug/kg | 10.0 | 33.3 |
| 208-96-8 | Acenaphthylene | | 1160 | ug/kg | 10.0 | 33.3 |
| 62-53-3 | Aniline | | 1060 | ug/kg | 100 | 333 |
| 120-12-7 | Anthracene | | 1150 | ug/kg | 10.0 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | | 1230 | ug/kg | 10.0 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | | 1200 | ug/kg | 10.0 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | | 1170 | ug/kg | 10.0 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | | 1030 | ug/kg | 10.0 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | | 1150 | ug/kg | 10.0 | 33.3 |
| 65-85-0 | Benzoic acid | | 1430 | ug/kg | 167 | 666 |
| 100-51-6 | Benzyl alcohol | | 1180 | ug/kg | 100 | 333 |
| 85-68-7 | Butylbenzylphthalate | | 1260 | ug/kg | 100 | 333 |
| 218-01-9 | Chrysene | | 1250 | ug/kg | 10.0 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | | 1340 | ug/kg | 100 | 333 |
| 117-84-0 | Di-n-octylphthalate | | 1570 | ug/kg | 100 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203129288** | | | | |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1404169** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 10:19** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1807.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1250 | ug/kg | 10.0 | 33.3 |
| 132-64-9 | Dibenzofuran | | 1090 | ug/kg | 100 | 333 |
| 84-66-2 | Diethylphthalate | | 1220 | ug/kg | 100 | 333 |
| 131-11-3 | Dimethylphthalate | | 1190 | ug/kg | 100 | 333 |
| 122-39-4 | Diphenylamine | | 1100 | ug/kg | 100 | 333 |
| 206-44-0 | Fluoranthene | | 1310 | ug/kg | 10.0 | 33.3 |
| 86-73-7 | Fluorene | | 1110 | ug/kg | 10.0 | 33.3 |
| 118-74-1 | Hexachlorobenzene | | 1150 | ug/kg | 100 | 333 |
| 87-68-3 | Hexachlorobutadiene | | 1000 | ug/kg | 100 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | | 781 | ug/kg | 100 | 333 |
| 67-72-1 | Hexachloroethane | | 1150 | ug/kg | 100 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1090 | ug/kg | 10.0 | 33.3 |
| 78-59-1 | Isophorone | | 1120 | ug/kg | 100 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 994 | ug/kg | 100 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | | 1280 | ug/kg | 100 | 333 |
| 91-20-3 | Naphthalene | | 1050 | ug/kg | 10.0 | 33.3 |
| 98-95-3 | Nitrobenzene | | 1010 | ug/kg | 100 | 333 |
| 87-86-5 | Pentachlorophenol | | 973 | ug/kg | 100 | 333 |
| 85-01-8 | Phenanthrene | | 1130 | ug/kg | 10.0 | 33.3 |
| 108-95-2 | Phenol | | 1100 | ug/kg | 100 | 333 |
| 129-00-0 | Pyrene | | 969 | ug/kg | 10.0 | 33.3 |
| 110-86-1 | Pyridine | | 837 | ug/kg | 100 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 862 | ug/kg | 100 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 974 | ug/kg | 100 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1020 | ug/kg | 100 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1310 | ug/kg | 100 | 333 |
| 65794-96-9 | m,p-Cresols | | 1410 | ug/kg | 100 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 894 | ug/kg | 100 | 333 |
| 95-48-7 | o-Cresol | | 1250 | ug/kg | 100 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1080 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1090 | ug/kg | 100 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203129289** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 11:30** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1809.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1110 | ug/kg | 106 | 354 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1130 | ug/kg | 106 | 354 |
| 122-66-7 | Azobenzene | | 1480 | ug/kg | 106 | 354 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 1040 | ug/kg | 106 | 354 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1090 | ug/kg | 106 | 354 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1210 | ug/kg | 106 | 354 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1250 | ug/kg | 106 | 354 |
| 120-83-2 | 2,4-Dichlorophenol | | 1210 | ug/kg | 106 | 354 |
| 105-67-9 | 2,4-Dimethylphenol | | 1190 | ug/kg | 106 | 354 |
| 51-28-5 | 2,4-Dinitrophenol | | 759 | ug/kg | 106 | 707 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1110 | ug/kg | 106 | 354 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1180 | ug/kg | 106 | 354 |
| 91-58-7 | 2-Chloronaphthalene | | 1220 | ug/kg | 10.6 | 35.4 |
| 95-57-8 | 2-Chlorophenol | | 1360 | ug/kg | 106 | 354 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 1190 | ug/kg | 106 | 354 |
| 91-57-6 | 2-Methylnaphthalene | | 1080 | ug/kg | 10.6 | 35.4 |
| 88-75-5 | 2-Nitrophenol | | 1120 | ug/kg | 106 | 354 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 818 | ug/kg | 106 | 354 |
| 101-55-3 | 4-Bromophenylphenylether | | 1260 | ug/kg | 106 | 354 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1300 | ug/kg | 141 | 354 |
| 106-47-8 | 4-Chloroaniline | | 981 | ug/kg | 106 | 354 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1180 | ug/kg | 106 | 354 |
| 100-02-7 | 4-Nitrophenol | | 923 | ug/kg | 106 | 354 |
| 83-32-9 | Acenaphthene | | 1120 | ug/kg | 10.6 | 35.4 |
| 208-96-8 | Acenaphthylene | | 1240 | ug/kg | 10.6 | 35.4 |
| 62-53-3 | Aniline | | 1230 | ug/kg | 106 | 354 |
| 120-12-7 | Anthracene | | 1250 | ug/kg | 10.6 | 35.4 |
| 56-55-3 | Benzo(a)anthracene | | 1390 | ug/kg | 10.6 | 35.4 |
| 50-32-8 | Benzo(a)pyrene | | 1350 | ug/kg | 10.6 | 35.4 |
| 205-99-2 | Benzo(b)fluoranthene | | 1540 | ug/kg | 10.6 | 35.4 |
| 191-24-2 | Benzo(ghi)perylene | | 919 | ug/kg | 10.6 | 35.4 |
| 207-08-9 | Benzo(k)fluoranthene | | 1500 | ug/kg | 10.6 | 35.4 |
| 65-85-0 | Benzoic acid | | 2080 | ug/kg | 177 | 707 |
| 100-51-6 | Benzyl alcohol | | 1350 | ug/kg | 106 | 354 |
| 85-68-7 | Butylbenzylphthalate | | 1630 | ug/kg | 106 | 354 |
| 218-01-9 | Chrysene | | 1400 | ug/kg | 10.6 | 35.4 |
| 84-74-2 | Di-n-butylphthalate | | 1440 | ug/kg | 106 | 354 |
| 117-84-0 | Di-n-octylphthalate | | 1430 | ug/kg | 106 | 354 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203129289** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 11:30** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1809.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1050 | ug/kg | 10.6 | 35.4 |
| 132-64-9 | Dibenzofuran | | 1140 | ug/kg | 106 | 354 |
| 84-66-2 | Diethylphthalate | | 1230 | ug/kg | 106 | 354 |
| 131-11-3 | Dimethylphthalate | | 1270 | ug/kg | 106 | 354 |
| 122-39-4 | Diphenylamine | | 1270 | ug/kg | 106 | 354 |
| 206-44-0 | Fluoranthene | | 1360 | ug/kg | 10.6 | 35.4 |
| 86-73-7 | Fluorene | | 1100 | ug/kg | 10.6 | 35.4 |
| 118-74-1 | Hexachlorobenzene | | 1300 | ug/kg | 106 | 354 |
| 87-68-3 | Hexachlorobutadiene | | 1010 | ug/kg | 106 | 354 |
| 77-47-4 | Hexachlorocyclopentadiene | | 938 | ug/kg | 106 | 354 |
| 67-72-1 | Hexachloroethane | | 1120 | ug/kg | 106 | 354 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 915 | ug/kg | 10.6 | 35.4 |
| 78-59-1 | Isophorone | | 1210 | ug/kg | 106 | 354 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1110 | ug/kg | 106 | 354 |
| 621-64-7 | N-Nitrosodipropylamine | | 1430 | ug/kg | 106 | 354 |
| 91-20-3 | Naphthalene | | 1100 | ug/kg | 10.6 | 35.4 |
| 98-95-3 | Nitrobenzene | | 1070 | ug/kg | 106 | 354 |
| 87-86-5 | Pentachlorophenol | | 1210 | ug/kg | 106 | 354 |
| 85-01-8 | Phenanthrene | | 1230 | ug/kg | 10.6 | 35.4 |
| 108-95-2 | Phenol | | 1390 | ug/kg | 106 | 354 |
| 129-00-0 | Pyrene | | 1350 | ug/kg | 10.6 | 35.4 |
| 110-86-1 | Pyridine | | 846 | ug/kg | 106 | 354 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 947 | ug/kg | 106 | 354 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1080 | ug/kg | 106 | 354 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1130 | ug/kg | 106 | 354 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1590 | ug/kg | 106 | 354 |
| 65794-96-9 | m,p-Cresols | | 1680 | ug/kg | 106 | 354 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 777 | ug/kg | 106 | 354 |
| 95-48-7 | o-Cresol | | 1550 | ug/kg | 106 | 354 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1080 | ug/kg | 117 | 354 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 919 | ug/kg | 106 | 354 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203129290** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:02** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1810.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1120 | ug/kg | 106 | 354 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1120 | ug/kg | 106 | 354 |
| 122-66-7 | Azobenzene | | 1440 | ug/kg | 106 | 354 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 1020 | ug/kg | 106 | 354 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1060 | ug/kg | 106 | 354 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1220 | ug/kg | 106 | 354 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1250 | ug/kg | 106 | 354 |
| 120-83-2 | 2,4-Dichlorophenol | | 1240 | ug/kg | 106 | 354 |
| 105-67-9 | 2,4-Dimethylphenol | | 1190 | ug/kg | 106 | 354 |
| 51-28-5 | 2,4-Dinitrophenol | | 763 | ug/kg | 106 | 707 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1160 | ug/kg | 106 | 354 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1200 | ug/kg | 106 | 354 |
| 91-58-7 | 2-Chloronaphthalene | | 1220 | ug/kg | 10.6 | 35.4 |
| 95-57-8 | 2-Chlorophenol | | 1370 | ug/kg | 106 | 354 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 1150 | ug/kg | 106 | 354 |
| 91-57-6 | 2-Methylnaphthalene | | 1130 | ug/kg | 10.6 | 35.4 |
| 88-75-5 | 2-Nitrophenol | | 1150 | ug/kg | 106 | 354 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 729 | ug/kg | 106 | 354 |
| 101-55-3 | 4-Bromophenylphenylether | | 1250 | ug/kg | 106 | 354 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1390 | ug/kg | 141 | 354 |
| 106-47-8 | 4-Chloroaniline | | 1040 | ug/kg | 106 | 354 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1210 | ug/kg | 106 | 354 |
| 100-02-7 | 4-Nitrophenol | | 910 | ug/kg | 106 | 354 |
| 83-32-9 | Acenaphthene | | 1150 | ug/kg | 10.6 | 35.4 |
| 208-96-8 | Acenaphthylene | | 1220 | ug/kg | 10.6 | 35.4 |
| 62-53-3 | Aniline | | 1160 | ug/kg | 106 | 354 |
| 120-12-7 | Anthracene | | 1260 | ug/kg | 10.6 | 35.4 |
| 56-55-3 | Benzo(a)anthracene | | 1410 | ug/kg | 10.6 | 35.4 |
| 50-32-8 | Benzo(a)pyrene | | 1360 | ug/kg | 10.6 | 35.4 |
| 205-99-2 | Benzo(b)fluoranthene | | 1610 | ug/kg | 10.6 | 35.4 |
| 191-24-2 | Benzo(ghi)perylene | | 1140 | ug/kg | 10.6 | 35.4 |
| 207-08-9 | Benzo(k)fluoranthene | | 1570 | ug/kg | 10.6 | 35.4 |
| 65-85-0 | Benzoic acid | | 2020 | ug/kg | 177 | 707 |
| 100-51-6 | Benzyl alcohol | | 1360 | ug/kg | 106 | 354 |
| 85-68-7 | Butylbenzylphthalate | | 1690 | ug/kg | 106 | 354 |
| 218-01-9 | Chrysene | | 1400 | ug/kg | 10.6 | 35.4 |
| 84-74-2 | Di-n-butylphthalate | | 1460 | ug/kg | 106 | 354 |
| 117-84-0 | Di-n-octylphthalate | | 1360 | ug/kg | 106 | 354 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3751** | **Date Collected:** | **07/10/2014 07:40** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203129290** | **Date Received:** | **07/12/2014 09:00** | **%Moisture:** | **5.8** |
| **Client Sample:** | **QC for batch 1404169** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84157MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1404170** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:02** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 17:40** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.b\s5G1810.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1340 | ug/kg | 10.6 | 35.4 |
| 132-64-9 | Dibenzofuran | | 1140 | ug/kg | 106 | 354 |
| 84-66-2 | Diethylphthalate | | 1280 | ug/kg | 106 | 354 |
| 131-11-3 | Dimethylphthalate | | 1300 | ug/kg | 106 | 354 |
| 122-39-4 | Diphenylamine | | 1290 | ug/kg | 106 | 354 |
| 206-44-0 | Fluoranthene | | 1370 | ug/kg | 10.6 | 35.4 |
| 86-73-7 | Fluorene | | 1130 | ug/kg | 10.6 | 35.4 |
| 118-74-1 | Hexachlorobenzene | | 1290 | ug/kg | 106 | 354 |
| 87-68-3 | Hexachlorobutadiene | | 1040 | ug/kg | 106 | 354 |
| 77-47-4 | Hexachlorocyclopentadiene | | 719 | ug/kg | 106 | 354 |
| 67-72-1 | Hexachloroethane | | 1160 | ug/kg | 106 | 354 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1130 | ug/kg | 10.6 | 35.4 |
| 78-59-1 | Isophorone | | 1220 | ug/kg | 106 | 354 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1080 | ug/kg | 106 | 354 |
| 621-64-7 | N-Nitrosodipropylamine | | 1400 | ug/kg | 106 | 354 |
| 91-20-3 | Naphthalene | | 1130 | ug/kg | 10.6 | 35.4 |
| 98-95-3 | Nitrobenzene | | 1080 | ug/kg | 106 | 354 |
| 87-86-5 | Pentachlorophenol | | 1220 | ug/kg | 106 | 354 |
| 85-01-8 | Phenanthrene | | 1260 | ug/kg | 10.6 | 35.4 |
| 108-95-2 | Phenol | | 1390 | ug/kg | 106 | 354 |
| 129-00-0 | Pyrene | | 1460 | ug/kg | 10.6 | 35.4 |
| 110-86-1 | Pyridine | | 893 | ug/kg | 106 | 354 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 895 | ug/kg | 106 | 354 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1070 | ug/kg | 106 | 354 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1110 | ug/kg | 106 | 354 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1660 | ug/kg | 106 | 354 |
| 65794-96-9 | m,p-Cresols | | 1710 | ug/kg | 106 | 354 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 859 | ug/kg | 106 | 354 |
| 95-48-7 | o-Cresol | | 1480 | ug/kg | 106 | 354 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1130 | ug/kg | 117 | 354 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 973 | ug/kg | 106 | 354 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 23-JUL-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| SEMIVOA GC/MS | SW846 3541/8270D | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1404170 | See Below | | |

**Potentially affected work order(s)(SDG): 352522(2014-3751)**

**Application Issues:**

Failed Yield for Surrogates

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Sample 352522011 did not meet surrogate (p-Terphenyl-d14) recovery acceptance limits with a positive bias. | 1. This failure is due to the associated internal standard failing low and was confirmed by additional analysis. |

**Originator's Name:**

Richard Bomar 23-JUL-14

**Data Validator/Group Leader:**

Cameron Bearden 23-JUL-14

# Perchlorates by LCMSMS Analysis

# Case Narrative

**Perchlorate by LC-MS/MS**
**ARS International, LLC (ARSL)**
**SDG 2014-3751**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography-Mass Spectrometry/Mass Spectrometry (LC-MS/MS) by EPA Method 6850 Modified (6850M)** |
| Analytical Method: | SW846 6850 Modified |
| Prep Method: | SW846 6850 Modified |
| Analytical Batch Number: | 1402813 |
| Prep Batch Number: | 1402812 |

## Sample Analysis

| Sample ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 1203126000 | Interference Check Sample (ICS) |
| 1203125996 | Method Blank (MB) |
| 1203125997 | Laboratory Control Sample (LCS) |
| 1203125998 | 352522003(RE57-14-84138) Matrix Spike (MS) |
| 1203125999 | 352522003(RE57-14-84138) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP).

The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 11.

## Calibration Information

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

**ICV Requirements**
The initial calibration verification standard (ICV) met the acceptance criteria.

**CCB Requirements**
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

**CCV Requirements**
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

**Low Level Standard (CRI) Requirements**
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

## Quality Control (QC) Information

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Interference Check Sample (ICS)**
The ICS spike recoveries met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Client sample 352522003 (RE57-14-84138) was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
The RPDs between the MS and MSD met the acceptance limits.

**Retention Time Standard Area Acceptance**
The retention time standard areas were within the required acceptance criteria for all samples and QC.

**Retention Time**
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard.

The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used.

In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

## Technical Information

**Holding Time Specifications**
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-extractions or re-analyses were not required in this SDG.

## Miscellaneous Information

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents.

A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

**Method Comments**
The samples in this SDG were not originally analyzed using EPA Method 314.0.

**Additional Comments**
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred.

Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

**Perchlorate Isotope Ratio**
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples.

Please see the isotope ratio criteria in the Miscellaneous Section.

## System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for Perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1 and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for Perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package.

Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

## Chromatographic Columns

Chromatographic separation of Perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

## Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 − (843) 556−8171 − www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS−LANS−MTOA6−25093−GEL)

Client SDG: 2014−3751 GEL Work Order: 352522

**The Qualifiers in this report are defined as follows:**

* A quality control analyte recovery is outside of specified acceptance criteria

** Analyte is a surrogate compound

J Value is estimated

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL Indicates that sample is diluted.
RA Indicates that sample is re−analyzed without re−extraction.
RE Indicates that sample is re−extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP−like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Michael A. Penny Jr. **Name: Michael Penny**

**Date: 18 JUL 2014** **Title: Group Leader**

# Sample Data Summary

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84157

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522001

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 94.2

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .528 | 2.11 | 2.11 | ug/kg | U | 1 | 16-JUL-14 21:44 | per0716041a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-JUL-14 21:44 | per0716041a |
| 14797-73-0 | Perchlorate-101 | .528 | 2.11 | 2.11 | ug/kg | U | 1 | 16-JUL-14 21:44 | per0716041a |
| | Perchlorate-O(18) | | | 5.12 | ug/kg | | 1 | 16-JUL-14 21:44 | per0716041a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84159

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522002

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.7

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .534 | 2.14 | 2.14 | ug/kg | U | 1 | 16-JUL-14 21:52 | per0716042a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-JUL-14 21:52 | per0716042a |
| 14797-73-0 | Perchlorate-101 | .534 | 2.14 | 2.14 | ug/kg | U | 1 | 16-JUL-14 21:52 | per0716042a |
| | Perchlorate-O(18) | | | 5.20 | ug/kg | | 1 | 16-JUL-14 21:52 | per0716042a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84138

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522003

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 97.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .515 | 2.06 | 2.06 | ug/kg | U | 1 | 16-JUL-14 22:01 | per0716043a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-JUL-14 22:01 | per0716043a |
| 14797-73-0 | Perchlorate-101 | .515 | 2.06 | 2.06 | ug/kg | U | 1 | 16-JUL-14 22:01 | per0716043a |
| | Perchlorate-O(18) | | | 5.04 | ug/kg | | 1 | 16-JUL-14 22:01 | per0716043a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84149

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522004

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.2

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .534 | 2.13 | 1.10 | ug/kg | J | 1 | 16-JUL-14 22:28 | per0716046a |
| | Perchlorate Isotope Ratio | | | 3.02 | | | 1 | 16-JUL-14 22:28 | per0716046a |
| 14797-73-0 | Perchlorate-101 | .534 | 2.13 | 1.14 | ug/kg | J | 1 | 16-JUL-14 22:28 | per0716046a |
| | Perchlorate-O(18) | | | 5.19 | ug/kg | | 1 | 16-JUL-14 22:28 | per0716046a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84160

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522005

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 96.3

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .519 | 2.08 | 2.08 | ug/kg | U | 1 | 16-JUL-14 22:37 | per0716047a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-JUL-14 22:37 | per0716047a |
| 14797-73-0 | Perchlorate-101 | .519 | 2.08 | 2.08 | ug/kg | U | 1 | 16-JUL-14 22:37 | per0716047a |
| | Perchlorate-O(18) | | | 5.07 | ug/kg | | 1 | 16-JUL-14 22:37 | per0716047a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84139

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522006

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 95.5

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .524 | 2.1 | 2.10 | ug/kg | U | 1 | 16-JUL-14 23:13 | per0716051a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-JUL-14 23:13 | per0716051a |
| 14797-73-0 | Perchlorate-101 | .524 | 2.1 | 2.10 | ug/kg | U | 1 | 16-JUL-14 23:13 | per0716051a |
| | Perchlorate-O(18) | | | 4.96 | ug/kg | | 1 | 16-JUL-14 23:13 | per0716051a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84150

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522007

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 86

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .57 | 2.28 | 1.59 | ug/kg | J | 1 | 16-JUL-14 23:22 | per0716052a |
| | Perchlorate Isotope Ratio | | | 3.09 | | | 1 | 16-JUL-14 23:22 | per0716052a |
| 14797-73-0 | Perchlorate-101 | .57 | 2.28 | 1.62 | ug/kg | J | 1 | 16-JUL-14 23:22 | per0716052a |
| | Perchlorate-O(18) | | | 5.51 | ug/kg | | 1 | 16-JUL-14 23:22 | per0716052a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84161

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522008

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 96.4

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .519 | 2.08 | 0.636 | ug/kg | J | 1 | 16-JUL-14 23:31 | per0716053a |
| | Perchlorate Isotope Ratio | | | 3.13 | | | 1 | 16-JUL-14 23:31 | per0716053a |
| 14797-73-0 | Perchlorate-101 | .519 | 2.08 | 0.637 | ug/kg | J | 1 | 16-JUL-14 23:31 | per0716053a |
| | Perchlorate-O(18) | | | 4.86 | ug/kg | | 1 | 16-JUL-14 23:31 | per0716053a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84141

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522009

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 90

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .557 | 2.23 | 2.23 | ug/kg | U | 1 | 16-JUL-14 23:40 | per0716054a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-JUL-14 23:40 | per0716054a |
| 14797-73-0 | Perchlorate-101 | .557 | 2.23 | 2.23 | ug/kg | U | 1 | 16-JUL-14 23:40 | per0716054a |
| | Perchlorate-O(18) | | | 5.29 | ug/kg | | 1 | 16-JUL-14 23:40 | per0716054a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84152

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522010

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 95

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .526 | 2.11 | 0.582 | ug/kg | J | 1 | 16-JUL-14 23:49 | per0716055a |
| | Perchlorate Isotope Ratio | | | 3 | | | 1 | 16-JUL-14 23:49 | per0716055a |
| 14797-73-0 | Perchlorate-101 | .526 | 2.11 | 0.609 | ug/kg | J | 1 | 16-JUL-14 23:49 | per0716055a |
| | Perchlorate-O(18) | | | 4.90 | ug/kg | | 1 | 16-JUL-14 23:49 | per0716055a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84120

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 352522011

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92.8

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .534 | 2.13 | 0.957 | ug/kg | J | 1 | 16-JUL-14 23:58 | per0716056a |
| | Perchlorate Isotope Ratio | | | 3.27 | | | 1 | 16-JUL-14 23:58 | per0716056a |
| 14797-73-0 | Perchlorate-101 | .534 | 2.13 | 0.918 | ug/kg | J | 1 | 16-JUL-14 23:58 | per0716056a |
| | Perchlorate-O(18) | | | 5.12 | ug/kg | | 1 | 16-JUL-14 23:58 | per0716056a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Quality Control Summary

## Perchlorate Laboratory Control Sample

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No. (SDG):** 2014-3751

**Extract Batch Code:** 1402812

**Date Filtered:** 15-JUL-14

**Matrix:** SOIL

**Sample ID:** 1203125997

| Analyte^ | True | Found | Units | %Rec | Q | Control Limits |
|---|---|---|---|---|---|---|
| Perchlorate | 1.97 | 1.78 | ug/kg | 90.2 | | 70 - 130 |
| Perchlorate Isotope Ratio | | 3.04 | | | | - |
| Perchlorate-101 | 1.97 | 1.84 | ug/kg | 93.1 | | 70 - 130 |
| Perchlorate-O(18) | | 4.82 | ug/kg | | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

## Perchlorate Spike/Spike Duplicate Summary

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No (SDG):** 2014-3751

**Extract Batch Code:** 1402812

**Date Extracted:** 15-JUL-14

**GEL MS/PS ID:** 1203125998

**Client ID:** RE57-14-84138

**GEL MSD/PSD ID:** 1203125999

**QC Type:** MS

| Compound^ | Spike Added | Sample Conc | Units | MS Conc | MS Rec # | MSD Conc | MSD Rec # | RPD # | RPD Limit | Recovery Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 2.06 | 0.148 | ug/kg | 2.12 | 95.7 | 1.98 | 89.3 | 6.88 | 30 | 75 - 125 |
| Perchlorate Isotope Ratio | 0 | 2.95 | | 3.17 | | 3.13 | | 1.35 | | - |
| Perchlorate-101 | 2.06 | 0.158 | ug/kg | 2.10 | 94.3 | 1.99 | 89.3 | 5.53 | 30 | 75 - 125 |
| Perchlorate-O(18) | 0 | 5.04 | ug/kg | 5.00 | | 5.01 | | .225 | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

# Quality Control Data

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
MB

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 1203125996

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .495 | 1.98 | 1.98 | ug/kg | U | 1 | 16-JUL-14 21:17 | per0716038a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 16-JUL-14 21:17 | per0716038a |
| 14797-73-0 | Perchlorate-101 | .495 | 1.98 | 1.98 | ug/kg | U | 1 | 16-JUL-14 21:17 | per0716038a |
| | Perchlorate-O(18) | | | 4.85 | ug/kg | | 1 | 16-JUL-14 21:17 | per0716038a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
LCS

**Date Received:** 15-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 1203125997

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .493 | 1.97 | 1.78 | ug/kg | J | 1 | 16-JUL-14 21:26 | per0716039a |
| | Perchlorate Isotope Ratio | | | 3.04 | | | 1 | 16-JUL-14 21:26 | per0716039a |
| 14797-73-0 | Perchlorate-101 | .493 | 1.97 | 1.84 | ug/kg | J | 1 | 16-JUL-14 21:26 | per0716039a |
| | Perchlorate-O(18) | | | 4.82 | ug/kg | | 1 | 16-JUL-14 21:26 | per0716039a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.04 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
ICS

**Date Received:**

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 1203126000

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .49 | 1.96 | 1.83 | ug/kg | J | 1 | 16-JUL-14 21:35 | per0716040a |
| | Perchlorate Isotope Ratio | | | 2.99 | | | 1 | 16-JUL-14 21:35 | per0716040a |
| 14797-73-0 | Perchlorate-101 | .49 | 1.96 | 1.92 | ug/kg | J | 1 | 16-JUL-14 21:35 | per0716040a |
| | Perchlorate-O(18) | | | 4.77 | ug/kg | | 1 | 16-JUL-14 21:35 | per0716040a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84138MS

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 1203125998

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 97.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .515 | 2.06 | 2.12 | ug/kg | | 1 | 16-JUL-14 22:10 | per0716044a |
| | Perchlorate Isotope Ratio | | | 3.17 | | | 1 | 16-JUL-14 22:10 | per0716044a |
| 14797-73-0 | Perchlorate-101 | .515 | 2.06 | 2.10 | ug/kg | | 1 | 16-JUL-14 22:10 | per0716044a |
| | Perchlorate-O(18) | | | 5.00 | ug/kg | | 1 | 16-JUL-14 22:10 | per0716044a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402812

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84138MSD

**Date Received:** 12-JUL-14

**GEL Job No (SDG):** 2014-3751

**GEL Sample ID:** 1203125999

**Date Filtered:** 15-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 97.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .512 | 2.05 | 1.98 | ug/kg | J | 1 | 16-JUL-14 22:19 | per0716045a |
| | Perchlorate Isotope Ratio | | | 3.13 | | | 1 | 16-JUL-14 22:19 | per0716045a |
| 14797-73-0 | Perchlorate-101 | .512 | 2.05 | 1.99 | ug/kg | J | 1 | 16-JUL-14 22:19 | per0716045a |
| | Perchlorate-O(18) | | | 5.01 | ug/kg | | 1 | 16-JUL-14 22:19 | per0716045a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Metals Analysis

# Case Narrative

**Metals Fractional Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3751**

**Sample Analysis**

| Sample ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 1203127181 | Method Blank (MB) **ICP** |
| 1203127182 | Laboratory Control Sample (LCS) |
| 1203127185 | 352522001(RE57-14-84157L) Serial Dilution (SD) |
| 1203127183 | 352522001(RE57-14-84157D) Sample Duplicate (DUP) |
| 1203127184 | 352522001(RE57-14-84157S) Matrix Spike (MS) |
| 1203127196 | Method Blank (MB) **ICP-MS** |
| 1203127197 | Laboratory Control Sample (LCS) |
| 1203127200 | 352522001(RE57-14-84157L) Serial Dilution (SD) |
| 1203127198 | 352522001(RE57-14-84157D) Sample Duplicate (DUP) |
| 1203127199 | 352522001(RE57-14-84157S) Matrix Spike (MS) |
| 1203133202 | Method Blank (MB) **CVAA** |
| 1203133203 | Laboratory Control Sample (LCS) |
| 1203133206 | 352522001(RE57-14-84157L) Serial Dilution (SD) |
| 1203133204 | 352522001(RE57-14-84157D) Sample Duplicate (DUP) |
| 1203133205 | 352522001(RE57-14-84157S) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**Method/Analysis Information**

| | |
|---|---|
| **Analytical Batch:** | 1403267, 1403273 and 1405674 |
| **Prep Batch :** | 1403266, 1403272 and 1405670 |
| **Standard Operating Procedures:** | GL-MA-E-013 REV# 22, GL-MA-E-009 REV# 24, GL-MA-E-014 REV# 25 and GL-MA-E-010 REV# 28 |
| **Analytical Method:** | SW846 3050B/6010C, SW846 3050B/6020A and SW846 7471A |
| **Prep Method :** | SW846 3050B and SW846 7471A Prep |

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**System Configuration**

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with an ESI SC-FAST introduction, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 0.4L/min, argon gas flows of 13 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

**Calibration Information**

**Instrument Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**CRDL/PQL Requirements**
All PQL standards for 6010C met the control limits with the exception of lead listed below. The sample concentrations were less than the MDL or greater than 2x the PQL, so the data is not adversely affected. 352522001 (RE57-14-84157), 352522002 (RE57-14-84159), 352522003 (RE57-14-84138), 352522004 (RE57-14-84149), 352522005 (RE57-14-84160), 352522006 (RE57-14-84139), 352522007 (RE57-14-84150), 352522008 (RE57-14-84161), 352522009 (RE57-14-84141), 352522010 (RE57-14-84152) and 352522011 (RE57-14-84120)-ICP.

**ICSA/ICSAB Statement**
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blanks (CCB) Requirements**
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**

The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**
The following samples were selected as the quality control (QC) samples for this SDG: 352522001 (RE57-14-84157)-ICP, ICP-MS and CVAA.

**Matrix Spike (MS) Recovery Statement**
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS did not meet the recommended quality control acceptance criteria for percent recoveries for chromium and potassium. 1203127184 (RE57-14-84157)-ICP.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. Chromium did not meet these requirements. 1203127183 (RE57-14-84157)-ICP.

**Serial Dilution % Difference Statement**
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the established acceptance percent difference criteria.

**Technical Information**

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Sample Dilutions**
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times. ICP-MS. Samples 1203133203 (LCS), 352522004 (RE57-14-84149) and 352522011 (RE57-14-84120)-CVAA were diluted to ensure that analyte concentrations were within the linear calibration range of the instrument.

**Preparation Information**
The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and

dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. Data exception reports were included behind the Case Narrative or in the Miscellaneous Data section of this data package. The following DER was generated for this SDG: 1322165. 1203127183 (RE57-14-84157) and 1203127184 (RE57-14-84157)-ICP.

**Additional Comments**
Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:** Nik-Cole A. Elmore **Date:** 8.11.14

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3751  GEL Work Order: 352522

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

J  Value is estimated

N  Metals--The Matrix spike sample recovery is not within specified control limits

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Nick-Cole A. Elmore 8-11-14

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522001 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84157 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 94.2

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3670000 | ug/kg | | 7200 | 21200 | 21200 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 1060 | ug/kg | U | 350 | 1060 | 1060 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 1140 | ug/kg | | 208 | 1040 | 1040 | 2 | MS | BAJ | 08/10/14 10:04 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 60500 | ug/kg | | 106 | 530 | 530 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 657 | ug/kg | | 20.8 | 104 | 104 | 2 | MS | BAJ | 08/10/14 10:04 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 530 | ug/kg | U | 106 | 530 | 530 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 624000 | ug/kg | | 8470 | 26500 | 26500 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 68300 | ug/kg | *N | 159 | 530 | 530 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 1420 | ug/kg | | 159 | 530 | 530 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 4630 | ug/kg | | 318 | 1060 | 1060 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 8770000 | ug/kg | | 8470 | 26500 | 26500 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 9310 | ug/kg | | 350 | 1060 | 1060 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 287000 | ug/kg | | 9000 | 31800 | 31800 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 376000 | ug/kg | | 212 | 1060 | 1060 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 8.8 | ug/kg | J | 4.18 | 12.5 | 12.5 | 1 | AV | MTM1 | 07/24/14 11:59 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 4870 | ug/kg | | 104 | 416 | 416 | 2 | MS | BAJ | 08/10/14 10:04 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 811000 | ug/kg | N | 6780 | 26500 | 26500 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 1040 | ug/kg | U | 343 | 1040 | 1040 | 2 | MS | BAJ | 08/10/14 10:04 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 530 | ug/kg | U | 106 | 530 | 530 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 388000 | ug/kg | | 7410 | 26500 | 26500 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 416 | ug/kg | U | 62.4 | 416 | 416 | 2 | MS | BAJ | 08/10/14 10:04 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 3550 | ug/kg | | 106 | 530 | 530 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 60300 | ug/kg | | 424 | 1060 | 1060 | 1 | P | HSC | 07/31/14 18:27 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.501 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.51 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.51 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522002 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84159 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.7

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5260000 | ug/kg | | 6980 | 20500 | 20500 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 1030 | ug/kg | U | 339 | 1030 | 1030 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 920 | ug/kg | J | 209 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 10:25 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 36000 | ug/kg | | 103 | 513 | 513 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 781 | ug/kg | | 20.9 | 105 | 105 | 2 | MS | BAJ | 08/10/14 10:25 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 112 | ug/kg | J | 103 | 513 | 513 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 482000 | ug/kg | | 8210 | 25700 | 25700 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 4970 | ug/kg | *N | 154 | 513 | 513 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 396 | ug/kg | J | 154 | 513 | 513 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 3990 | ug/kg | | 308 | 1030 | 1030 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 7540000 | ug/kg | | 8210 | 25700 | 25700 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 12700 | ug/kg | | 339 | 1030 | 1030 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 245000 | ug/kg | | 8730 | 30800 | 30800 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 126000 | ug/kg | | 205 | 1030 | 1030 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 257 | ug/kg | | 4.28 | 12.8 | 12.8 | 1 | AV | MTM1 | 07/24/14 14:21 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 1500 | ug/kg | | 105 | 419 | 419 | 2 | MS | BAJ | 08/10/14 10:25 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 587000 | ug/kg | N | 6570 | 25700 | 25700 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 1050 | ug/kg | U | 345 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 10:25 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 513 | ug/kg | U | 103 | 513 | 513 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 249000 | ug/kg | | 7190 | 25700 | 25700 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 419 | ug/kg | U | 62.8 | 419 | 419 | 2 | MS | BAJ | 08/10/14 10:25 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 2740 | ug/kg | | 103 | 513 | 513 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 73300 | ug/kg | | 411 | 1030 | 1030 | 1 | P | HSC | 07/31/14 18:40 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.52 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.51 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.502 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522003 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84138 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 97.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 2540000 | ug/kg | | 6600 | 19400 | 19400 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 486 | ug/kg | J | 321 | 971 | 971 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 585 | ug/kg | J | 197 | 984 | 984 | 2 | MS | BAJ | 08/10/14 10:30 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 28900 | ug/kg | | 97.1 | 486 | 486 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 595 | ug/kg | | 19.7 | 98.4 | 98.4 | 2 | MS | BAJ | 08/10/14 10:30 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 486 | ug/kg | U | 97.1 | 486 | 486 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 170000 | ug/kg | | 7770 | 24300 | 24300 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 27700 | ug/kg | *N | 146 | 486 | 486 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 336 | ug/kg | J | 146 | 486 | 486 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 4600 | ug/kg | | 291 | 971 | 971 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 6780000 | ug/kg | | 7770 | 24300 | 24300 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 10100 | ug/kg | | 321 | 971 | 971 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 72600 | ug/kg | | 8260 | 29100 | 29100 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 145000 | ug/kg | | 194 | 971 | 971 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 26.7 | ug/kg | | 3.97 | 11.9 | 11.9 | 1 | AV | MTM1 | 07/24/14 14:23 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 813 | ug/kg | | 98.4 | 394 | 394 | 2 | MS | BAJ | 08/10/14 10:30 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 618000 | ug/kg | N | 6220 | 24300 | 24300 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 984 | ug/kg | U | 325 | 984 | 984 | 2 | MS | BAJ | 08/10/14 10:30 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 486 | ug/kg | U | 97.1 | 486 | 486 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 387000 | ug/kg | | 6800 | 24300 | 24300 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 394 | ug/kg | U | 59.1 | 394 | 394 | 2 | MS | BAJ | 08/10/14 10:30 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 1410 | ug/kg | | 97.1 | 486 | 486 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 75400 | ug/kg | | 388 | 971 | 971 | 1 | P | HSC | 07/31/14 18:43 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.53 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.523 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.521 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522004 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84149 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.2

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5230000 | ug/kg | | 7160 | 21100 | 21100 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 1050 | ug/kg | U | 348 | 1050 | 1050 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 2640 | ug/kg | | 209 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 10:47 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 384000 | ug/kg | | 105 | 527 | 527 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 704 | ug/kg | | 20.9 | 105 | 105 | 2 | MS | BAJ | 08/10/14 10:47 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 574 | ug/kg | | 105 | 527 | 527 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 4550000 | ug/kg | | 8430 | 26300 | 26300 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 19100 | ug/kg | *N | 158 | 527 | 527 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 3820 | ug/kg | | 158 | 527 | 527 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 65100 | ug/kg | | 316 | 1050 | 1050 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 11300000 | ug/kg | | 8430 | 26300 | 26300 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 33600 | ug/kg | | 348 | 1050 | 1050 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 2180000 | ug/kg | | 8960 | 31600 | 31600 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 227000 | ug/kg | | 211 | 1050 | 1050 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 20600 | ug/kg | | 213 | 637 | 637 | 50 | AV | MTM1 | 07/24/14 15:02 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 9640 | ug/kg | | 105 | 418 | 418 | 2 | MS | BAJ | 08/10/14 10:47 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 1040000 | ug/kg | N | 6740 | 26300 | 26300 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 1050 | ug/kg | U | 345 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 10:47 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 15200 | ug/kg | | 105 | 527 | 527 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 137000 | ug/kg | | 7370 | 26300 | 26300 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 418 | ug/kg | U | 62.7 | 418 | 418 | 2 | MS | BAJ | 08/10/14 10:47 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 21600 | ug/kg | | 105 | 527 | 527 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 113000 | ug/kg | | 421 | 1050 | 1050 | 1 | P | HSC | 07/31/14 18:53 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.509 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.513 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.505 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522005 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84160 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 96.3

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 2720000 | ug/kg | | 6740 | 19800 | 19800 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 991 | ug/kg | U | 327 | 991 | 991 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 527 | ug/kg | J | 196 | 981 | 981 | 2 | MS | BAJ | 08/10/14 10:51 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 50500 | ug/kg | | 99.1 | 495 | 495 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 1080 | ug/kg | | 19.6 | 98.1 | 98.1 | 2 | MS | BAJ | 08/10/14 10:51 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 106 | ug/kg | J | 99.1 | 495 | 495 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 93500 | ug/kg | | 7920 | 24800 | 24800 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 4200 | ug/kg | *N | 149 | 495 | 495 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 188 | ug/kg | J | 149 | 495 | 495 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 5830 | ug/kg | | 297 | 991 | 991 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 7070000 | ug/kg | | 7920 | 24800 | 24800 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 10100 | ug/kg | | 327 | 991 | 991 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 63100 | ug/kg | | 8420 | 29700 | 29700 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 141000 | ug/kg | | 198 | 991 | 991 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 9.41 | ug/kg | J | 3.89 | 11.6 | 11.6 | 1 | AV | MTM1 | 07/24/14 15:11 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 1230 | ug/kg | | 98.1 | 392 | 392 | 2 | MS | BAJ | 08/10/14 10:51 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 678000 | ug/kg | N | 6340 | 24800 | 24800 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 981 | ug/kg | U | 324 | 981 | 981 | 2 | MS | BAJ | 08/10/14 10:51 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 495 | ug/kg | U | 99.1 | 495 | 495 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 416000 | ug/kg | | 6930 | 24800 | 24800 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 392 | ug/kg | U | 58.9 | 392 | 392 | 2 | MS | BAJ | 08/10/14 10:51 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 1030 | ug/kg | | 99.1 | 495 | 495 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 64800 | ug/kg | | 396 | 991 | 991 | 1 | P | HSC | 07/31/14 18:56 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.524 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.529 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.536 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522006 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84139 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 95.5

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4070000 | ug/kg | | 6800 | 20000 | 20000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 1000 | ug/kg | U | 330 | 1000 | 1000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 1330 | ug/kg | | 199 | 994 | 994 | 2 | MS | BAJ | 08/10/14 10:55 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 111000 | ug/kg | | 100 | 500 | 500 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 516 | ug/kg | | 19.9 | 99.4 | 99.4 | 2 | MS | BAJ | 08/10/14 10:55 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 194 | ug/kg | J | 100 | 500 | 500 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 1200000 | ug/kg | | 8000 | 25000 | 25000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 3170 | ug/kg | *N | 150 | 500 | 500 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 1430 | ug/kg | | 150 | 500 | 500 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 3210 | ug/kg | | 300 | 1000 | 1000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 7700000 | ug/kg | | 8000 | 25000 | 25000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 12000 | ug/kg | | 330 | 1000 | 1000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 506000 | ug/kg | | 8500 | 30000 | 30000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 387000 | ug/kg | | 200 | 1000 | 1000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 36.1 | ug/kg | | 3.98 | 11.9 | 11.9 | 1 | AV | MTM1 | 07/24/14 15:09 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 2750 | ug/kg | | 99.4 | 398 | 398 | 2 | MS | BAJ | 08/10/14 10:55 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 599000 | ug/kg | N | 6400 | 25000 | 25000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 994 | ug/kg | U | 328 | 994 | 994 | 2 | MS | BAJ | 08/10/14 10:55 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 105 | ug/kg | J | 100 | 500 | 500 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 112000 | ug/kg | | 7000 | 25000 | 25000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 398 | ug/kg | U | 59.6 | 398 | 398 | 2 | MS | BAJ | 08/10/14 10:55 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 6490 | ug/kg | | 100 | 500 | 500 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 44500 | ug/kg | | 400 | 1000 | 1000 | 1 | P | HSC | 07/31/14 18:59 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.524 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.527 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.529 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522007 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84150 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 86

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 29600000 | ug/kg | | 7820 | 23000 | 23000 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 1150 | ug/kg | U | 379 | 1150 | 1150 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 3850 | ug/kg | | 207 | 1030 | 1030 | 2 | MS | BAJ | 08/10/14 10:59 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 70500 | ug/kg | | 115 | 575 | 575 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 2290 | ug/kg | | 20.7 | 103 | 103 | 2 | MS | BAJ | 08/10/14 10:59 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 575 | ug/kg | U | 115 | 575 | 575 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 4290000 | ug/kg | | 9200 | 28700 | 28700 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 11900 | ug/kg | *N | 172 | 575 | 575 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 2620 | ug/kg | | 172 | 575 | 575 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 11400 | ug/kg | | 345 | 1150 | 1150 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 20800000 | ug/kg | | 9200 | 28700 | 28700 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 18600 | ug/kg | | 379 | 1150 | 1150 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 2830000 | ug/kg | | 9770 | 34500 | 34500 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 92500 | ug/kg | | 230 | 1150 | 1150 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 14.5 | ug/kg | | 4.5 | 13.4 | 13.4 | 1 | AV | MTM1 | 07/24/14 14:28 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 9160 | ug/kg | | 103 | 414 | 414 | 2 | MS | BAJ | 08/10/14 10:59 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 1740000 | ug/kg | N | 7360 | 28700 | 28700 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 1030 | ug/kg | U | 341 | 1030 | 1030 | 2 | MS | BAJ | 08/10/14 10:59 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 250 | ug/kg | J | 115 | 575 | 575 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 196000 | ug/kg | | 8050 | 28700 | 28700 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 156 | ug/kg | J | 62.1 | 414 | 414 | 2 | MS | BAJ | 08/10/14 10:59 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 21600 | ug/kg | | 115 | 575 | 575 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 47300 | ug/kg | | 460 | 1150 | 1150 | 1 | P | HSC | 07/31/14 19:02 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.503 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.559 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.517 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522008 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84161 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 96.4

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4140000 | ug/kg | | 6390 | 18800 | 18800 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 940 | ug/kg | U | 310 | 940 | 940 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 842 | ug/kg | J | 207 | 1030 | 1030 | 2 | MS | BAJ | 08/10/14 11:04 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 28100 | ug/kg | | 94 | 470 | 470 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 504 | ug/kg | | 20.7 | 103 | 103 | 2 | MS | BAJ | 08/10/14 11:04 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 470 | ug/kg | U | 94 | 470 | 470 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 284000 | ug/kg | | 7520 | 23500 | 23500 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 29100 | ug/kg | *N | 141 | 470 | 470 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 794 | ug/kg | | 141 | 470 | 470 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 2560 | ug/kg | | 282 | 940 | 940 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 7890000 | ug/kg | | 7520 | 23500 | 23500 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 7960 | ug/kg | | 310 | 940 | 940 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 136000 | ug/kg | | 7990 | 28200 | 28200 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 339000 | ug/kg | | 188 | 940 | 940 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 20.1 | ug/kg | | 3.67 | 10.9 | 10.9 | 1 | AV | MTM1 | 07/24/14 14:30 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 2680 | ug/kg | | 103 | 413 | 413 | 2 | MS | BAJ | 08/10/14 11:04 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 580000 | ug/kg | N | 6020 | 23500 | 23500 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 1030 | ug/kg | U | 341 | 1030 | 1030 | 2 | MS | BAJ | 08/10/14 11:04 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 470 | ug/kg | U | 94 | 470 | 470 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 317000 | ug/kg | | 6580 | 23500 | 23500 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 413 | ug/kg | U | 62 | 413 | 413 | 2 | MS | BAJ | 08/10/14 11:04 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 1910 | ug/kg | | 94 | 470 | 470 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 52600 | ug/kg | | 376 | 940 | 940 | 1 | P | HSC | 07/31/14 19:05 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.552 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.502 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.569 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522009 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84141 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 90

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 8710000 | ug/kg | | 7080 | 20800 | 20800 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 1040 | ug/kg | U | 344 | 1040 | 1040 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 1730 | ug/kg | | 203 | 1020 | 1020 | 2 | MS | BAJ | 08/10/14 11:08 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 89100 | ug/kg | | 104 | 521 | 521 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 794 | ug/kg | | 20.3 | 102 | 102 | 2 | MS | BAJ | 08/10/14 11:08 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 521 | ug/kg | U | 104 | 521 | 521 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 1090000 | ug/kg | | 8330 | 26000 | 26000 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 3360 | ug/kg | *N | 156 | 521 | 521 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 2060 | ug/kg | | 156 | 521 | 521 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 3830 | ug/kg | | 312 | 1040 | 1040 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 10700000 | ug/kg | | 8330 | 26000 | 26000 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 13400 | ug/kg | | 344 | 1040 | 1040 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 707000 | ug/kg | | 8850 | 31200 | 31200 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 369000 | ug/kg | | 208 | 1040 | 1040 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 16.5 | ug/kg | | 4.32 | 12.9 | 12.9 | 1 | AV | MTM1 | 07/24/14 14:31 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 3910 | ug/kg | | 102 | 407 | 407 | 2 | MS | BAJ | 08/10/14 11:08 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 1250000 | ug/kg | N | 6660 | 26000 | 26000 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 1020 | ug/kg | U | 335 | 1020 | 1020 | 2 | MS | BAJ | 08/10/14 11:08 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 244 | ug/kg | J | 104 | 521 | 521 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 315000 | ug/kg | | 7290 | 26000 | 26000 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 407 | ug/kg | U | 61 | 407 | 407 | 2 | MS | BAJ | 08/10/14 11:08 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 7690 | ug/kg | | 104 | 521 | 521 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 55700 | ug/kg | | 416 | 1040 | 1040 | 1 | P | HSC | 07/31/14 19:09 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.535 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.548 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.518 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522010 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84152 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 95

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4190000 | ug/kg | | 6900 | 20300 | 20300 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 1010 | ug/kg | U | 335 | 1010 | 1010 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 1290 | ug/kg | | 204 | 1020 | 1020 | 2 | MS | BAJ | 08/10/14 11:12 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 33800 | ug/kg | | 101 | 507 | 507 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 390 | ug/kg | | 20.4 | 102 | 102 | 2 | MS | BAJ | 08/10/14 11:12 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 507 | ug/kg | U | 101 | 507 | 507 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 877000 | ug/kg | | 8110 | 25400 | 25400 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 3350 | ug/kg | *N | 152 | 507 | 507 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 675 | ug/kg | | 152 | 507 | 507 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 1750 | ug/kg | | 304 | 1010 | 1010 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 7970000 | ug/kg | | 8110 | 25400 | 25400 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 7740 | ug/kg | | 335 | 1010 | 1010 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 344000 | ug/kg | | 8620 | 30400 | 30400 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 169000 | ug/kg | | 203 | 1010 | 1010 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 62.6 | ug/kg | | 3.97 | 11.9 | 11.9 | 1 | AV | MTM1 | 07/24/14 14:33 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 2100 | ug/kg | | 102 | 409 | 409 | 2 | MS | BAJ | 08/10/14 11:12 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 532000 | ug/kg | N | 6490 | 25400 | 25400 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 1020 | ug/kg | U | 337 | 1020 | 1020 | 2 | MS | BAJ | 08/10/14 11:12 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 114 | ug/kg | J | 101 | 507 | 507 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 213000 | ug/kg | | 7100 | 25400 | 25400 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 409 | ug/kg | U | 61.3 | 409 | 409 | 2 | MS | BAJ | 08/10/14 11:12 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 4780 | ug/kg | | 101 | 507 | 507 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 43400 | ug/kg | | 406 | 1010 | 1010 | 1 | P | HSC | 07/31/14 19:12 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.519 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.515 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.533 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3751 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352522011 **BASIS:** Dry Weight **DATE COLLECTED** 10−JUL−14

**CLIENT ID:** RE57−14−84120 **LEVEL:** Low **DATE RECEIVED** 12−JUL−14

**MATRIX:** SO **%SOLIDS:** 92.8

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5080000 | ug/kg | | 6980 | 20500 | 20500 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−36−0 | Antimony | 1030 | ug/kg | U | 339 | 1030 | 1030 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−38−2 | Arsenic | 2750 | ug/kg | | 195 | 973 | 973 | 2 | MS | BAJ | 08/10/14 11:17 | 140809−2 | 1403273 |
| 7440−39−3 | Barium | 236000 | ug/kg | | 103 | 513 | 513 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−41−7 | Beryllium | 705 | ug/kg | | 19.5 | 97.3 | 97.3 | 2 | MS | BAJ | 08/10/14 11:17 | 140809−2 | 1403273 |
| 7440−43−9 | Cadmium | 222 | ug/kg | J | 103 | 513 | 513 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−70−2 | Calcium | 2880000 | ug/kg | | 8210 | 25700 | 25700 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−47−3 | Chromium | 11200 | ug/kg | *N | 154 | 513 | 513 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−48−4 | Cobalt | 3000 | ug/kg | | 154 | 513 | 513 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−50−8 | Copper | 47700 | ug/kg | | 308 | 1030 | 1030 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7439−89−6 | Iron | 11200000 | ug/kg | | 8210 | 25700 | 25700 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7439−92−1 | Lead | 28600 | ug/kg | | 339 | 1030 | 1030 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7439−95−4 | Magnesium | 1690000 | ug/kg | | 8730 | 30800 | 30800 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7439−96−5 | Manganese | 272000 | ug/kg | | 205 | 1030 | 1030 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7439−97−6 | Mercury | 23500 | ug/kg | | 433 | 1290 | 1290 | 100 | AV | MTM1 | 07/24/14 14:35 | 072414S1−3 | 1405674 |
| 7440−02−0 | Nickel | 8050 | ug/kg | | 97.3 | 389 | 389 | 2 | MS | BAJ | 08/10/14 11:17 | 140809−2 | 1403273 |
| 7440−09−7 | Potassium | 944000 | ug/kg | N | 6570 | 25700 | 25700 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7782−49−2 | Selenium | 427 | ug/kg | J | 321 | 973 | 973 | 2 | MS | BAJ | 08/10/14 11:17 | 140809−2 | 1403273 |
| 7440−22−4 | Silver | 10800 | ug/kg | | 103 | 513 | 513 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−23−5 | Sodium | 151000 | ug/kg | | 7190 | 25700 | 25700 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−28−0 | Thallium | 389 | ug/kg | U | 58.4 | 389 | 389 | 2 | MS | BAJ | 08/10/14 11:17 | 140809−2 | 1403273 |
| 7440−62−2 | Vanadium | 17000 | ug/kg | | 103 | 513 | 513 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |
| 7440−66−6 | Zinc | 89600 | ug/kg | | 411 | 1030 | 1030 | 1 | P | HSC | 07/31/14 19:15 | 073114−1 | 1403267 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1403267 | 1403266 | SW846 3050B | 0.525 | g | 50 | mL | 07/15/14 | KXP3 |
| 1403273 | 1403272 | SW846 3050B | 0.554 | g | 50 | mL | 07/15/14 | JXO1 |
| 1405674 | 1405670 | SW846 7471A Prep | 0.5 | g | 30 | mL | 07/23/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# Quality Control Summary

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3751

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| 1203127181 | | | | | | | | |
| | Aluminum | 6690 | ug/kg | +/−19700 | U | P | 6690 | 19700 |
| | Antimony | 325 | ug/kg | +/−984 | U | P | 325 | 984 |
| | Barium | 98.4 | ug/kg | +/−492 | U | P | 98.4 | 492 |
| | Cadmium | 98.4 | ug/kg | +/−492 | U | P | 98.4 | 492 |
| | Calcium | 7870 | ug/kg | +/−24600 | U | P | 7870 | 24600 |
| | Chromium | 148 | ug/kg | +/−492 | U | P | 148 | 492 |
| | Cobalt | 148 | ug/kg | +/−492 | U | P | 148 | 492 |
| | Copper | 295 | ug/kg | +/−984 | U | P | 295 | 984 |
| | Iron | 7870 | ug/kg | +/−24600 | U | P | 7870 | 24600 |
| | Potassium | 7070 | ug/kg | +/−24600 | J | P | 6300 | 24600 |
| | Lead | 580 | ug/kg | +/−984 | J | P | 325 | 984 |
| | Magnesium | 8370 | ug/kg | +/−29500 | U | P | 8370 | 29500 |
| | Manganese | 197 | ug/kg | +/−984 | U | P | 197 | 984 |
| | Silver | 98.4 | ug/kg | +/−492 | U | P | 98.4 | 492 |
| | Sodium | 6890 | ug/kg | +/−24600 | U | P | 6890 | 24600 |
| | Vanadium | 98.4 | ug/kg | +/−492 | U | P | 98.4 | 492 |
| | Zinc | 394 | ug/kg | +/−984 | U | P | 394 | 984 |
| 1203127196 | | | | | | | | |
| | Arsenic | 199 | ug/kg | +/−996 | U | MS | 199 | 996 |
| | Beryllium | 19.9 | ug/kg | +/−99.6 | U | MS | 19.9 | 99.6 |
| | Nickel | 99.6 | ug/kg | +/−398 | U | MS | 99.6 | 398 |
| | Selenium | 329 | ug/kg | +/−996 | U | MS | 329 | 996 |
| | Thallium | −69.9 | ug/kg | +/−398 | J | MS | 59.8 | 398 |
| 1203133202 | | | | | | | | |
| | Mercury | 4.02 | ug/kg | +/−12 | U | AV | 4.02 | 12 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3751 **Client ID** RE57−14−84157S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 94.2

**Sample ID:** 352522001 **Spike ID:** 1203127184

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | | 5910000 | | 3670000 | | 512000 | 437 | N/A | P |
| Antimony | ug/kg | 75−125 | 44600 | | 350 | U | 51200 | 87 | | P |
| Barium | ug/kg | 75−125 | 107000 | | 60500 | | 51200 | 91.3 | | P |
| Cadmium | ug/kg | 75−125 | 49700 | | 106 | U | 51200 | 96.9 | | P |
| Calcium | ug/kg | 75−125 | 1130000 | | 624000 | | 512000 | 98.7 | | P |
| Chromium | ug/kg | 75−125 | 106000 | | 68300 | | 51200 | 73.3 | N | P |
| Cobalt | ug/kg | 75−125 | 50400 | | 1420 | | 51200 | 95.5 | | P |
| Copper | ug/kg | 75−125 | 58300 | | 4630 | | 51200 | 105 | | P |
| Iron | ug/kg | | 9760000 | | 8770000 | | 512000 | 194 | N/A | P |
| Lead | ug/kg | 75−125 | 61800 | | 9310 | | 51200 | 102 | | P |
| Magnesium | ug/kg | 75−125 | 909000 | | 287000 | | 512000 | 121 | | P |
| Manganese | ug/kg | | 432000 | | 376000 | | 51200 | 110 | N/A | P |
| Potassium | ug/kg | 75−125 | 1540000 | | 811000 | | 512000 | 142 | N | P |
| Silver | ug/kg | 75−125 | 48500 | | 106 | U | 51200 | 94.6 | | P |
| Sodium | ug/kg | 75−125 | 987000 | | 388000 | | 512000 | 117 | | P |
| Vanadium | ug/kg | 75−125 | 55000 | | 3550 | | 51200 | 101 | | P |
| Zinc | ug/kg | 75−125 | 115000 | | 60300 | | 51200 | 107 | | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3751 **Client ID** RE57−14−84157S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 94.2

**Sample ID:** 352522001 **Spike ID:** 1203127199

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | 75−125 | 6120 | | 1140 | | 5090 | 97.8 | | MS |
| Beryllium | ug/kg | 75−125 | 5690 | | 657 | | 5090 | 98.8 | | MS |
| Nickel | ug/kg | 75−125 | 10300 | | 4870 | | 5090 | 106 | | MS |
| Selenium | ug/kg | 75−125 | 5040 | | 343 | U | 5090 | 95.3 | | MS |
| Thallium | ug/kg | 75−125 | 4500 | | 62.4 | U | 5090 | 88.5 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3751 **Client ID** RE57−14−84157S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 94.2

**Sample ID:** 352522001 **Spike ID:** 1203133205

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | 80−120 | 132 | | 8.8 | J | 123 | 100 | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3751 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84157D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352522001 **Duplicate ID:** 1203127183 **Percent Solids for Dup:** 94.2

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | +/−20% | 3670000 | | 3730000 | | 1.53 | | P |
| Antimony | ug/kg | | 350 | U | 343 | U | | | P |
| Barium | ug/kg | +/−20% | 60500 | | 60500 | | .11 | | P |
| Cadmium | ug/kg | | 106 | U | 104 | U | | | P |
| Calcium | ug/kg | +/−20% | 624000 | | 628000 | | .582 | | P |
| Chromium | ug/kg | +/−20% | 68300 | | 54100 | | 23.2 | * | P |
| Cobalt | ug/kg | +/−519 | 1420 | | 1400 | | 1.05 | | P |
| Copper | ug/kg | +/−1040 | 4630 | | 4580 | | 1.12 | | P |
| Iron | ug/kg | +/−20% | 8770000 | | 9250000 | | 5.38 | | P |
| Lead | ug/kg | +/−20% | 9310 | | 9620 | | 3.23 | | P |
| Magnesium | ug/kg | +/−20% | 287000 | | 305000 | | 6.03 | | P |
| Manganese | ug/kg | +/−20% | 376000 | | 393000 | | 4.23 | | P |
| Potassium | ug/kg | +/−20% | 811000 | | 790000 | | 2.62 | | P |
| Silver | ug/kg | | 106 | U | 104 | U | | | P |
| Sodium | ug/kg | +/−20% | 388000 | | 359000 | | 7.91 | | P |
| Vanadium | ug/kg | +/−20% | 3550 | | 3550 | | .0697 | | P |
| Zinc | ug/kg | +/−20% | 60300 | | 63600 | | 5.36 | | P |

***Analytical Methods:**

**P SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3751 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84157D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352522001 **Duplicate ID:** 1203127198 **Percent Solids for Dup:** 94.2

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | +/−1020 | 1140 | | 1210 | | 6.4 | | MS |
| Beryllium | ug/kg | +/−20% | 657 | | 662 | | .7 | | MS |
| Nickel | ug/kg | +/−20% | 4870 | | 4640 | | 4.99 | | MS |
| Selenium | ug/kg | | 343 | U | 335 | U | | | MS |
| Thallium | ug/kg | | 62.4 | U | 61 | U | | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3751 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84157D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352522001 **Duplicate ID:** 1203133204 **Percent Solids for Dup:** 94.2

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | +/−12.6 | 8.8 | J | 8.93 | J | 1.49 | | AV |

***Analytical Methods:**

**AV SW846 7471A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3751

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203127182 | | | | | | | | |
| | Aluminum | ug/kg | 8680000 | 7270000 | | 83.7 | 44.9−154.4 | P |
| | Antimony | ug/kg | 166000 | 128000 | | 77.2 | 33.1−167.3 | P |
| | Barium | ug/kg | 290000 | 285000 | | 98.4 | 82.8−117.6 | P |
| | Cadmium | ug/kg | 85000 | 86900 | | 102 | 84−115.9 | P |
| | Calcium | ug/kg | 6120000 | 6240000 | | 102 | 83.2−117 | P |
| | Chromium | ug/kg | 168000 | 177000 | | 105 | 81.5−117.9 | P |
| | Cobalt | ug/kg | 87000 | 91000 | | 105 | 84.8−114.9 | P |
| | Copper | ug/kg | 187000 | 207000 | | 111 | 84−116.6 | P |
| | Iron | ug/kg | 12500000 | 14000000 | | 112 | 50.5−148.8 | P |
| | Lead | ug/kg | 120000 | 121000 | | 101 | 83.3−116.7 | P |
| | Magnesium | ug/kg | 2920000 | 2930000 | | 100 | 75−125.3 | P |
| | Manganese | ug/kg | 310000 | 318000 | | 103 | 82.6−117.4 | P |
| | Potassium | ug/kg | 2780000 | 2560000 | | 92 | 69.1−130.9 | P |
| | Silver | ug/kg | 55200 | 54100 | | 98 | 66.3−133.7 | P |
| | Vanadium | ug/kg | 138000 | 152000 | | 110 | 79.7−120.3 | P |
| | Zinc | ug/kg | 206000 | 209000 | | 101 | 82−118 | P |
| | Sodium | ug/kg | 504000 | 521000 | | 103 | 73.6−126.4 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3751

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203127197 | | | | | | | | |
| | Arsenic | ug/kg | 137000 | 143000 | | 105 | 83.2−117.5 | MS |
| | Beryllium | ug/kg | 138000 | 155000 | | 112 | 84.1−115.9 | MS |
| | Nickel | ug/kg | 159000 | 175000 | | 110 | 84.3−115.7 | MS |
| | Selenium | ug/kg | 43500 | 48300 | | 111 | 77.9−122.3 | MS |
| | Thallium | ug/kg | 146000 | 155000 | | 106 | 81.5−119.2 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3751

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203133203 | | | | | | | | |
| | Mercury | ug/kg | 7690 | 7790 | | 101 | 71.4−129 | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3751 **Client ID** RE57−14−84157L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352522001 **Serial Dilution ID:** 1203127185

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 34700 | | 35500 | | 2.41 | | 10 | P |
| Antimony | 3.3 | U | 16.5 | U | | | | P |
| Barium | 572 | | 595 | | 4.09 | | 10 | P |
| Cadmium | 1 | U | 5 | U | | | | P |
| Calcium | 5890 | | 5980 | | 1.53 | | 10 | P |
| Chromium | 645 | | 664 | | 3.01 | | 10 | P |
| Cobalt | 13.4 | | 14.3 | J | 7.32 | | | P |
| Copper | 43.7 | | 43.8 | J | .285 | | | P |
| Iron | 82800 | | 84700 | | 2.32 | | 10 | P |
| Lead | 87.9 | | 112 | | 26.8 | | | P |
| Magnesium | 2710 | | 2700 | | .464 | | | P |
| Manganese | 3550 | | 3730 | | 5.14 | | 10 | P |
| Potassium | 7660 | | 7480 | | 2.31 | | 10 | P |
| Silver | 1 | U | 5 | U | | | | P |
| Sodium | 3670 | | 3750 | | 2.35 | | 10 | P |
| Vanadium | 33.5 | | 35 | | 4.35 | | | P |
| Zinc | 569 | | 593 | | 4.11 | | 10 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3751 **Client ID** RE57−14−84157L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352522001 **Serial Dilution ID:** 1203127200

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 5.47 | | 7.18 | J | 31.3 | | | MS |
| Beryllium | 3.16 | | 3.3 | | 4.5 | | | MS |
| Nickel | 23.4 | | 23.3 | | .521 | | | MS |
| Selenium | 1.65 | U | 8.25 | U | | | | MS |
| Thallium | .3 | U | 1.5 | U | | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3751 **Client ID** RE57−14−84157L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352522001 **Serial Dilution ID:** 1203133206

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .141 | J | .335 | U | 100 | | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 08-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| ICP | SW846 3050B/6010C | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1403267 | See Below | | |

**Potentially affected work order(s)(SDG): 352522(2014-3751)**

**Application Issues:**

Failed Recovery for MS/PS

Failed RPD for DUP

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed Recovery for MS/PS:<br><br>QC 1203127184MS,1203143359PS<br><br>2. Failed RPD for DUP:<br><br>QC 1203127183DUP | 1. The matrix spike recovery failed outside of the control limits for chromium and potassium. The post spike failed outside the required control limits for potassium but passed for all other analytes. This verifies the presence of a matrix interference for potassium and verifies the absence of a matrix interference for all the other analytes.<br><br>2. The sample and sample duplicate % RPD failed outside the control limits for chromium due to possible sample non-homogeneity and/or matrix interference. |

**Originator's Name:**

Helen Camello 08-AUG-14

**Data Validator/Group Leader:**

Theresa McKelvey 08-AUG-14

# General Chem Analysis

# Case Narrative

**General Chemistry Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3751**

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Cyanide and Total** | | |
| **Analytical Batch:** | 1402234 and 1402824 | **Method:** | SW9012A Cyanide and Total |
| **Prep Batch :** | 1402233 and 1402823 | **Method:** | SSW846 9010B Prep |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| Sample ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 1203124664 | MB for batch 1402233 |
| 1203126017 | MB for batch 1402823 |
| 1203124669 | Laboratory Control Sample (LCS) |
| 1203126022 | Laboratory Control Sample (LCS) |
| 1203124666 | 352306001(RE57-14-84178) Sample Duplicate (DUP) |
| 1203126018 | 352460001(RE57-14-84119) Sample Duplicate (DUP) |
| 1203126019 | 352522001(RE57-14-84157) Sample Duplicate (DUP) |
| 1203124668 | 352306001(RE57-14-84178) Matrix Spike (MS) |
| 1203126020 | 352460001(RE57-14-84119) Matrix Spike (MS) |
| 1203126021 | 352522001(RE57-14-84157) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with

GL-GC-E-095 REV# 17.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Designation**
The following samples were selected for QC analysis: 352306001 (RE57-14-84178)- Batch 1402234, 352460001 (RE57-14-84119) and 352522001 (RE57-14-84157)- Batch 1402824.

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recoveries for this sample set were within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1203124666 (RE57-14-84178)- Batch 1402234, 1203126018 (RE57-14-84119) and 1203126019 (RE57-14-84157)- Batch 1402824.

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**

All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**
All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**
The following samples in this sample group were diluted due to high concentration: 1203124669 (LCS)- Batch 1402234 and 1203126022 (LCS)- Batch 1402824.

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Ion Chromatography** | | |
| **Analytical Batch:** | 1403036 | **Method:** | EPA 300.0 Nitrate in Soil |
| **Prep Batch :** | 1403034 | **Method:** | EPA 300.0 PREP |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

| Sample ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 1203126607 | MB for batch 1403034 |
| 1203126612 | Laboratory Control Sample (LCS) |
| 1203126608 | 352460011(RE57-14-84158) Sample Duplicate (DUP) |
| 1203126609 | 352460012(RE57-14-84137) Sample Duplicate (DUP) |
| 1203126610 | 352460011(RE57-14-84158) Matrix Spike (MS) |
| 1203126611 | 352460012(RE57-14-84137) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 22.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

## Calibration Information

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following samples were selected for QC analysis: 352460011 (RE57-14-84158) and 352460012 (RE57-14-84137).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recoveries for this sample set were within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD between the sample and its duplicate met the acceptance limits.

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
The following sample from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1203126608 (RE57-14-84158).

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:**_____ **Date:** 8/8/14

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis Report
## for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3751  GEL Work Order: 352522

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

**  Analyte is a surrogate compound

H  Analytical holding time was exceeded

J  Value is estimated

N  Metals--The Matrix spike sample recovery is not within specified control limits

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____ 8/8/14

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84157 | Project: | LANL00114 |
| Sample ID: | 352522001 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 10-JUL-14 07:40 | | |
| Receive Date: | 12-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 5.77% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 82.1 | 246 | ug/kg | 1 | AXH3 | 07/17/14 | 1240 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.350 | 1.06 | mg/kg | 1 | RXB5 | 07/15/14 | 0659 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84159
Sample ID: 352522002
Matrix: SO
Collect Date: 10-JUL-14 08:20
Receive Date: 12-JUL-14
Collector: Client
Moisture: 6.35%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 81.1 | 243 | ug/kg | 1 | AXH3 | 07/17/14 | 1243 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.352 | 1.07 | mg/kg | 1 | RXB5 | 07/15/14 | 0729 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84138
Sample ID: 352522003
Matrix: SO
Collect Date: 10-JUL-14 10:30
Receive Date: 12-JUL-14
Collector: Client
Moisture: 2.87%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 84.3 | 252 | ug/kg | 1 | AXH3 | 07/17/14 | 1244 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.340 | 1.03 | mg/kg | 1 | RXB5 | 07/15/14 | 0759 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84149
Sample ID: 352522004
Matrix: SO
Collect Date: 10-JUL-14 09:30
Receive Date: 12-JUL-14
Collector: Client
Moisture: 6.76%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 82.9 | 248 | ug/kg | 1 | AXH3 | 07/17/14 | 1245 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.354 | 1.07 | mg/kg | 1 | RXB5 | 07/15/14 | 0829 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84160
Sample ID: 352522005
Matrix: SO
Collect Date: 10-JUL-14 11:45
Receive Date: 12-JUL-14
Collector: Client
Moisture: 3.67%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 81.8 | 245 | ug/kg | 1 | AXH3 | 07/17/14 | 1246 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.343 | 1.04 | mg/kg | 1 | RXB5 | 07/15/14 | 0859 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84139
Sample ID: 352522006
Matrix: SO
Collect Date: 10-JUL-14 08:00
Receive Date: 12-JUL-14
Collector: Client
Moisture: 4.55%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 84.1 | 252 | ug/kg | 1 | AXH3 | 07/17/14 | 1246 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.346 | 1.05 | mg/kg | 1 | RXB5 | 07/15/14 | 0929 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

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2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84150
Sample ID: 352522007
Matrix: SO
Collect Date: 10-JUL-14 08:15
Receive Date: 12-JUL-14
Collector: Client
Moisture: 13.5%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 94.7 | 283 | ug/kg | 1 | AXH3 | 07/17/14 | 1247 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.382 | 1.16 | mg/kg | 1 | RXB5 | 07/15/14 | 0959 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84161
Sample ID: 352522008
Matrix: SO
Collect Date: 10-JUL-14 12:00
Receive Date: 12-JUL-14
Collector: Client
Moisture: 3.65%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 78.8 | 236 | ug/kg | 1 | AXH3 | 07/17/14 | 1252 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.342 | 1.04 | mg/kg | 1 | RXB5 | 07/15/14 | 1029 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84141
Sample ID: 352522009
Matrix: SO
Collect Date: 10-JUL-14 10:20
Receive Date: 12-JUL-14
Collector: Client
Moisture: 10.2%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 91.2 | 273 | ug/kg | 1 | AXH3 | 07/17/14 | 1253 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.368 | 1.11 | mg/kg | 1 | RXB5 | 07/15/14 | 1058 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84152
Sample ID: 352522010
Matrix: SO
Collect Date: 10-JUL-14 10:40
Receive Date: 12-JUL-14
Collector: Client
Moisture: 5.01%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 74.5 | 223 | ug/kg | 1 | AXH3 | 07/14/14 | 1416 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.347 | 1.05 | mg/kg | 1 | RXB5 | 07/15/14 | 1228 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 8, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3751

Client Sample ID: RE57-14-84120
Sample ID: 352522011
Matrix: SO
Collect Date: 10-JUL-14 09:50
Receive Date: 12-JUL-14
Collector: Client
Moisture: 7.25%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 88.3 | 264 | ug/kg | 1 | AXH3 | 07/14/14 | 1417 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.356 | 1.08 | mg/kg | 1 | RXB5 | 07/15/14 | 1258 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# Quality Control Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: August 8, 2014**



**Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**
**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352522**

| Parmname | NOM | | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flow Injection Analysis** | | | | | | | | | | | |
| Batch 1402234 | | | | | | | | | | | |
| QC1203124666 352306001 DUP | | | | | | | | | | | |
| Cyanide, Total | | U | ND | U | ND | ug/kg | N/A | | | AXH3 | 07/14/14 13:50 |
| QC1203124669 LCS | | | | | | | | | | | |
| Cyanide, Total | 90600 | | | | 94300 | ug/kg | | 104 | (68%-140%) | | 07/14/14 13:43 |
| QC1203124664 MB | | | | | | | | | | | |
| Cyanide, Total | | | | U | 250 | ug/kg | | | | | 07/14/14 13:42 |
| QC1203124668 352306001 MS | | | | | | | | | | | |
| Cyanide, Total | 4910 | U | ND | | 5210 | ug/kg | | 106 | (55%-125%) | | 07/14/14 13:51 |
| Batch 1402824 | | | | | | | | | | | |
| QC1203126018 352460001 DUP | | | | | | | | | | | |
| Cyanide, Total | | U | ND | U | ND | ug/kg | N/A | | | AXH3 | 07/17/14 12:22 |
| QC1203126019 352522001 DUP | | | | | | | | | | | |
| Cyanide, Total | | U | ND | U | ND | ug/kg | N/A | | | | 07/17/14 12:41 |
| QC1203126022 LCS | | | | | | | | | | | |
| Cyanide, Total | 90600 | | | | 96400 | ug/kg | | 106 | (68%-140%) | | 07/17/14 12:20 |
| QC1203126017 MB | | | | | | | | | | | |
| Cyanide, Total | | | | U | 250 | ug/kg | | | | | 07/17/14 12:19 |
| QC1203126020 352460001 MS | | | | | | | | | | | |
| Cyanide, Total | 4720 | U | ND | | 5140 | ug/kg | | 108 | (55%-125%) | | 07/17/14 12:27 |
| QC1203126021 352522001 MS | | | | | | | | | | | |
| Cyanide, Total | 5010 | U | ND | | 5560 | ug/kg | | 111 | (55%-125%) | | 07/17/14 12:42 |
| **Ion Chromatography** | | | | | | | | | | | |
| Batch 1403036 | | | | | | | | | | | |
| QC1203126608 352460011 DUP | | | | | | | | | | | |
| Nitrate-N | | J | 0.521 | J | 0.594 | mg/kg | 13.1 ^ | | (+/-1.07) | RXB5 | 07/15/14 02:00 |
| QC1203126609 352460012 DUP | | | | | | | | | | | |
| Nitrate-N | | U | ND | U | ND | mg/kg | N/A | | | | 07/15/14 03:30 |
| QC1203126612 LCS | | | | | | | | | | | |
| Nitrate-N | 25.0 | | | | 23.6 | mg/kg | | 94.5 | (90%-110%) | | 07/15/14 01:00 |
| QC1203126607 MB | | | | | | | | | | | |
| | | | | | 1.00 | | | | | | |

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## QC Summary

**Workorder:** **352522**



| Parmname | NOM | | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ion Chromatography** | | | | | | | | | | | |
| Batch 1403036 | | | | | | | | | | | |
| Nitrate-N | | | | U | | mg/kg | | | | | 07/15/14 00:31 |
| QC1203126610 352460011 MS | | | | | | | | | | | |
| Nitrate-N | 26.8 | J | 0.521 | | 26.3 | mg/kg | | 96 | (90%-110%) | RXB5 | 07/15/14 02:30 |
| QC1203126611 352460012 MS | | | | | | | | | | | |
| Nitrate-N | 26.0 | U | ND | | 25.1 | mg/kg | | 96.4 | (90%-110%) | | 07/15/14 04:00 |

**Notes:**

| | |
|---|---|
| < | Result is less than value reported |
| > | Result is greater than value reported |
| B | The target analyte was detected in the associated blank. |
| E | General Chemistry--Concentration of the target analyte exceeds the instrument calibration range |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Z | Paint Filter Test--Particulates passed through the filter, however no free liquids were observed. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| d | 5-day BOD--The 2:1 depletion requirement was not met for this sample |
| e | 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# Radiological Analysis

**Radiochemistry Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3751**
**Work Order 352522**

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **ISOU** |
| Analytical Method: | DOE EML HASL-300, U-02-RC Modified |
| Prep Method: | Dry Soil Prep |
| Analytical Batch Number: | 1402959 |
| Prep Batch Number: | 1402794 |

| Sample ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 1203126403 | Method Blank (MB) |
| 1203126404 | 352522001(RE57-14-84157) Sample Duplicate (DUP) |
| 1203126405 | Laboratory Control Sample (LCS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 25.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

**Standards Information**
Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**
Aliquot for sample 1203126403 (MB) was changed to 1.0 per client request.

**Designated QC**
The following sample was used for QC: 352522001 (RE57-14-84157). The QC was from ARSL work order 352522.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integration**
No manual integrations were performed on data in this batch.

**Sample-Specific MDA/MDC**
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

**Additional Comments**
The MDCs (and Lc if requested) are calculated using a blank population.

**Blank Decision Level**
The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Method/Analysis Information**

| | |
|---|---|
| **Procedure:** | **Dry Weight-Percent Moisture** |
| Analytical Method: | Dry Soil Prep |
| Analytical Batch Number: | 1402794 |

| Sample ID | Client ID |
|---|---|
| 352522001 | RE57-14-84157 |
| 352522002 | RE57-14-84159 |
| 352522003 | RE57-14-84138 |
| 352522004 | RE57-14-84149 |
| 352522005 | RE57-14-84160 |
| 352522006 | RE57-14-84139 |
| 352522007 | RE57-14-84150 |
| 352522008 | RE57-14-84161 |
| 352522009 | RE57-14-84141 |
| 352522010 | RE57-14-84152 |
| 352522011 | RE57-14-84120 |
| 1203125983 | 352522001(RE57-14-84157) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 10 and GL-RAD-A-021 REV# 20.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Designated QC**
The following sample was used for QC: 352522001 (RE57-14-84157). The QC was from ARSL work order 352522.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
Not applicable. The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**

None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this sample set.

**Blank Decision Level**
Not Applicable. The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

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## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3751  GEL Work Order: 352522

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** **Name: Kate Gellatly**

**Date: 24 JUL 2014**  **Title: Analyst I**

# Sample Data Summary

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545 Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84157
Sample ID: 352522001
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 5.77%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.30 | +/-0.0717 | 0.096 | 0.0428 | +/-0.109 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1504 | 1402959 | 2 |
| Uranium-235/236 | U | 0.0472 | +/-0.0164 | 0.0689 | 0.028 | +/-0.0166 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.20 | +/-0.0687 | 0.0601 | 0.0249 | +/-0.103 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 91.1 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84159
Sample ID: 352522002
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 6.35%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.30 | +/-0.0747 | 0.105 | 0.047 | +/-0.112 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1504 | 1402959 | 2 |
| Uranium-235/236 | | 0.083 | +/-0.0232 | 0.0757 | 0.0308 | +/-0.0238 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.43 | +/-0.0785 | 0.066 | 0.0273 | +/-0.121 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 84.7 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84138
Sample ID: 352522003
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 2.87%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.23 | +/-0.0672 | 0.091 | 0.0406 | +/-0.103 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1504 | 1402959 | 2 |
| Uranium-235/236 | U | 0.0627 | +/-0.0179 | 0.0653 | 0.0266 | +/-0.0183 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.14 | +/-0.065 | 0.057 | 0.0236 | +/-0.0973 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 98.3 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84149
Sample ID: 352522004
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 6.76%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.55 | +/-0.0775 | 0.0957 | 0.0427 | +/-0.126 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1504 | 1402959 | 2 |
| Uranium-235/236 | | 0.0848 | +/-0.0221 | 0.0687 | 0.028 | +/-0.0227 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.25 | +/-0.0697 | 0.0599 | 0.0248 | +/-0.106 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 93.2 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84160
Sample ID: 352522005
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 3.67%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.18 | +/-0.0664 | 0.0909 | 0.0405 | +/-0.0997 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1504 | 1402959 | 2 |
| Uranium-235/236 | | 0.0715 | +/-0.019 | 0.0652 | 0.0266 | +/-0.0195 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.19 | +/-0.0661 | 0.0569 | 0.0236 | +/-0.100 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 96.3 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84139
Sample ID: 352522006
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 4.55%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.34 | +/-0.081 | 0.120 | 0.0536 | +/-0.119 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1505 | 1402959 | 2 |
| Uranium-235/236 | U | 0.0768 | +/-0.0229 | 0.0862 | 0.0351 | +/-0.0234 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.50 | +/-0.0849 | 0.0752 | 0.0311 | +/-0.129 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 74.5 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84150
Sample ID: 352522007
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 13.5%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.55 | +/-0.0823 | 0.108 | 0.0483 | +/-0.130 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1505 | 1402959 | 2 |
| Uranium-235/236 | U | 0.0479 | +/-0.022 | 0.0777 | 0.0316 | +/-0.0222 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.67 | +/-0.0857 | 0.0678 | 0.028 | +/-0.138 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 89.8 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84161
Sample ID: 352522008
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 3.65%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.34 | +/-0.0777 | 0.108 | 0.0482 | +/-0.116 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1505 | 1402959 | 2 |
| Uranium-235/236 | | 0.0956 | +/-0.0238 | 0.0775 | 0.0315 | +/-0.0245 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.37 | +/-0.0774 | 0.0676 | 0.028 | +/-0.117 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 90.0 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84141
Sample ID: 352522009
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 10.2%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.33 | +/-0.0765 | 0.107 | 0.0479 | +/-0.115 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1505 | 1402959 | 2 |
| Uranium-235/236 | U | 0.0634 | +/-0.0211 | 0.0771 | 0.0314 | +/-0.0215 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.28 | +/-0.0744 | 0.0673 | 0.0278 | +/-0.111 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 81.1 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84152
Sample ID: 352522010
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 5.01%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.34 | +/-0.0735 | 0.0998 | 0.0445 | +/-0.113 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1505 | 1402959 | 2 |
| Uranium-235/236 | | 0.0835 | +/-0.0225 | 0.0716 | 0.0292 | +/-0.0231 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.54 | +/-0.0784 | 0.0625 | 0.0259 | +/-0.126 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 85.2 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 24, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84120
Sample ID: 352522011
Matrix: SO
Collect Date: 10-JUL-14
Receive Date: 12-JUL-14
Collector: Client
Moisture: 7.25%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.90 | +/-0.0873 | 0.098 | 0.0437 | +/-0.149 | 0.100 | pCi/g | | JXR1 | 07/22/14 | 1505 | 1402959 | 2 |
| Uranium-235/236 | U | 0.0627 | +/-0.0241 | 0.0703 | 0.0286 | +/-0.0244 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.38 | +/-0.0743 | 0.0614 | 0.0254 | +/-0.116 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/14/14 | 1603 | 1402794 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402959 | 87.4 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# Quality Control Data

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: July 24, 2014**


**Client :** **Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**

**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352522**

| Parmname | NOM | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|
| **Rad Alpha Spec** | | | | | | | | | | |
| Batch 1402959 | | | | | | | | | | |
| QC1203126404 352522001 DUP | | | | | | | | | | |
| Uranium-233/234 | | 1.30 | | 1.43 | pCi/g | 0.281 | | (0-1) | JXR1 | 07/22/1415:05 |
| | TPU: | +/-0.109 | | +/-0.116 | | | | | | |
| Uranium-235/236 | U | 0.0472 | U | 0.050 | pCi/g | 0.0384 | | (0-1) | | |
| | TPU: | +/-0.0166 | | +/-0.019 | | | | | | |
| Uranium-238 | | 1.20 | | 1.19 | pCi/g | 0.0317 | | (0-1) | | |
| | TPU: | +/-0.103 | | +/-0.101 | | | | | | |
| **Uranium-232 Tracer | 4.33 | 3.97 | | 4.26 | pCi/g | | 98.5 | (50%-105%) | | |
| | TPU: | +/-0.306 | | +/-0.302 | | | | | | |
| QC1203126405 LCS | | | | | | | | | | |
| Uranium-233/234 | | | | 6.49 | pCi/g | | | | JXR1 | 07/22/1415:05 |
| | TPU: | | | +/-0.534 | | | | | | |
| Uranium-235/236 | | | U | 0.232 | pCi/g | | | | | |
| | TPU: | | | +/-0.0774 | | | | | | |
| Uranium-238 | 5.75 | | | 5.39 | pCi/g | | 93.7 | (75%-125%) | | |
| | TPU: | | | +/-0.461 | | | | | | |
| **Uranium-232 Tracer | 20.9 | | | 19.9 | pCi/g | | 95.3 | (50%-105%) | | |
| | TPU: | | | +/-1.46 | | | | | | |
| QC1203126403 MB | | | | | | | | | | |
| Uranium-233/234 | | | U | 0.00 | pCi/g | | | | JXR1 | 07/22/1415:05 |
| | TPU: | | | +/-0.00634 | | | | | | |
| Uranium-235/236 | | | U | 0.00248 | pCi/g | | | | | |
| | TPU: | | | +/-0.0043 | | | | | | |
| Uranium-238 | | | U | 0.00201 | pCi/g | | | | | |
| | TPU: | | | +/-0.00531 | | | | | | |
| **Uranium-232 Tracer | 2.19 | | | 1.90 | pCi/g | | 86.5 | (50%-105%) | | |
| | TPU: | | | +/-0.155 | | | | | | |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

| | |
|---|---|
| ** | Analyte is a Tracer compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| BD | Results are either below the MDC or tracer recovery is low |
| FA | Failed analysis. |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| K | Analyte present. Reported value may be biased high. Actual value is expected to be lower. |
| L | Analyte present. Reported value may be biased low. Actual value is expected to be higher. |

## QC Summary

**Workorder:** **352522**



| Parmname | NOM | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| M | M if above MDC and less than LLD |
| M | REMP Result > MDC/CL and < RDL |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| UI | Gamma Spectroscopy--Uncertain identification |
| UJ | Gamma Spectroscopy--Uncertain identification |
| UL | Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | Other specific qualifiers were required to properly define the results. Consult case narrative. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
** Indicates analyte is a surrogate/tracer compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

COC/Lab Request #: 2014-3719



Client Contact:

Lab Agreement # : 126310011

Project Number :

Analysis Turnaround Time:

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Site Name: Los Alamos National Laboratory

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 | Metals(W) |
|---|---|---|---|---|---|---|---|
| RE57-14-84187 | Jul 9 2014 | 09:04 | SO | 1 | 1 | 1 | |
| RE57-14-84195 | Jul 9 2014 | 9:04 | SO | 1 | 1 | 1 | |
| RE57-14-84197 | Jul 9 2014 | 9:55 | W | | | | 1 |
| RE57-14-84200 | Jul 9 2014 | 09:04 | SO | 1 | | | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| | Melissa Montoya | 7/10/14 3:00 | | | |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84187 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/09/2014 | FIELD MATRIX: | S | ROCK |
| TIME COLLECTED (HH:MM): | | 0904 | MEDIA: | | Qbt3 |
| PRS ID: | 57-006 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4023 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4023 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 8 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 9 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | |

**SAMPLE COMMENTS:** tuff, gray, moderately welded, sl. moist, no HC odor

**LOCATION COMMENTS:** 6-2 8-9 ft

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 19 dpm

Beta/Gamma 1600 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** W. Sanchez

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sanchez, Wayne (Signature) Way Sel | 7/9/14 9:45 | (Printed Name) K. Greene (Signature) | 7/9/14 3:45 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84195 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/9/14 | FIELD MATRIX: | S | ~~Qbt 3~~ Rock |
| TIME COLLECTED (HH:MM): | | 9:04 AM | MEDIA: | | Qbt 3 |
| PRS ID: | 57-006 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | UNK | 57-4023 | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | | 57-4023 | FIELD QC TYPE: | FD | ↓ |
| TOP DEPTH: | | 8 ft | SAMPLE USAGE: | QC | ↓ |
| BOTTOM DEPTH: | | 9 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** QC of RE57-14-84187

**LOCATION COMMENTS:** 6-2 8-9 ft

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

**Alpha** 29 **dpm**

**Beta/Gamma** 1485 **dpm**

**PID** Ambient / Reading = 0.0 / 0.0 **ppm**

**COLLECTED BY (PRINT)** Sanchez, Wayne

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Bobbie Rappe<br>(Signature) Rappe | 07/09/14 1545 | (Printed Name) K. Green<br>(Signature) | 7/9/14 3145 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84197

**WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/9/14 | FIELD MATRIX: | W | | Water |
| TIME COLLECTED (HH:MM): | | | 9:55 AM | MEDIA: | | | OK |
| PRS ID: | 57-006 | | OK | SAMPLE TECH CODE: | DC | | |
| LOCATION ID: | UNK | | 57-4023 | FIELD PREP: | UF | | |
| LOCATION TYPE: | | | 57-4023 | FIELD QC TYPE: | FR | | |
| TOP DEPTH: | | | 8 ft | SAMPLE USAGE: | QC | | |
| BOTTOM DEPTH: | | | 9 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | Metals(W) | 1 LITER POLY | 1 | HNO3 | Y | N/A |

**SAMPLE COMMENTS:** QC of RE57-14-84187 Equipment rinsate from hand auger bucket and sample mixing bowl

**LOCATION COMMENTS:** 6-2 8-9 ft

**FIELD PARAMETERS:** N/A

**COLLECTED BY (PRINT)** Rafette, Kyle

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| J. J. | 7-9-14 1545 | K. Greene | 7-9-14 1545 |
| **RELINQUISHED BY (Printed Name) (Signature)** | **Date/Time** | **RECEIVED BY (Printed Name) (Signature)** | **Date/Time** |
| | | | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84200 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/09/2014 | FIELD MATRIX: | S | Rock |
| TIME COLLECTED (HH:MM): | | 0904 | MEDIA: | | ~~Sb~~ Sand (PON 07/09/14) |
| PRS ID: | 57-006 | OK | SAMPLE TECH CODE: | DC | OK |
| LOCATION ID: | UNK | 57-4023 | FIELD PREP: | NA | |
| LOCATION TYPE: | | 57-4023 | FIELD QC TYPE: | FTB | |
| TOP DEPTH: | | 8 ft | SAMPLE USAGE: | QC | ✓ |
| BOTTOM DEPTH: | | 9 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |

**SAMPLE COMMENTS:** QC of RE57-14-84187

**LOCATION COMMENTS:** 6-2 8-9 ft

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha NA dpm PID Ambient Reading = 0.0 ppm

Beta/Gamma NA dpm 0.0

**COLLECTED BY (PRINT)** W. Sanchez

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sandoval, Wayne (Signature) Wayne Sandoval | 7/9/14 1545 | (Printed Name) K. Green (Signature) | 7/9/14 3:45 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# DATA VALIDATION REPORT

Chain Of Custody No. 2014-3719

1. Distribution Of Samples In EDD.

| SDG | Analytical Method | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks |
|---|---|---|---|---|---|---|
| 352465 | EPA:245.2 | | | | | |
| 352465 | EPA:300.0 | 1 | 1 | | | |
| 352465 | HASL-300:ISOU | 1 | 1 | | | |
| 352465 | SW-846:6010C | 1 | 1 | | | |
| 352465 | SW-846:6020 | 1 | 1 | | | |
| 352465 | SW-846:6850 | 1 | 1 | | | |
| 352465 | SW-846:7471A | 1 | 1 | | | |
| 352465 | SW-846:8260B | 1 | 1 | 1 | | |
| 352465 | SW-846:8270D | 1 | 1 | | | |
| 352465 | SW-846:9012A | 1 | 1 | | | |

| SDG | Analytical Method | Analysis Lot ID | Prep Lot ID | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks | Method Blanks | Matrix Spikes | Matrix Spike Dups | Analytical Spikes | Post-Digestion Spikes | Lab Control Samples | Lab Control Sample Dups | Blank Spike | Blank Spike Dups | Lab Duplicates | Storage Blanks | Preparation Blanks | Reagent Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 352465 | EPA:245.2 | 1404427 | 1404425 | | | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352465 | EPA:300.0 | 1403036 | 1403034 | 1 | 1 | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352465 | HASL-300:ISOU | 1402588 | 1402588 | 1 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352465 | SW-846:6010C | 1402847 | 1402846 | | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352465 | SW-846:6010C | 1403245 | 1403244 | 1 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352465 | SW-846:6020 | 1402860 | 1402858 | 1 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352465 | SW-846:6020 | 1402900 | 1402898 | | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352465 | SW-846:6850 | 1402719 | 1402718 | 1 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352465 | SW-846:7471A | 1405302 | 1405301 | 1 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352465 | SW-846:8260B | 1407979 | 1407977 | 1 | 1 | 1 | | | 2 | | | | | 4 | | | | | | | |
| 352465 | SW-846:8270D | 1403912 | 1403911 | 1 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352465 | SW-846:9012A | 1402234 | 1402233 | 1 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |

2. Distribution Of Analytes In EDD.

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| EPA:245.2 | INORGANIC | LCS | 1203129978 | LCS | 0 | 0 | 1 | 0 |
| EPA:245.2 | INORGANIC | MB | 1203129977 | MB | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84197 | 1203129979 | DUP | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84197 | 352465003 | FR | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | WT_IPC-14-55927 | 1203129982 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | LCS | 1203126612 | LCS | 0 | 0 | 1 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | MB | 1203126607 | MB | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84137 | 1203126609 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84158 | 1203126608 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84187 | 352465001 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84195 | 352465002 | FD | 1 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | LCS | 1203125487 | LCS | 0 | 0 | 1 | 0 |
| HASL-300:ISOU | RAD | MB | 1203125485 | MB | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84187 | 352465001 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84195 | 352465002 | FD | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | SFBMACRO-14-83950 | 1203125486 | DUP | 3 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | CAMO-14-81584 | 1203126080 | DUP | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203126084 | LCS | 0 | 0 | 13 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203127125 | LCS | 0 | 0 | 17 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203126083 | MB | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203127124 | MB | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84187 | 1203127126 | DUP | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84187 | 352465001 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84195 | 352465002 | FD | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84197 | 352465003 | FR | 13 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | CAMO-14-84010 | 1203126213 | DUP | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203126095 | LCS | 0 | 0 | 5 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203126212 | LCS | 0 | 0 | 9 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203126094 | MB | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203126211 | MB | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84187 | 1203126096 | DUP | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84187 | 352465001 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84195 | 352465002 | FD | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84197 | 352465003 | FR | 9 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | LCS | 1203125787 | LCS | 0 | 0 | 1 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | MB | 1203125786 | MB | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84187 | 352465001 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84195 | 352465002 | FD | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | LCS | 1203132300 | LCS | 0 | 0 | 1 | 0 |
| SW-846:7471A | INORGANIC | MB | 1203132299 | MB | 1 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:7471A | INORGANIC | RE57-14-84187 | 1203132301 | DUP | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84187 | 352465001 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84195 | 352465002 | FD | 1 | 0 | 0 | 0 |
| SW-846:8260B | VOC | LCS | 1203139144 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203139145 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | LCS | 1203139146 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203139147 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | MB | 1203139138 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | MB | 1203139139 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84187 | 352465001 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84195 | 352465002 | FD | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84200 | 352465004 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8270D | SVOC | LCS | 1203128640 | LCS | 0 | 6 | 69 | 0 |
| SW-846:8270D | SVOC | MB | 1203128639 | MB | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84187 | 352465001 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84195 | 352465002 | FD | 69 | 6 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | LCS | 1203124669 | LCS | 0 | 0 | 1 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | MB | 1203124664 | MB | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84178 | 1203124666 | DUP | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84187 | 352465001 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84195 | 352465002 | FD | 1 | 0 | 0 | 0 |

3. Are any analytes missing?

No.

4. Were any holding times exceeded?

No.

5. Any contaminants in blanks?

# DATA VALIDATION REPORT

| Blank FS ID | Blank Lab Sample | Blank Type | Analytical Method | Sample | Parameter Name | Blank Lab Result | Lab Qualifier | Blank Lab Units | Blank Lab Detection Limit |
|---|---|---|---|---|---|---|---|---|---|
| MB | 1203126083 | METHOD BLANK | SW-846:6010C | W | Iron | -30.8 | J | ug/L | 100 |
| MB | 1203126083 | METHOD BLANK | SW-846:6010C | W | Vanadium | -1.42 | J | ug/L | 5.00 |
| MB | 1203127124 | METHOD BLANK | SW-846:6010C | SO | Lead | 591 | J | ug/kg | 982 |
| MB | 1203127124 | METHOD BLANK | SW-846:6010C | SO | Sodium | -9120 | J | ug/kg | 24600 |

| Field Sample ID | Blank Lab | Blank Type | Analytical Method | Parameter Name | Blank Lab Result | Blank Lab Units | Lab Result | Lab Qualifier | Lab Detection Limit | Detect Flag | Detect to Nondetect Factor | Detect to Estimated Factor | Use Factors |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84197 | 1203126083 | METHOD BLANK | SW-846:6010C | Iron | -30.8 | ug/L | 100 | U | 100 | N | | | |
| RE57-14-84187 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 418000 | N | 25500 | Y | | | |
| RE57-14-84195 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 437000 | N | 25700 | Y | | | |
| RE57-14-84197 | 1203126083 | METHOD BLANK | SW-846:6010C | Vanadium | -1.42 | ug/L | 5.00 | U | 5.00 | N | | | |

6. Any surrogate recoveries outside the control limits?

No.

7. Any MS/MSD recoveries or RPDs outside the control limits?

No.

8. Any LCS/LCSD or BS/BSD recoveries or RPDs outside the control limits?

No.

# DATA VALIDATION REPORT

9. Any Field Duplicate RPDs outside the desired limits?

No.

10. Any Lab Duplicate RPDs outside the desired limits?

| Field Sample ID | Lab Sample ID | LD Lab Sample ID | Analytical Method | Parameter Name | Sample Matrix | Lab Result | LD Lab Result | Lab Units | Detect Flag | LD Detect Flag | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84187 | 352465001 | 1203127126 | SW-846:6010C | Calcium | SO | 362000 | 267000 | ug/kg | Y | Y | 30.2 | 20 |

11. Any required reporting limits exceeded?

No.

12. Additional Validator's Comments.

13. Display Flagged Data.

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4023 | 2014-3719 | RE57-14-84187 | REG | INIT | INORGANIC | SW-846:6010C | Calcium | * | J | I10a | Y | 362000 | ug/kg | 362 | mg/kg | | | SD | 07/09/2014 | | 1403245 | VAL | Y |
| 57-4023 | 2014-3719 | RE57-14-84195 | FD | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0787 | pCi/g | .0787 | pCi/g | 0.082 | 0.0239 | SD | 07/09/2014 | | 1402588 | VAL | Y |

| Reason Code | Description |
|---|---|
| I10a | The sample and the duplicate sample results were >=5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples. |
| J_LAB | The analytical laboratory qualified the detected result as estimated (J) because the result was less the PQL but greater than the MDL |
| NQ | The analytical laboratory did not qualifiy the analyte as not detected and/or any other standard qualifire. The analyte is detected in the sample. |
| R5 | Analyte is not detected because the amount reported is less than the MDC. |
| U_LAB | The analytical laboratory qualified the analyte as not detected. |

14. Usable Result Count.

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84187 | 57-4023 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84187 | 57-4023 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84187 | 57-4023 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84187 | 57-4023 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84187 | 57-4023 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84187 | 57-4023 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84187 | 57-4023 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84187 | 57-4023 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84187 | 57-4023 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84195 | 57-4023 | FD | EPA:300.0 | 0 | 1 |
| RE57-14-84195 | 57-4023 | FD | HASL-300:ISOU | 0 | 3 |
| RE57-14-84195 | 57-4023 | FD | SW-846:6010C | 0 | 17 |
| RE57-14-84195 | 57-4023 | FD | SW-846:6020 | 0 | 5 |
| RE57-14-84195 | 57-4023 | FD | SW-846:6850 | 0 | 1 |
| RE57-14-84195 | 57-4023 | FD | SW-846:7471A | 0 | 1 |
| RE57-14-84195 | 57-4023 | FD | SW-846:8260B | 0 | 62 |
| RE57-14-84195 | 57-4023 | FD | SW-846:8270D | 0 | 69 |
| RE57-14-84195 | 57-4023 | FD | SW-846:9012A | 0 | 1 |
| RE57-14-84197 | 57-4023 | FR | EPA:245.2 | 0 | 1 |
| RE57-14-84197 | 57-4023 | FR | SW-846:6010C | 0 | 13 |
| RE57-14-84197 | 57-4023 | FR | SW-846:6020 | 0 | 9 |
| RE57-14-84200 | 57-4023 | FTB | SW-846:8260B | 0 | 62 |

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
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P 843.556.8171 F 843.766.1178
www.gel.com

August 06, 2014

Mr. Keith Greene
Los Alamos National Laboratory
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER
Work Order: 352465
SDG: 2014-3719

Dear Mr. Greene:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on July 11, 2014, and analyzed for GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Hope Taylor for
Valerie Davis
Project Manager

Chain of Custody: 2014-3719
Enclosures

**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Work Order #: 352465**
**SDG: 2014-3719**

Table of Contents

Case Narrative.....1

Chain of Custody and Supporting Documentation.....5

Data Review Qualifier Flag Definition Sheet.....15

Volatile Analysis.....18

Case Narrative.....19

Sample Data Summary.....25

Quality Control Summary.....32

Quality Control Data.....52

Miscellaneous.....73

Semi-Volatile Analysis.....76

Case Narrative.....77

Sample Data Summary.....83

Quality Control Summary.....90

Quality Control Data.....105

Miscellaneous.....115

Perchlorates by LCMSMS Analysis.....117

Case Narrative.....118

Sample Data Summary.....124

Quality Control Summary.....127

Quality Control Data.....130

Metals Analysis.....136
Case Narrative.....137
Sample Data Summary.....142
Quality Control Summary.....148
Miscellaneous.....176
General Chem Analysis.....178
Case Narrative.....179
Sample Data Summary.....187
Quality Control Summary.....191
Radiological Analysis.....194
Sample Data Summary.....200
Quality Control Data.....203

# Case Narrative

**Case Narrative for**
**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Workorder #: 352465**
**SDG # : 2014-3719**

**August 06, 2014**

**Laboratory Identification:**

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on July 11, 2014 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C). Shipping container temperatures were checked, documented, and within specifications. There are no additional comments concerning sample receipt.

**Sample Identification** The laboratory received the following samples:

| Laboratory ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 352465003 | RE57-14-84197 |
| 352465004 | RE57-14-84200 |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package**

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Hope Taylor for
Valerie Davis
Project Manager

**List of current GEL Certifications as of 06 August 2014**

| State | Certification |
|---|---|
| Alaska | UST−110 |
| Arkansas | 88−0651 |
| CLIA | 42D0904046 |
| California NELAP | 01151CA |
| Colorado | SC00012 |
| Connecticut | PH−0169 |
| Delaware | SC000122013−10 |
| DoD ELAP/ ISO17025 A2LA | 2567.01 |
| Florida NELAP | E87156 |
| Foreign Soils Permit | P330−12−00283, P330−12−00284 |
| Georgia | SC00012 |
| Georgia SDWA | 967 |
| Hawaii | SC000122013−10 |
| Idaho Chemistry | SC00012 |
| Idaho Radiochemistry | SC00012 |
| Illinois NELAP | 200029 |
| Indiana | C−SC−01 |
| Kansas NELAP | E−10332 |
| Kentucky | 90129 |
| Louisiana NELAP | 03046 (AI33904) |
| Louisiana SDWA | LA130005 |
| Maryland | 270 |
| Massachusetts | M−SC012 |
| Michigan | 9976 |
| Mississippi | SC000122013−10 |
| Nebraska | NE−OS−26−13 |
| Nevada | SC000122014−1 |
| New Hampshire NELAP | 2054 |
| New Jersey NELAP | SC002 |
| New Mexico | SC00012 |
| New York NELAP | 11501 |
| North Carolina | 233 |
| North Carolina SDWA | 45709 |
| Oklahoma | 9904 |
| Pennsylvania NELAP | 68−00485 |
| Plant Material Permit | PDEP−12−00260 |
| South Carolina Chemistry | 10120001 |
| South Carolina GVL | 23611001 |
| South Carolina Radiochemi | 10120002 |
| Tennessee | TN 02934 |
| Texas NELAP | T104704235−14−9 |
| Utah NELAP | SC000122014−14 |
| Vermont | VT87156 |
| Virginia NELAP | 460202 |
| Washington | C780−12 |
| Wisconsin | 999887790 |

# Chain of Custody and Supporting Documentation

General Engineering Laboratories, Inc., Charleston, SC.
2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

352465

COC/Lab Request #: 2014-3719

Page 1 of 1

Client Contact:

Lab Agreement # : 126310011

Project Number :

Analysis Turnaround Time:
24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Site Name: Los Alamos National Laboratory

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 | Metals(W) |
|---|---|---|---|---|---|---|---|
| RE57-14-84187 | Jul 9 2014 | 09:04 | SO | 1 | 1 | 1 | |
| RE57-14-84195 | Jul 9 2014 | 9:04 | SO | 1 | 1 | 1 | |
| RE57-14-84197 | Jul 9 2014 | 9:55 | W | | | | 1 |
| RE57-14-84200 | Jul 9 2014 | 09:04 | SO | 1 | | | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | Melissa Montoya | 7/10/14 3:00 | P. Nient | Patricia Dent | 7-11-14 0900 |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

GEL Laboratories LLC

# SAMPLE RECEIPT & REVIEW FORM

| | |
|---|---|
| Client: LANL | SDG/AR/COC/Work Order: 2014-3719 |
| Received By: P. Wilent | Date Received: 7-11-14 |

| Suspected Hazard Information | Yes | No | *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. |
|---|---|---|---|
| COC/Samples marked as radioactive? | | X | Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0CPM |
| Classified Radioactive II or III by RSO? | | X | If yes, Were swipes taken of sample contatiners < action levels? |
| COC/Samples marked containing PCBs? | | X | |
| Package, COC, and/or Samples marked as beryllium or asbestos containing? | | X | If yes, samples are to be segregeated as Safety Controlled Samples, and opened by the GEL Safety Group. |
| Shipped as a DOT Hazardous? | | X | Hazard Class Shipped: UN#: |
| Samples identified as Foreign Soil? | | X | |

| | Sample Receipt Criteria | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items) |
|---|---|---|---|---|---|
| 1 | Shipping containers received intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 2 | Samples requiring cold preservation within (0 ≤ 6 deg. C)?* | X | | | Preservation Method: Ice bags Blue ice Dry ice None Other (describe) 3-6,17c *all temperatures are recorded in Celsius |
| 2a | Daily check performed and passed on IR temperature gun? | X | | | Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 130462966 |
| 3 | Chain of custody documents included with shipment? | X | | | |
| 4 | Sample containers intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 5 | Samples requiring chemical preservation at proper pH? | X | | | Sample ID's, containers affected and observed pH: If Preservation added, Lot#: |
| 6 | VOA vials free of headspace (defined as < 6mm bubble)? | X | | | Sample ID's and containers affected: |
| 7 | Are Encore containers present? | | | X | (If yes, immediately deliver to Volatiles laboratory) |
| 8 | Samples received within holding time? | X | | | ID's and tests affected: |
| 9 | Sample ID's on COC match ID's on bottles? | X | | | Sample ID's and containers affected: |
| 10 | Date & time on COC match date & time on bottles? | X | | | Sample ID's affected: |
| 11 | Number of containers received match number indicated on COC? | | | X | Sample ID's affected: SEE Continuation Sheet |
| 12 | Are sample containers identifiable as GEL provided? | | | X | |
| 13 | COC form is properly signed in relinquished/received sections? | X | | | |
| 14 | Carrier and tracking number. | | | | Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other<br>5908 1777 2681-4<br>5908 1777 2729-5<br>5908 1777 2659-4<br>5908 1777 2707-3c<br>5908 1777 2692-4c<br>5908 1777 2648-4c<br>5908 1777 2626-17c<br>5908 1777 2660-5c<br>5908 1777 2670-5c<br>5908 1777 2637-3c<br>5908 1777 2718-5c |

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials OP Date 7-14-14 Page 1 of 2

GEL Laboratories LLC **SAMPLE RECEIPT & REVIEW CONTINUATION FORM**

Client: LANL Received By: P. Ward Date Received: 7-11-14 SDG/AR/COC/Work Order: 2014-3719

CAMO-14-81465, 81477 For 8260b Lab rec'd (1) Container each Chain indicates (2) each.

~~CAMO-14-84766~~ P.D 7-11-14
CAMO-14-81566, 81567 For 8260b Lab rec'd (1) Container each Chain indicates (2) each.

WST36-14-84545, 84546 For SVOA, HEXP & O+G Lab rec'd (1) Containers each Chain indicates (3) each

~~WST3~~ P.D. 7-11-14
WTESR-14-78699 For SR90 Lab rec'd (1) Container Chain indicates (3).

PM (or PMA) review: Initials QP Date 7-14-14 Page 2 of 2

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 44.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A01EC2AF0

4c

521C2/ED4F/6F03

FedEx Express

J141214052201uv

1 of 2

TRK# 0201 5908 1777 2681

## MASTER ##

FRI - 11 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

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SC-US CHS

Part # 156148-434 RIT2 10/11-88

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 29.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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3 of 3

MPS# 0263 5908 1777 2729

Mstr# 5908 1777 2707 0201

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Part # 156148-434 RIT2 10/11 88

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ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

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REF: WESW1152000

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TRK# 0201 5908 1777 2659

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PRIORITY OVERNIGHT

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ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
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TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991155W300

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1 of 3

TRK# 0201 5908 1777 2707
## MASTER ##

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ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2804

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2 of 2
MPS# 0263 5908 1777 2692
Mstr# 5908 1777 2681

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Part # 156148-434 RIT2 10/11 88

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 48.0 LB MAN
CAD: 0014176/CAFE2804

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2 of 2
MPS# 0263 5908 1777 2648
Mstr# 5908 1777 2637

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Part # 156148-434 RIT2 10/11 88

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 56.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MP5R13AAV00

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TRK# 0201 5908 1777 2626

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SC-US CHS

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KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE991158W100

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KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 19.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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PRIORITY OVERNIGHT

TRK# 0201 5908 1777 2670

XX CHSA 5c

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SC-US CHS

Part # 156148-434 RIT2 10/11 ##

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2804

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWF0

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521C2/ED4F/6F03

FedEx Express

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1 of 2

TRK# 0201 5908 1777 2637
## MASTER ##

FRI - 11 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

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SC-US CHS

Part # 156148-434 RIT2 10/11 ##

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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REF: WE991155W300

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2 of 3

MPS# 0263 5908 1777 2718

Mstr# 5908 1777 2707

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PRIORITY OVERNIGHT

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SC-US CHS

Part # 156148-434 RITR 10/11

# Data Review Qualifier Flag Definition Sheet

## Data Review Qualifier Definitions

| Qualifier | Explanation |
|---|---|
| * | A quality control analyte recovery is outside of specified acceptance criteria |
| ** | Analyte is a surrogate compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL |
| A | The TIC is a suspected aldol-condensation product |
| B | Target analyte was detected in the associated blank |
| B | Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL |
| BD | Results are either below the MDC or tracer recovery is low |
| C | Analyte has been confirmed by GC/MS analysis |
| D | Results are reported from a diluted aliquot of the sample |
| d | 5-day BOD-The 2:1 depletion requirement was not met for this sample |
| E | Organics-Concentration of the target analyte exceeds the instrument calibration range |
| E | Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria |
| H | Analytical holding time was exceeded |
| h | Preparation or preservation holding time was exceeded |
| J | Value is estimated |
| N | Metals-The Matrix spike sample recovery is not within specified control limits |
| N | Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more |
| ND | Analyte concentration is not detected above the reporting limit |
| UI | Gamma Spectroscopy-Uncertain identification |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | QC Samples were not spiked with this compound |
| Z | Paint Filter Test-Particulates passed through the filter, however no free liquids were observed. |

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

# Volatile Analysis

# Case Narrative

**ChemStation Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3719**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer** |
| Analytical Method: | SW846 8260B |
| Prep Method: | SW846 5030 |
| Analytical Batch Number: | 1407979 |
| Prep Batch Number: | 1407977 |

## Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

| Sample ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 352465004 | RE57-14-84200 |
| 1203139138 | Method Blank (MB) |
| 1203139139 | Method Blank (MB) |
| 1203139140 | 352465001(RE57-14-84187) Post Spike (PS) |
| 1203139141 | 352465001(RE57-14-84187) Post Spike (PS) |
| 1203139142 | 352465001(RE57-14-84187) Post Spike Duplicate (PSD) |
| 1203139143 | 352465001(RE57-14-84187) Post Spike Duplicate (PSD) |
| 1203139144 | Laboratory Control Sample (LCS) |
| 1203139145 | Laboratory Control Sample (LCS) |
| 1203139146 | Laboratory Control Sample (LCS) |
| 1203139147 | Laboratory Control Sample (LCS) |

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 352465 001 and 002 in this SDG were analyzed on an "dry weight" basis. Samples 352465 004 in this SDG were analyzed on a "as received" basis.

## Preparation/Analytical Method Verification

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 21.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

## Calibration Information

A complete list of the initial calibration data files with the correct dates and times of analysis are shown in the Calibration History report located in the Standard Data section of the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L or 20 ug/L for low level analyses. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

### Initial Calibration
At the request of the client, linear curve fits, for target analytes that did not meet the x-intercept criteria of less than or equal to 3 times the MDL and had %RSDs less than 60%, were set to use the average response factor to quantitate data in this SDG.

### Continuing Calibration Verification Requirements
All associated calibration verification standard(s) (CCV) met the acceptance criteria.

## Quality Control (QC) Information

### Blank (MB) Statement
Target analytes were detected in the blank 1203139139 (MB) below the reporting limit.

### Surrogate Recoveries
Surrogate recoveries in all client and quality control samples were within the acceptance limits.

### Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

### QC Sample Designation
Sample 352465001 (RE57-14-84187) was designated for spike analysis.

### Matrix Spike (PS) Recovery Statement
The spike recoveries were within the required acceptance limits.

### Matrix Spike Duplicate (PSD) Recovery Statement
The spike duplicate recoveries were within the required acceptance limits.

### Relative Percent Difference (RPD) Statement
The RPDs between the matrix spike pair met the acceptance limits.

### Internal Standard (ISTD) Acceptance
The internal standard responses in all client and quality control samples met the required acceptance criteria.

## Technical Information

### Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. Samples were not analyzed within the recommended holding. However, the samples were analyzed within two times the holding period. This satisfies the client criteria.

**Sample Preservation and Integrity**
All samples met the sample preservation and integrity requirements.

**Sample Dilutions/Methanol Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-analyses were not required for samples in this SDG.

**Miscellaneous Information**

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
The following DER was generated for this SDG: 1320761.

**Manual Integrations**
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

**TIC Comment**
Tentatively identified compounds (TIC) were requested for this sample delivery group/work order. Please note that non-requested target analytes that are reported on the quantitation reports will be present on the Form I. These detected analytes are included in the calibrated method and as a result will be reported on the Sample Data Summary (Form I) or Certificate of Analysis (C of A). TIC data are included on the Sample Data Summary (Form I).

**Additional Comments**
Additional comments were not required for this SDG.

**Residual Chlorine**
Residual Chlorine was not detected in any of the samples in this SDG.

**System Configuration**

The Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description | P & T Trap |
|---|---|---|---|---|---|

| | | | | | |
|---|---|---|---|---|---|
| VOA9.I | Agilent 6890/5973 GC/MS w/ OI Eclipse/Archon Autosampler | HP6890/HP5973 | DB-624 | J&W, 60m x 0.25mm x 1.4um | Trap 10 |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 − (843) 556−8171 − www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS−LANS−MTOA6−25093−GEL)

Client SDG: 2014−3719  GEL Work Order: 352465

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

B  The target analyte was detected in the associated blank.

H  Analytical holding time was exceeded

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

DL  Indicates that sample is diluted.
RA  Indicates that sample is re−analyzed without re−extraction.
RE  Indicates that sample is re−extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP−like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Erin Haubert  **Name:** **Erin Haubert**

**Date:** **07 AUG 2014**  **Title:** **Data Validator**

# Sample Data Summary

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84187** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 17:26** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:40** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X422.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84187** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 17:26** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:40** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X422.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 9.79 | ug/kg | 0 | J |
| | unknown | 5.153 | 13.9 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84195** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 17:54** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:41** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X423.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.06 | ug/kg | 0.532 | 1.06 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 78-93-3 | 2-Butanone | HUh | 5.32 | ug/kg | 1.77 | 5.32 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 591-78-6 | 2-Hexanone | HUh | 5.32 | ug/kg | 1.77 | 5.32 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.32 | ug/kg | 1.77 | 5.32 |
| 67-64-1 | Acetone | HUh | 5.32 | ug/kg | 1.77 | 5.32 |
| 71-43-2 | Benzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 108-86-1 | Bromobenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 74-97-5 | Bromochloromethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-27-4 | Bromodichloromethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-25-2 | Bromoform | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 74-83-9 | Bromomethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-15-0 | Carbon disulfide | HUh | 5.32 | ug/kg | 1.77 | 5.32 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 108-90-7 | Chlorobenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-00-3 | Chloroethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 67-66-3 | Chloroform | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 74-87-3 | Chloromethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84195** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 17:54** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:41** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X423.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 74-95-3 | Dibromomethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 100-41-4 | Ethylbenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 74-88-4 | Iodomethane | HUh | 5.32 | ug/kg | 1.77 | 5.32 |
| 98-82-8 | Isopropylbenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-09-2 | Methylene chloride | HUh | 5.32 | ug/kg | 1.77 | 5.32 |
| 100-42-5 | Styrene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 108-88-3 | Toluene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 79-01-6 | Trichloroethylene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.32 | ug/kg | 1.77 | 5.32 |
| 75-01-4 | Vinyl chloride | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.710 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 103-65-1 | n-Propylbenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 95-47-6 | o-Xylene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.355 | 1.06 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.301 | 10.2 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465004** | **Date Received:** | **07/11/2014 09:00** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84200** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 11:19** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:27** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X409.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465004** | **Date Received:** | **07/11/2014 09:00** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84200** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 11:19** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:27** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X409.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.301 | 8.39 | ug/kg | 0 | J |

# Quality Control Summary

**Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3719**

**Matrix Type: SOLID**

| Sample ID | Client ID | DCED4 %REC | TOL %REC | BFB %REC |
|---|---|---|---|---|
| 1203139144 | LCS for batch 1407977 | 83 | 93 | 88 |
| 1203139145 | LCS for batch 1407977 | 85 | 98 | 90 |
| 1203139138 | MB for batch 1407977 | 89 | 98 | 92 |
| 352465004 | RE57-14-84200 | 88 | 96 | 90 |
| 352465001 | RE57-14-84187 | 89 | 103 | 96 |
| 352465002 | RE57-14-84195 | 89 | 99 | 86 |
| 1203139146 | LCS for batch 1407977 | 81 | 92 | 86 |
| 1203139147 | LCS for batch 1407977 | 88 | 95 | 93 |
| 1203139139 | MB for batch 1407977 | 87 | 96 | 89 |
| 1203139140 | RE57-14-84187PS | 81 | 96 | 89 |
| 1203139142 | RE57-14-84187PSD | 86 | 97 | 85 |
| 1203139141 | RE57-14-84187PS | 83 | 99 | 94 |
| 1203139143 | RE57-14-84187PSD | 86 | 98 | 93 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| DCED4 | = 1,2-Dichloroethane-d4 | (76%-122%) |
| TOL | = Toluene-d8 | (80%-120%) |
| BFB | = Bromofluorobenzene | (80%-120%) |

* Recovery outside Acceptance Limits
\# Column to be used to flag recovery values
D Sample Diluted

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PS | m,p-Xylenes | 100 | 0.00 | HUh | 98.5 | 98 | 62-124 |
| 67-64-1 | PS | Acetone | 250 | 0.00 | HUh | 220 | 88 | 42-147 |
| 74-88-4 | PS | Iodomethane | 250 | 0.00 | HUh | 243 | 97 | 68-121 |
| 75-15-0 | PS | Carbon disulfide | 250 | 0.00 | HUh | 244 | 98 | 64-147 |
| 78-93-3 | PS | 2-Butanone | 250 | 0.00 | HUh | 228 | 91 | 44-145 |
| 108-10-1 | PS | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 243 | 97 | 71-133 |
| 591-78-6 | PS | 2-Hexanone | 250 | 0.00 | HUh | 247 | 99 | 47-147 |
| 75-71-8 | PS | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 38.7 | 77 | 46-134 |
| 74-87-3 | PS | Chloromethane | 50.0 | 0.00 | HUh | 58.9 | 118 | 54-139 |
| 75-01-4 | PS | Vinyl chloride | 50.0 | 0.00 | HUh | 62.1 | 124 | 47-141 |
| 74-83-9 | PS | Bromomethane | 50.0 | 0.00 | HUh | 48.7 | 97 | 47-135 |
| 75-00-3 | PS | Chloroethane | 50.0 | 0.00 | HUh | 52.2 | 104 | 52-129 |
| 75-69-4 | PS | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 44.8 | 90 | 61-126 |
| 75-35-4 | PS | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 45.6 | 91 | 67-135 |
| 75-09-2 | PS | Methylene chloride | 50.0 | 0.00 | HUh | 44.5 | 89 | 68-123 |
| 156-60-5 | PS | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 46.8 | 94 | 67-129 |
| 75-34-3 | PS | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 46.8 | 94 | 70-125 |
| 156-59-2 | PS | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 46.7 | 93 | 70-125 |
| 594-20-7 | PS | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 44.6 | 89 | 67-129 |
| 74-97-5 | PS | Bromochloromethane | 50.0 | 0.00 | HUh | 48.5 | 97 | 73-123 |
| 67-66-3 | PS | Chloroform | 50.0 | 0.00 | HUh | 42.4 | 85 | 70-123 |
| 71-55-6 | PS | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 44.3 | 89 | 71-128 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PS | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 43.0 | 86 | 68-129 |
| 56-23-5 | PS | Carbon tetrachloride | 50.0 | 0.00 | HUh | 44.6 | 89 | 70-129 |
| 107-06-2 | PS | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 39.1 | 78 | 67-119 |
| 71-43-2 | PS | Benzene | 50.0 | 0.00 | HUh | 48.6 | 97 | 67-124 |
| 79-01-6 | PS | Trichloroethylene | 50.0 | 0.00 | HUh | 45.9 | 92 | 68-130 |
| 78-87-5 | PS | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.1 | 96 | 69-122 |
| 74-95-3 | PS | Dibromomethane | 50.0 | 0.00 | HUh | 45.5 | 91 | 73-120 |
| 75-27-4 | PS | Bromodichloromethane | 50.0 | 0.00 | HUh | 44.6 | 89 | 67-124 |
| 10061-01-5 | PS | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 45.5 | 91 | 67-127 |
| 108-88-3 | PS | Toluene | 50.0 | 0.00 | HUh | 46.2 | 92 | 64-124 |
| 10061-02-6 | PS | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 42.2 | 84 | 68-122 |
| 79-00-5 | PS | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 44.5 | 89 | 73-121 |
| 142-28-9 | PS | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 42.1 | 84 | 69-119 |
| 127-18-4 | PS | Tetrachloroethylene | 50.0 | 0.00 | HUh | 48.5 | 97 | 64-123 |
| 124-48-1 | PS | Dibromochloromethane | 50.0 | 0.00 | HUh | 48.9 | 98 | 66-122 |
| 106-93-4 | PS | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 45.1 | 90 | 73-125 |
| 108-90-7 | PS | Chlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 68-120 |
| 100-41-4 | PS | Ethylbenzene | 50.0 | 0.00 | HUh | 45.4 | 91 | 63-122 |
| 95-47-6 | PS | o-Xylene | 50.0 | 0.00 | HUh | 48.7 | 97 | 64-122 |
| 100-42-5 | PS | Styrene | 50.0 | 0.00 | HUh | 47.1 | 94 | 70-126 |
| 75-25-2 | PS | Bromoform | 50.0 | 0.00 | HUh | 46.0 | 92 | 54-131 |
| 98-82-8 | PS | Isopropylbenzene | 50.0 | 0.00 | HUh | 48.2 | 96 | 64-132 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 48.3 | 97 | 68-132 |
| 96-18-4 | PS | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 42.6 | 85 | 66-131 |
| 108-86-1 | PS | Bromobenzene | 50.0 | 0.00 | HUh | 47.8 | 96 | 67-124 |
| 103-65-1 | PS | n-Propylbenzene | 50.0 | 0.00 | HUh | 43.9 | 88 | 60-127 |
| 108-67-8 | PS | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 46.5 | 93 | 62-129 |
| 95-49-8 | PS | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 47.6 | 95 | 63-125 |
| 106-43-4 | PS | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 43.7 | 87 | 63-124 |
| 98-06-6 | PS | tert-Butylbenzene | 50.0 | 0.00 | HUh | 49.0 | 98 | 64-131 |
| 95-63-6 | PS | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 44.9 | 90 | 63-126 |
| 135-98-8 | PS | sec-Butylbenzene | 50.0 | 0.00 | HUh | 46.4 | 93 | 59-133 |
| 99-87-6 | PS | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 46.1 | 92 | 58-130 |
| 541-73-1 | PS | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 62-125 |
| 106-46-7 | PS | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 62-122 |
| 104-51-8 | PS | n-Butylbenzene | 50.0 | 0.00 | HUh | 41.0 | 82 | 55-133 |
| 96-12-8 | PS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 43.8 | 88 | 54-133 |
| 630-20-6 | PS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 48.1 | 96 | 72-126 |
| 95-50-1 | PS | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.4 | 93 | 63-123 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PSD | m,p-Xylenes | 100 | 0.00 | HUh | 96.1 | 96 | 62-124 | 2 | 0-20 |
| 67-64-1 | PSD | Acetone | 250 | 0.00 | HUh | 247 | 99 | 42-147 | 12 | 0-20 |
| 74-88-4 | PSD | Iodomethane | 250 | 0.00 | HUh | 250 | 100 | 68-121 | 3 | 0-20 |
| 75-15-0 | PSD | Carbon disulfide | 250 | 0.00 | HUh | 246 | 98 | 64-147 | 1 | 0-20 |
| 78-93-3 | PSD | 2-Butanone | 250 | 0.00 | HUh | 254 | 102 | 44-145 | 11 | 0-20 |
| 108-10-1 | PSD | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 253 | 101 | 71-133 | 4 | 0-20 |
| 591-78-6 | PSD | 2-Hexanone | 250 | 0.00 | HUh | 261 | 105 | 47-147 | 6 | 0-20 |
| 75-71-8 | PSD | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 36.6 | 73 | 46-134 | 6 | 0-20 |
| 74-87-3 | PSD | Chloromethane | 50.0 | 0.00 | HUh | 54.8 | 110 | 54-139 | 7 | 0-20 |
| 75-01-4 | PSD | Vinyl chloride | 50.0 | 0.00 | HUh | 57.5 | 115 | 47-141 | 8 | 0-20 |
| 74-83-9 | PSD | Bromomethane | 50.0 | 0.00 | HUh | 45.6 | 91 | 47-135 | 6 | 0-20 |
| 75-00-3 | PSD | Chloroethane | 50.0 | 0.00 | HUh | 49.0 | 98 | 52-129 | 6 | 0-20 |
| 75-69-4 | PSD | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 42.6 | 85 | 61-126 | 5 | 0-20 |
| 75-35-4 | PSD | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 46.5 | 93 | 67-135 | 2 | 0-20 |
| 75-09-2 | PSD | Methylene chloride | 50.0 | 0.00 | HUh | 47.0 | 94 | 68-123 | 6 | 0-20 |
| 156-60-5 | PSD | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 47.7 | 95 | 67-129 | 2 | 0-20 |
| 75-34-3 | PSD | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 47.3 | 95 | 70-125 | 1 | 0-20 |
| 156-59-2 | PSD | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 47.6 | 95 | 70-125 | 2 | 0-20 |
| 594-20-7 | PSD | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 43.4 | 87 | 67-129 | 3 | 0-20 |
| 74-97-5 | PSD | Bromochloromethane | 50.0 | 0.00 | HUh | 51.2 | 102 | 73-123 | 5 | 0-20 |
| 67-66-3 | PSD | Chloroform | 50.0 | 0.00 | HUh | 43.9 | 88 | 70-123 | 3 | 0-20 |
| 71-55-6 | PSD | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 44.1 | 88 | 71-128 | 1 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PSD | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 42.3 | 85 | 68-129 | 2 | 0-20 |
| 56-23-5 | PSD | Carbon tetrachloride | 50.0 | 0.00 | HUh | 45.7 | 91 | 70-129 | 3 | 0-20 |
| 107-06-2 | PSD | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 40.9 | 82 | 67-119 | 5 | 0-20 |
| 71-43-2 | PSD | Benzene | 50.0 | 0.00 | HUh | 48.0 | 96 | 67-124 | 1 | 0-20 |
| 79-01-6 | PSD | Trichloroethylene | 50.0 | 0.00 | HUh | 46.4 | 93 | 68-130 | 1 | 0-20 |
| 78-87-5 | PSD | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.5 | 97 | 69-122 | 1 | 0-20 |
| 74-95-3 | PSD | Dibromomethane | 50.0 | 0.00 | HUh | 46.9 | 94 | 73-120 | 3 | 0-20 |
| 75-27-4 | PSD | Bromodichloromethane | 50.0 | 0.00 | HUh | 45.7 | 91 | 67-124 | 2 | 0-20 |
| 10061-01-5 | PSD | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 45.2 | 90 | 67-127 | 1 | 0-20 |
| 108-88-3 | PSD | Toluene | 50.0 | 0.00 | HUh | 46.2 | 92 | 64-124 | 0 | 0-20 |
| 10061-02-6 | PSD | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 42.5 | 85 | 68-122 | 1 | 0-20 |
| 79-00-5 | PSD | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 45.4 | 91 | 73-121 | 2 | 0-20 |
| 142-28-9 | PSD | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 42.0 | 84 | 69-119 | 0 | 0-20 |
| 127-18-4 | PSD | Tetrachloroethylene | 50.0 | 0.00 | HUh | 48.5 | 97 | 64-123 | 0 | 0-20 |
| 124-48-1 | PSD | Dibromochloromethane | 50.0 | 0.00 | HUh | 50.8 | 102 | 66-122 | 4 | 0-20 |
| 106-93-4 | PSD | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 47.0 | 94 | 73-125 | 4 | 0-20 |
| 108-90-7 | PSD | Chlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 68-120 | 0 | 0-20 |
| 100-41-4 | PSD | Ethylbenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 63-122 | 2 | 0-20 |
| 95-47-6 | PSD | o-Xylene | 50.0 | 0.00 | HUh | 48.8 | 98 | 64-122 | 0 | 0-20 |
| 100-42-5 | PSD | Styrene | 50.0 | 0.00 | HUh | 47.7 | 95 | 70-126 | 1 | 0-20 |
| 75-25-2 | PSD | Bromoform | 50.0 | 0.00 | HUh | 47.4 | 95 | 54-131 | 3 | 0-20 |
| 98-82-8 | PSD | Isopropylbenzene | 50.0 | 0.00 | HUh | 45.8 | 92 | 64-132 | 5 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PSD | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 47.8 | 96 | 68-132 | 1 | 0-20 |
| 96-18-4 | PSD | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 43.5 | 87 | 66-131 | 2 | 0-20 |
| 108-86-1 | PSD | Bromobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 67-124 | 3 | 0-20 |
| 103-65-1 | PSD | n-Propylbenzene | 50.0 | 0.00 | HUh | 41.7 | 83 | 60-127 | 5 | 0-20 |
| 108-67-8 | PSD | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 62-129 | 5 | 0-20 |
| 95-49-8 | PSD | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 45.5 | 91 | 63-125 | 4 | 0-20 |
| 106-43-4 | PSD | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 41.9 | 84 | 63-124 | 4 | 0-20 |
| 98-06-6 | PSD | tert-Butylbenzene | 50.0 | 0.00 | HUh | 46.9 | 94 | 64-131 | 4 | 0-20 |
| 95-63-6 | PSD | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 42.6 | 85 | 63-126 | 5 | 0-20 |
| 135-98-8 | PSD | sec-Butylbenzene | 50.0 | 0.00 | HUh | 44.2 | 88 | 59-133 | 5 | 0-20 |
| 99-87-6 | PSD | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 44.2 | 88 | 58-130 | 4 | 0-20 |
| 541-73-1 | PSD | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 45.6 | 91 | 62-125 | 1 | 0-20 |
| 106-46-7 | PSD | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 44.1 | 88 | 62-122 | 0 | 0-20 |
| 104-51-8 | PSD | n-Butylbenzene | 50.0 | 0.00 | HUh | 39.3 | 79 | 55-133 | 4 | 0-20 |
| 96-12-8 | PSD | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 46.7 | 93 | 54-133 | 6 | 0-20 |
| 630-20-6 | PSD | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 49.7 | 99 | 72-126 | 3 | 0-20 |
| 95-50-1 | PSD | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.2 | 92 | 63-123 | 0 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139141**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 11:03**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PS | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 240 | 96 | 68-146 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139143**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 11:31**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PSD | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 215 | 86 | 68-146 | 11 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 92.7 | 93 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 220 | 88 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 229 | 92 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 229 | 92 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 219 | 88 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 220 | 88 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 229 | 92 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 36.0 | 72 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 51.2 | 102 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 51.4 | 103 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 43.8 | 88 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 44.7 | 89 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 41.0 | 82 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 42.0 | 84 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 41.7 | 83 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 43.7 | 87 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 43.3 | 87 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 43.9 | 88 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 43.2 | 86 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 46.9 | 94 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 41.9 | 84 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 42.8 | 86 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 39.7 | 79 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 44.8 | 90 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 37.9 | 76 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 44.9 | 90 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 44.0 | 88 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 43.7 | 87 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 43.5 | 87 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 43.5 | 87 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 44.1 | 88 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 42.8 | 86 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 40.9 | 82 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 41.3 | 83 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 38.9 | 78 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 43.8 | 88 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 49.9 | 100 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 43.4 | 87 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 43.1 | 86 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 42.7 | 85 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 45.1 | 90 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 45.5 | 91 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 47.7 | 95 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 43.6 | 87 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 43.3 | 87 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 39.9 | 80 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 44.1 | 88 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 40.6 | 81 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 43.2 | 86 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 43.1 | 86 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 41.3 | 83 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 44.9 | 90 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 42.1 | 84 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 44.0 | 88 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 43.3 | 87 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 45.1 | 90 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 43.7 | 87 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 40.2 | 80 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 45.5 | 91 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 46.1 | 92 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 44.9 | 90 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139145**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 09:25**
**Dilution: 1**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 191 | 76 | 76-130 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 101 | 101 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 232 | 93 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 257 | 103 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 254 | 102 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 231 | 92 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 230 | 92 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 239 | 96 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 37.8 | 76 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 57.6 | 115 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 60.0 | 120 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 49.2 | 98 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 50.9 | 102 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 44.1 | 88 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 46.8 | 94 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 46.1 | 92 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 48.8 | 98 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 48.3 | 97 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 49.1 | 98 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 45.9 | 92 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 52.8 | 106 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 45.0 | 90 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 46.3 | 93 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 43.9 | 88 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 47.5 | 95 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 40.3 | 81 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 49.3 | 99 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 47.0 | 94 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 48.8 | 98 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 45.7 | 91 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 45.2 | 90 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 48.2 | 96 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 45.9 | 92 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 43.3 | 87 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 43.7 | 87 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 41.9 | 84 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 47.8 | 96 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 50.4 | 101 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 46.4 | 93 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 48.0 | 96 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 45.9 | 92 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 49.9 | 100 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 50.4 | 101 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 45.7 | 91 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 45.1 | 90 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 44.5 | 89 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 38.8 | 78 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 46.7 | 93 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 42.4 | 85 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 44.0 | 88 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 46.4 | 93 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 43.1 | 86 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 46.1 | 92 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 43.2 | 86 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 45.6 | 91 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 45.4 | 91 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 47.9 | 96 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 46.2 | 92 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 42.2 | 84 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 41.9 | 84 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 49.1 | 98 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 47.1 | 94 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139147**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 09:10**
**Dilution: 1**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 207 | 83 | 76-130 |

## Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1407977** | **Instrument ID:** | **VOA9.I** | **Data File:** | **073114V9\9X406B.D** |
| **Lab Sample ID:** | **1203139138** | **Prep Date:** | **07/31/2014 07:02** | **Analyzed:** | **07/31/14 09:54** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|
| 01 LCS for batch 1407977 | 1203139144 | 073114V9\9X403L.D | 07/31/14 | 0829 |
| 02 LCS for batch 1407977 | 1203139145 | 073114V9\9X405L.D | 07/31/14 | 0925 |
| 03 RE57-14-84200 | 352465004 | 073114V9\9X409.D | 07/31/14 | 1119 |
| 04 RE57-14-84187 | 352465001 | 073114V9\9X422.D | 07/31/14 | 1726 |
| 05 RE57-14-84195 | 352465002 | 073114V9\9X423.D | 07/31/14 | 1754 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1407977** | **Instrument ID:** | **VOA9.I** | **Data File:** | **080514V9\9Y206B.D** |
| **Lab Sample ID:** | **1203139139** | **Prep Date:** | **08/05/2014 07:02** | **Analyzed:** | **08/05/14 09:38** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|
| 07 LCS for batch 1407977 | 1203139146 | 080514V9\9Y203L.D | 08/05/14 | 0813 |
| 08 LCS for batch 1407977 | 1203139147 | 080514V9\9Y205L.D | 08/05/14 | 0910 |
| 09 RE57-14-84187PS | 1203139140 | 080514V9\9Y207.D | 08/05/14 | 1006 |
| 10 RE57-14-84187PSD | 1203139142 | 080514V9\9Y208.D | 08/05/14 | 1034 |
| 11 RE57-14-84187PS | 1203139141 | 080514V9\9Y209.D | 08/05/14 | 1103 |
| 12 RE57-14-84187PSD | 1203139143 | 080514V9\9Y210.D | 08/05/14 | 1131 |

# Quality Control Data

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139138** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:54** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X406B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139138** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:54** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X406B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 5.77 | ug/kg | 0 | J |
| | unknown | 4.951 | 11.6 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139139** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:38** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y206B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | J | 1.88 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139139** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:38** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y206B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 6.4 | ug/kg | 0 | J |
| | unknown | 5.26 | 8.51 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139140** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:06** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y207.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 51.3 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 51.5 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 47.5 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 49.9 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 45.8 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 45.5 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 47.9 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 46.8 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 48.1 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 41.7 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 51.3 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 49.6 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 44.9 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | Hh | 244 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | Hh | 50.8 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | Hh | 264 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | Hh | 46.6 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 49.2 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 259 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | BHh | 235 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | Hh | 51.9 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | Hh | 51.0 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | Hh | 49.1 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | Hh | 51.9 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | Hh | 260 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | Hh | 49.4 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | Hh | 55.7 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | Hh | 45.3 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | Hh | 62.8 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139140** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:06** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y207.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 52.1 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | Hh | 48.5 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 41.3 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | Hh | 48.4 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | Hh | 259 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | Hh | 51.4 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | Hh | 47.4 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | Hh | 50.3 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | Hh | 51.8 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | Hh | 48.9 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | Hh | 47.8 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | Hh | 66.3 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 49.8 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 48.5 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | Hh | 105 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | Hh | 43.7 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | Hh | 46.8 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | Hh | 52.0 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | Hh | 52.3 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 49.9 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 45.0 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139141** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:03** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y209.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139141** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:03** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y209.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 256 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139142** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:34** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y208.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 53.0 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 47.0 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 51.0 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 48.4 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 50.5 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 49.6 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 45.1 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 46.4 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 45.5 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 49.8 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 50.1 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 43.6 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 47.2 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 44.8 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 47.1 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 46.3 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | Hh | 271 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | Hh | 279 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | Hh | 44.7 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 47.1 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 270 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | BHh | 264 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | Hh | 51.2 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | Hh | 49.4 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | Hh | 54.6 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | Hh | 50.6 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | Hh | 48.7 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | Hh | 262 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | Hh | 52.2 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | Hh | 46.8 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | Hh | 58.4 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139142** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:34** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y208.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 54.2 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | Hh | 50.0 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 39.0 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | Hh | 266 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | Hh | 50.2 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | Hh | 50.8 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | Hh | 45.4 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | Hh | 61.3 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 50.7 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 48.3 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | Hh | 103 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | Hh | 41.9 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | Hh | 44.5 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | Hh | 52.1 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | Hh | 47.2 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | Hh | 50.0 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 50.9 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 45.4 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139143** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:31** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y210.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139143** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:31** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y210.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 229 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139144** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 08:29** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X403L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 46.1 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 42.8 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 43.3 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 41.3 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 43.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 42.0 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 39.7 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 39.9 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 42.1 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 45.5 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 43.4 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 37.9 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 43.7 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 43.2 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 38.9 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 43.7 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 43.2 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 219 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 229 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 41.3 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 43.3 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 220 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | | 220 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 44.1 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 46.9 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 43.5 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 47.7 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 43.8 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 229 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 44.8 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 44.7 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 41.9 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 51.2 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139144** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 08:29** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X403L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 49.9 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 43.5 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 36.0 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 42.7 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 229 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 43.6 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 41.7 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 45.5 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 43.8 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 42.8 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 41.0 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 51.4 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 43.9 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 44.1 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 92.7 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 40.2 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 40.6 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 43.7 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 40.9 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139145** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:25** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X405L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139145** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:25** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X405L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 191 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139146** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 08:13** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y203L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 49.1 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 46.3 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 44.5 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 43.7 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 48.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 46.8 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 43.9 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 38.8 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 43.2 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 41.9 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 46.4 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 47.1 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 40.3 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 48.8 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 47.9 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 41.9 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 46.2 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 45.9 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 231 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 46.4 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 239 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 45.4 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 230 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | B | 232 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 49.3 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 46.7 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 52.8 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 45.2 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 45.7 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 49.2 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 254 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 47.5 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 48.0 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 50.9 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 45.0 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 57.6 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139146** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 08:13** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y203L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 50.4 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 45.7 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 37.8 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 45.9 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 257 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 46.1 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 50.4 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 47.8 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 45.9 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 47.0 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 44.1 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 60.0 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 49.1 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 48.2 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 101 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 42.2 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 42.4 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 49.9 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 45.6 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 46.1 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 48.8 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 43.3 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139147** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:10** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y205L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139147** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:10** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y205L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 207 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 05-AUG-14 | Federal | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| VOA GC/MS | SW846 8260B | Solid | LANL 352207, 352465 |
| **Batch ID:** | **Sample Numbers:** | | |
| 1407979 | See Below | | |

**Potentially affected work order(s)(SDG): 352207(2014-3685),352460(2014-3718),352465(2014-3719),353064(2014-3910)**

**Application Issues:**

Sample Analyzed out of Holding

Sample Prepped out of Holding

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. The following samples were prepped and analyzed out of holding:<br><br>352207-001<br>352465-001, 002, 004<br>MS 1203139140, 1203139141<br>MSD 1203139142, 1203139143 | 1. The samples were prepped, analyzed, and reported within 2x the holding time. This was acceptable per the client. |

**Originator's Name:**

Ramona Yarbrough 05-AUG-14

**Data Validator/Group Leader:**

Erin Haubert 05-AUG-14

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 06-AUG-14 | Federal | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| VOA GC/MS | SW846 8260B | Solid | LANL 352460, 353064 |

**Batch ID:**
1407979

**Sample Numbers:**
352460001, 352460002, 352460003, 352460004, 352460005, 352460006, 352460008, 352460009, 352460010, 352460011, 352460012, 352460013, 353064001, 353064002, 353064003, 353064004

**Potentially affected work order(s)(SDG): 352207(2014-3685),352460(2014-3718),352465(2014-3719),353064(2014-3910)**

**Application Issues:**

Sample Analyzed out of Holding

Other

Failed Yield for Surrogates

Sample Prepped out of Holding

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. The following samples were prepped and analyzed out of holding:<br><br>352460-001,002,003,004,005,006,008,009,010,011,012,013<br>353064-001,002,003,004<br><br>2. The following samples did not meet the acceptable recovery criteria for the internal standards.<br><br>352460-006, 009, 010, 013<br>353064-001, 003<br><br>3. The sample 353064-003 did not meet the acceptable recovery criteria for the surrogate standards. | 1. The samples were analyzed and reported within 2x the hold time. This was acceptable per the client.<br><br>2/3. Data were reported as confirmation analyses were performed. |

**Originator's Name:**

Ramona Yarbrough 06-AUG-14

**Data Validator/Group Leader:**

# Semi-Volatile Analysis

# Case Narrative

**Semi-Volatile Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3719**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry** |
| Analytical Method: | SW846 3541/8270D |
| Prep Method: | SW846 3541 |
| Analytical Batch Number: | 1403912 |
| Prep Batch Number: | 1403911 |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3541/8270D:

| Sample ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 1203128639 | MB for batch 1403911 |
| 1203128640 | Laboratory Control Sample (LCS) |
| 1203128641 | 352465001(RE57-14-84187) Matrix Spike (MS) |
| 1203128642 | 352465001(RE57-14-84187) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 32.

Raw data reports are processed and reviewed by the analyst using the data analysis software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP).

## Calibration Information

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Methodologies referenced N-Nitroso-diphenylamine. However, as stated in EPA Methodology, "N-Nitroso-diphenylamine decomposes in

the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, showed that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

**Initial Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG) in this batch. A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

**CCV Requirements**
All Calibration Verification Standards (CCV) did not meet the acceptance criteria as outlined in Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. This SDG satisfied the 8270D outlier acceptance criteria. Detected concentrations of these analytes should be considered as estimated.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG in this batch met the acceptance criteria.

**Surrogate Recoveries**
All the surrogate recoveries were within the established acceptance criteria for this SDG in this batch.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Sample 352465001 (RE57-14-84187) was selected for analysis as the matrix spike and matrix spike duplicate.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
Multiple RPD values between the MS and MSD, 1203128641 (RE57-14-84187) and 1203128642 (RE57-14-84187), were not within the 0-30% limits. Please see the QC Summary/Spike Recovery Report for the specific analytes and RPD values. These RPD failures are attributed to the large difference in the recovery values between analyte pairs in the MS and MSD. The MS and MSD passed recoveries for all the analytes. The LCS passed recoveries for all the analytes. The data are reported.

**Internal Standard (ISTD) Acceptance**
The internal standard responses used to quantitate the requested target analytes were within the required acceptance criteria for the SDG associated samples in this batch.

**Technical Information:**

**Holding Time Specifications**
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**

All procedures were performed as stated in the SOP. All reported compound mass spectra met the detection specifications in the method.

**Sample Dilutions**
The samples in this SDG in this batch did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-extractions or re-analyses were not required in this SDG in this analytical batch unless confirmations or dilutions were required.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception report (1315873 was generated for the samples in this batch for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Manual integrations, if any, are included with the raw data.

**TIC Comment**
Tentatively identified compounds (TIC) may be requested for samples 1203128639 (MB), 352465001 (RE57-14-84187) and 352465002 (RE57-14-84195) in this delivery group/work order. Please note that non-requested calibrated analytes detected in a client sample may be reported on the Form 1/Certificate of Analysis as TICs. TIC data, if requested, are included on the Sample Data Summary (Form 1) and are also included with the sample raw data.

**Additional Comments**
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to rounding differences in the calculation, the data reported in the Surrogate Recovery Report may differ slightly from the raw data. Due to software issue, the raw data may not correctly display the updated SPC limits. Please see Sample Data Summary Report and Surrogate Recovery Report for the correct surrogate acceptance limits.

**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the reviewer name associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**System Configuration**

The Semi-Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| MSD8.I | Agilent 6890/5973 GC/MS w/ 7683 Autosampler | HP6890/HP5973 | DB-5MS | 25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane) |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3719  GEL Work Order: 352465

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Barbara Bailey  **Name: Barbara Bailey**

**Date: 07 AUG 2014**  **Title: Data Validator**

# Sample Data Summary

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84187** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 16:27** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1818.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 122-66-7 | Azobenzene | U | 356 | ug/kg | 107 | 356 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 120-83-2 | 2,4-Dichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 105-67-9 | 2,4-Dimethylphenol | U | 356 | ug/kg | 107 | 356 |
| 51-28-5 | 2,4-Dinitrophenol | U | 711 | ug/kg | 107 | 711 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 356 | ug/kg | 107 | 356 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 356 | ug/kg | 107 | 356 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 95-57-8 | 2-Chlorophenol | U | 356 | ug/kg | 107 | 356 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 356 | ug/kg | 107 | 356 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 88-75-5 | 2-Nitrophenol | U | 356 | ug/kg | 107 | 356 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 356 | ug/kg | 107 | 356 |
| 101-55-3 | 4-Bromophenylphenylether | U | 356 | ug/kg | 107 | 356 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 356 | ug/kg | 142 | 356 |
| 106-47-8 | 4-Chloroaniline | U | 356 | ug/kg | 107 | 356 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 356 | ug/kg | 107 | 356 |
| 100-02-7 | 4-Nitrophenol | U | 356 | ug/kg | 107 | 356 |
| 83-32-9 | Acenaphthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 208-96-8 | Acenaphthylene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 62-53-3 | Aniline | U | 356 | ug/kg | 107 | 356 |
| 120-12-7 | Anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 56-55-3 | Benzo(a)anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 50-32-8 | Benzo(a)pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 65-85-0 | Benzoic acid | U | 711 | ug/kg | 178 | 711 |
| 100-51-6 | Benzyl alcohol | U | 356 | ug/kg | 107 | 356 |
| 85-68-7 | Butylbenzylphthalate | U | 356 | ug/kg | 107 | 356 |
| 218-01-9 | Chrysene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 84-74-2 | Di-n-butylphthalate | U | 356 | ug/kg | 107 | 356 |
| 117-84-0 | Di-n-octylphthalate | U | 356 | ug/kg | 107 | 356 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84187** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 16:27** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1818.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 132-64-9 | Dibenzofuran | U | 356 | ug/kg | 107 | 356 |
| 84-66-2 | Diethylphthalate | U | 356 | ug/kg | 107 | 356 |
| 131-11-3 | Dimethylphthalate | U | 356 | ug/kg | 107 | 356 |
| 122-39-4 | Diphenylamine | U | 356 | ug/kg | 107 | 356 |
| 206-44-0 | Fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 86-73-7 | Fluorene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 118-74-1 | Hexachlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 87-68-3 | Hexachlorobutadiene | U | 356 | ug/kg | 107 | 356 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 356 | ug/kg | 107 | 356 |
| 67-72-1 | Hexachloroethane | U | 356 | ug/kg | 107 | 356 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 78-59-1 | Isophorone | U | 356 | ug/kg | 107 | 356 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 356 | ug/kg | 107 | 356 |
| 621-64-7 | N-Nitrosodipropylamine | U | 356 | ug/kg | 107 | 356 |
| 91-20-3 | Naphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 98-95-3 | Nitrobenzene | U | 356 | ug/kg | 107 | 356 |
| 87-86-5 | Pentachlorophenol | U | 356 | ug/kg | 107 | 356 |
| 85-01-8 | Phenanthrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 108-95-2 | Phenol | U | 356 | ug/kg | 107 | 356 |
| 129-00-0 | Pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 110-86-1 | Pyridine | U | 356 | ug/kg | 107 | 356 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 356 | ug/kg | 107 | 356 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 356 | ug/kg | 107 | 356 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 356 | ug/kg | 107 | 356 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 356 | ug/kg | 107 | 356 |
| 65794-96-9 | m,p-Cresols | U | 356 | ug/kg | 107 | 356 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 356 | ug/kg | 107 | 356 |
| 95-48-7 | o-Cresol | U | 356 | ug/kg | 107 | 356 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 356 | ug/kg | 117 | 356 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 356 | ug/kg | 107 | 356 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.24 | 287 | ug/kg | 96 | NJ |
| | Unknown Aldol Condensate | 4.171 | 5630 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84187** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 16:27** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1818.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 001599-67-3 | 1-Docosene | 15.611 | 848 | ug/kg | 92 | NJ |
| 000297-03-0 | Cyclotetracosane | 19.345 | 938 | ug/kg | 94 | NJ |
| | unknown | 22.003 | 202 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84195** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 18:03** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1821.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 122-66-7 | Azobenzene | U | 354 | ug/kg | 106 | 354 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 354 | ug/kg | 106 | 354 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 354 | ug/kg | 106 | 354 |
| 120-83-2 | 2,4-Dichlorophenol | U | 354 | ug/kg | 106 | 354 |
| 105-67-9 | 2,4-Dimethylphenol | U | 354 | ug/kg | 106 | 354 |
| 51-28-5 | 2,4-Dinitrophenol | U | 707 | ug/kg | 106 | 707 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 354 | ug/kg | 106 | 354 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 354 | ug/kg | 106 | 354 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 95-57-8 | 2-Chlorophenol | U | 354 | ug/kg | 106 | 354 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 354 | ug/kg | 106 | 354 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 88-75-5 | 2-Nitrophenol | U | 354 | ug/kg | 106 | 354 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 354 | ug/kg | 106 | 354 |
| 101-55-3 | 4-Bromophenylphenylether | U | 354 | ug/kg | 106 | 354 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 354 | ug/kg | 141 | 354 |
| 106-47-8 | 4-Chloroaniline | U | 354 | ug/kg | 106 | 354 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 354 | ug/kg | 106 | 354 |
| 100-02-7 | 4-Nitrophenol | U | 354 | ug/kg | 106 | 354 |
| 83-32-9 | Acenaphthene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 208-96-8 | Acenaphthylene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 62-53-3 | Aniline | U | 354 | ug/kg | 106 | 354 |
| 120-12-7 | Anthracene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 56-55-3 | Benzo(a)anthracene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 50-32-8 | Benzo(a)pyrene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 65-85-0 | Benzoic acid | U | 707 | ug/kg | 177 | 707 |
| 100-51-6 | Benzyl alcohol | U | 354 | ug/kg | 106 | 354 |
| 85-68-7 | Butylbenzylphthalate | U | 354 | ug/kg | 106 | 354 |
| 218-01-9 | Chrysene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 84-74-2 | Di-n-butylphthalate | U | 354 | ug/kg | 106 | 354 |
| 117-84-0 | Di-n-octylphthalate | U | 354 | ug/kg | 106 | 354 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84195** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 18:03** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1821.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 132-64-9 | Dibenzofuran | U | 354 | ug/kg | 106 | 354 |
| 84-66-2 | Diethylphthalate | U | 354 | ug/kg | 106 | 354 |
| 131-11-3 | Dimethylphthalate | U | 354 | ug/kg | 106 | 354 |
| 122-39-4 | Diphenylamine | U | 354 | ug/kg | 106 | 354 |
| 206-44-0 | Fluoranthene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 86-73-7 | Fluorene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 118-74-1 | Hexachlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 87-68-3 | Hexachlorobutadiene | U | 354 | ug/kg | 106 | 354 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 354 | ug/kg | 106 | 354 |
| 67-72-1 | Hexachloroethane | U | 354 | ug/kg | 106 | 354 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 78-59-1 | Isophorone | U | 354 | ug/kg | 106 | 354 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 354 | ug/kg | 106 | 354 |
| 621-64-7 | N-Nitrosodipropylamine | U | 354 | ug/kg | 106 | 354 |
| 91-20-3 | Naphthalene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 98-95-3 | Nitrobenzene | U | 354 | ug/kg | 106 | 354 |
| 87-86-5 | Pentachlorophenol | U | 354 | ug/kg | 106 | 354 |
| 85-01-8 | Phenanthrene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 108-95-2 | Phenol | U | 354 | ug/kg | 106 | 354 |
| 129-00-0 | Pyrene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 110-86-1 | Pyridine | U | 354 | ug/kg | 106 | 354 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 354 | ug/kg | 106 | 354 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 354 | ug/kg | 106 | 354 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 354 | ug/kg | 106 | 354 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 354 | ug/kg | 106 | 354 |
| 65794-96-9 | m,p-Cresols | U | 354 | ug/kg | 106 | 354 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 354 | ug/kg | 106 | 354 |
| 95-48-7 | o-Cresol | U | 354 | ug/kg | 106 | 354 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 354 | ug/kg | 117 | 354 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 354 | ug/kg | 106 | 354 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.229 | 241 | ug/kg | 95 | NJ |
| | Unknown Aldol Condensate | 4.165 | 4930 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352465002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84195** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 18:03** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1821.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 001599-67-3 | 1-Docosene | 15.692 | 752 | ug/kg | 96 | NJ |

# Quality Control Summary

**Semi-Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3719**

**Matrix Type: SOLID**

| Sample ID | Client ID | 2FP %REC | PHL %REC | NBZ %REC | FBP %REC | TBP %REC | TPH %REC |
|---|---|---|---|---|---|---|---|
| 1203128639 | MB for batch 1403911 | 72 | 74 | 74 | 70 | 94 | 71 |
| 1203128640 | LCS for batch 1403911 | 77 | 77 | 78 | 72 | 101 | 67 |
| 352465001 | RE57-14-84187 | 61 | 65 | 56 | 53 | 86 | 70 |
| 1203128641 | RE57-14-84187MS | 51 | 51 | 45 | 47 | 83 | 73 |
| 1203128642 | RE57-14-84187MSD | 65 | 67 | 65 | 59 | 90 | 70 |
| 352465002 | RE57-14-84195 | 60 | 60 | 60 | 57 | 76 | 72 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| 2FP | = 2-Fluorophenol | (23%-107%) |
| PHL | = Phenol-d5 | (25%-108%) |
| NBZ | = Nitrobenzene-d5 | (21%-103%) |
| FBP | = 2-Fluorobiphenyl | (25%-100%) |
| TBP | = 2,4,6-Tribromophenol | (20%-122%) |
| TPH | = p-Terphenyl-d14 | (31%-124%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1403911**
**Lab Sample ID** **1203128640**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 09:32**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 62-75-9 | LCS | N-Methyl-N-nitrosomethylam | 1670 | 0.0 | 1200 | 72 | 31-84 |
| 110-86-1 | LCS | Pyridine | 1670 | 0.0 | 933 | 56 | 29-85 |
| 62-53-3 | LCS | Aniline | 1670 | 0.0 | 1280 | 77 | 34-101 |
| 108-95-2 | LCS | Phenol | 1670 | 0.0 | 1270 | 77 | 38-98 |
| 111-44-4 | LCS | bis(2-Chloroethyl) ether | 1670 | 0.0 | 1200 | 72 | 35-96 |
| 95-57-8 | LCS | 2-Chlorophenol | 1670 | 0.0 | 1290 | 77 | 38-100 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 1670 | 0.0 | 1100 | 66 | 39-110 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 1670 | 0.0 | 1140 | 68 | 40-110 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 1670 | 0.0 | 1190 | 71 | 39-93 |
| 108-60-1 | LCS | bis(2-Chloro-1-methylethyl)et | 1670 | 0.0 | 1240 | 75 | 27-109 |
| 100-51-6 | LCS | Benzyl alcohol | 1670 | 0.0 | 1240 | 74 | 35-95 |
| 95-48-7 | LCS | o-Cresol | 1670 | 0.0 | 1310 | 79 | 37-97 |
| 65794-96-9 | LCS | m,p-Cresols | 1670 | 0.0 | 1460 | 88 | 39-115 |
| 621-64-7 | LCS | N-Nitrosodipropylamine | 1670 | 0.0 | 1300 | 78 | 34-106 |
| 67-72-1 | LCS | Hexachloroethane | 1670 | 0.0 | 1130 | 68 | 34-98 |
| 98-95-3 | LCS | Nitrobenzene | 1670 | 0.0 | 1300 | 78 | 35-99 |
| 78-59-1 | LCS | Isophorone | 1670 | 0.0 | 1370 | 82 | 36-98 |
| 88-75-5 | LCS | 2-Nitrophenol | 1670 | 0.0 | 1310 | 79 | 35-106 |
| 105-67-9 | LCS | 2,4-Dimethylphenol | 1670 | 0.0 | 1240 | 74 | 35-102 |
| 111-91-1 | LCS | bis(2-Chloroethoxy)methane | 1670 | 0.0 | 1270 | 77 | 37-98 |
| 120-83-2 | LCS | 2,4-Dichlorophenol | 1670 | 0.0 | 1300 | 78 | 35-110 |
| 65-85-0 | LCS | Benzoic acid | 3330 | 0.0 | 2180 | 65 | 27-99 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1403911**
**Lab Sample ID** **1203128640**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 09:32**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 106-47-8 | LCS | 4-Chloroaniline | 1670 | 0.0 | 1080 | 65 | 32-106 |
| 87-68-3 | LCS | Hexachlorobutadiene | 1670 | 0.0 | 1230 | 74 | 32-104 |
| 59-50-7 | LCS | 4-Chloro-3-methylphenol | 1670 | 0.0 | 1340 | 80 | 35-104 |
| 91-57-6 | LCS | 2-Methylnaphthalene | 1670 | 0.0 | 1200 | 72 | 36-107 |
| 91-20-3 | LCS | Naphthalene | 1670 | 0.0 | 1240 | 74 | 38-106 |
| 77-47-4 | LCS | Hexachlorocyclopentadiene | 1670 | 0.0 | 705 | 42 | 24-84 |
| 88-06-2 | LCS | 2,4,6-Trichlorophenol | 1670 | 0.0 | 1160 | 70 | 36-98 |
| 95-95-4 | LCS | 2,4,5-Trichlorophenol | 1670 | 0.0 | 1190 | 72 | 41-103 |
| 91-58-7 | LCS | 2-Chloronaphthalene | 1670 | 0.0 | 1220 | 73 | 39-101 |
| 88-74-4 | LCS | 2-Nitroaniline<br>*o-Nitroaniline* | 1670 | 0.0 | 1240 | 74 | 34-116 |
| 99-09-2 | LCS | 3-Nitroaniline<br>*m-Nitroaniline* | 1670 | 0.0 | 1190 | 72 | 32-113 |
| 131-11-3 | LCS | Dimethylphthalate | 1670 | 0.0 | 1260 | 75 | 41-105 |
| 606-20-2 | LCS | 2,6-Dinitrotoluene | 1670 | 0.0 | 1250 | 75 | 41-103 |
| 121-14-2 | LCS | 2,4-Dinitrotoluene | 1670 | 0.0 | 1270 | 77 | 43-109 |
| 208-96-8 | LCS | Acenaphthylene | 1670 | 0.0 | 1230 | 74 | 38-103 |
| 83-32-9 | LCS | Acenaphthene | 1670 | 0.0 | 1180 | 71 | 36-105 |
| 51-28-5 | LCS | 2,4-Dinitrophenol | 1670 | 0.0 | 666 | 40 | 22-83 |
| 132-64-9 | LCS | Dibenzofuran | 1670 | 0.0 | 1190 | 71 | 38-104 |
| 84-66-2 | LCS | Diethylphthalate | 1670 | 0.0 | 1250 | 75 | 42-109 |
| 100-02-7 | LCS | 4-Nitrophenol | 1670 | 0.0 | 1200 | 72 | 23-114 |
| 86-73-7 | LCS | Fluorene | 1670 | 0.0 | 1200 | 72 | 39-102 |
| 7005-72-3 | LCS | 4-Chlorophenylphenylether | 1670 | 0.0 | 1160 | 70 | 41-104 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1403911**
**Lab Sample ID** **1203128640**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 09:32**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 100-01-6 | LCS | 4-Nitroaniline<br>*p-Nitroaniline* | 1670 | 0.0 | 1500 | 90 | 35-150 |
| 534-52-1 | LCS | 2-Methyl-4,6-dinitrophenol | 1670 | 0.0 | 1170 | 71 | 33-103 |
| 122-39-4 | LCS | Diphenylamine | 1670 | 0.0 | 1210 | 73 | 40-101 |
| 122-66-7 | LCS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1670 | 0.0 | 1320 | 79 | 33-102 |
| 101-55-3 | LCS | 4-Bromophenylphenylether | 1670 | 0.0 | 1280 | 77 | 42-110 |
| 118-74-1 | LCS | Hexachlorobenzene | 1670 | 0.0 | 1480 | 89 | 41-108 |
| 87-86-5 | LCS | Pentachlorophenol | 1670 | 0.0 | 1170 | 70 | 31-93 |
| 85-01-8 | LCS | Phenanthrene | 1670 | 0.0 | 1200 | 72 | 43-105 |
| 120-12-7 | LCS | Anthracene | 1670 | 0.0 | 1230 | 74 | 43-104 |
| 84-74-2 | LCS | Di-n-butylphthalate | 1670 | 0.0 | 1330 | 80 | 46-112 |
| 206-44-0 | LCS | Fluoranthene | 1670 | 0.0 | 1350 | 81 | 44-106 |
| 129-00-0 | LCS | Pyrene | 1670 | 0.0 | 1020 | 61 | 33-99 |
| 85-68-7 | LCS | Butylbenzylphthalate | 1670 | 0.0 | 1190 | 72 | 37-107 |
| 117-81-7 | LCS | bis(2-Ethylhexyl)phthalate | 1670 | 0.0 | 1180 | 71 | 41-104 |
| 56-55-3 | LCS | Benzo(a)anthracene | 1670 | 0.0 | 1340 | 81 | 46-108 |
| 218-01-9 | LCS | Chrysene | 1670 | 0.0 | 1400 | 84 | 47-107 |
| 117-84-0 | LCS | Di-n-octylphthalate | 1670 | 0.0 | 1410 | 85 | 41-110 |
| 205-99-2 | LCS | Benzo(b)fluoranthene | 1670 | 0.0 | 1270 | 76 | 42-111 |
| 207-08-9 | LCS | Benzo(k)fluoranthene | 1670 | 0.0 | 1290 | 78 | 43-103 |
| 50-32-8 | LCS | Benzo(a)pyrene | 1670 | 0.0 | 1350 | 81 | 45-109 |
| 193-39-5 | LCS | Indeno(1,2,3-cd)pyrene | 1670 | 0.0 | 1410 | 85 | 45-115 |
| 53-70-3 | LCS | Dibenzo(a,h)anthracene | 1670 | 0.0 | 1640 | 99 | 39-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **LCS for batch 1403911**
**Lab Sample ID** **1203128640**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 09:32**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 191-24-2 | LCS | Benzo(ghi)perylene | 1670 | 0.0 | 1390 | 84 | 43-115 |
| 91-94-1 | LCS | 3,3'-Dichlorobenzidine | 1670 | 0.0 | 1280 | 77 | 32-111 |
| 120-82-1 | LCS | 1,2,4-Trichlorobenzene | 1670 | 0.0 | 1260 | 75 | 37-98 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187MS**
**Lab Sample ID** **1203128641**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 16:59**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MS | N-Methyl-N-nitrosomethylam | 1780 | 0.00 | U | 786 | 44 | 24-86 |
| 110-86-1 | MS | Pyridine | 1780 | 0.00 | U | 632 | 36 | 24-87 |
| 62-53-3 | MS | Aniline | 1780 | 0.00 | U | 915 | 52 | 28-91 |
| 108-95-2 | MS | Phenol | 1780 | 0.00 | U | 943 | 53 | 28-108 |
| 111-44-4 | MS | bis(2-Chloroethyl) ether | 1780 | 0.00 | U | 810 | 46 | 25-102 |
| 95-57-8 | MS | 2-Chlorophenol | 1780 | 0.00 | U | 886 | 50 | 28-108 |
| 541-73-1 | MS | 1,3-Dichlorobenzene | 1780 | 0.00 | U | 688 | 39 | 24-96 |
| 106-46-7 | MS | 1,4-Dichlorobenzene | 1780 | 0.00 | U | 707 | 40 | 24-97 |
| 95-50-1 | MS | 1,2-Dichlorobenzene | 1780 | 0.00 | U | 746 | 42 | 25-99 |
| 108-60-1 | MS | bis(2-Chloro-1-methylethyl)et | 1780 | 0.00 | U | 701 | 40 | 25-105 |
| 100-51-6 | MS | Benzyl alcohol | 1780 | 0.00 | U | 818 | 46 | 21-109 |
| 95-48-7 | MS | o-Cresol | 1780 | 0.00 | U | 927 | 52 | 27-105 |
| 65794-96-9 | MS | m,p-Cresols | 1780 | 0.00 | U | 1050 | 59 | 32-123 |
| 621-64-7 | MS | N-Nitrosodipropylamine | 1780 | 0.00 | U | 835 | 47 | 23-117 |
| 67-72-1 | MS | Hexachloroethane | 1780 | 0.00 | U | 671 | 38 | 24-102 |
| 98-95-3 | MS | Nitrobenzene | 1780 | 0.00 | U | 823 | 46 | 25-104 |
| 78-59-1 | MS | Isophorone | 1780 | 0.00 | U | 886 | 50 | 24-108 |
| 88-75-5 | MS | 2-Nitrophenol | 1780 | 0.00 | U | 880 | 50 | 24-106 |
| 105-67-9 | MS | 2,4-Dimethylphenol | 1780 | 0.00 | U | 880 | 50 | 30-109 |
| 111-91-1 | MS | bis(2-Chloroethoxy)methane | 1780 | 0.00 | U | 850 | 48 | 27-104 |
| 120-83-2 | MS | 2,4-Dichlorophenol | 1780 | 0.00 | U | 958 | 54 | 31-103 |
| 65-85-0 | MS | Benzoic acid | 3550 | 0.00 | U | 1700 | 48 | 15-115 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187MS**
**Lab Sample ID** **1203128641**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 16:59**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MS | 4-Chloroaniline | 1780 | 0.00 | U | 851 | 48 | 27-100 |
| 87-68-3 | MS | Hexachlorobutadiene | 1780 | 0.00 | U | 774 | 44 | 24-105 |
| 59-50-7 | MS | 4-Chloro-3-methylphenol | 1780 | 0.00 | U | 1050 | 59 | 32-112 |
| 91-57-6 | MS | 2-Methylnaphthalene | 1780 | 0.00 | U | 807 | 45 | 23-107 |
| 91-20-3 | MS | Naphthalene | 1780 | 0.00 | U | 802 | 45 | 21-107 |
| 77-47-4 | MS | Hexachlorocyclopentadiene | 1780 | 0.00 | U | 436 | 25 | 12-106 |
| 88-06-2 | MS | 2,4,6-Trichlorophenol | 1780 | 0.00 | U | 936 | 53 | 32-103 |
| 95-95-4 | MS | 2,4,5-Trichlorophenol | 1780 | 0.00 | U | 1030 | 58 | 38-109 |
| 91-58-7 | MS | 2-Chloronaphthalene | 1780 | 0.00 | U | 873 | 49 | 27-109 |
| 88-74-4 | MS | 2-Nitroaniline<br>*o-Nitroaniline* | 1780 | 0.00 | U | 973 | 55 | 37-114 |
| 99-09-2 | MS | 3-Nitroaniline<br>*m-Nitroaniline* | 1780 | 0.00 | U | 1130 | 64 | 31-110 |
| 131-11-3 | MS | Dimethylphthalate | 1780 | 0.00 | U | 1040 | 58 | 38-110 |
| 606-20-2 | MS | 2,6-Dinitrotoluene | 1780 | 0.00 | U | 1030 | 58 | 36-107 |
| 121-14-2 | MS | 2,4-Dinitrotoluene | 1780 | 0.00 | U | 1140 | 64 | 36-115 |
| 208-96-8 | MS | Acenaphthylene | 1780 | 0.00 | U | 909 | 51 | 32-103 |
| 83-32-9 | MS | Acenaphthene | 1780 | 0.00 | U | 856 | 48 | 28-102 |
| 51-28-5 | MS | 2,4-Dinitrophenol | 1780 | 0.00 | U | 599 | 34 | 19-101 |
| 132-64-9 | MS | Dibenzofuran | 1780 | 0.00 | U | 902 | 51 | 28-117 |
| 84-66-2 | MS | Diethylphthalate | 1780 | 0.00 | U | 1110 | 63 | 40-113 |
| 100-02-7 | MS | 4-Nitrophenol | 1780 | 0.00 | U | 1180 | 66 | 12-128 |
| 86-73-7 | MS | Fluorene | 1780 | 0.00 | U | 939 | 53 | 30-115 |
| 7005-72-3 | MS | 4-Chlorophenylphenylether | 1780 | 0.00 | U | 933 | 53 | 37-110 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187MS**
**Lab Sample ID** **1203128641**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 16:59**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MS | 4-Nitroaniline<br>*p-Nitroaniline* | 1780 | 0.00 | U | 1420 | 80 | 36-141 |
| 534-52-1 | MS | 2-Methyl-4,6-dinitrophenol | 1780 | 0.00 | U | 988 | 56 | 14-116 |
| 122-39-4 | MS | Diphenylamine | 1780 | 0.00 | U | 1130 | 64 | 34-111 |
| 122-66-7 | MS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1780 | 0.00 | U | 1080 | 61 | 35-105 |
| 101-55-3 | MS | 4-Bromophenylphenylether | 1780 | 0.00 | U | 1160 | 66 | 37-112 |
| 118-74-1 | MS | Hexachlorobenzene | 1780 | 0.00 | U | 1340 | 76 | 34-111 |
| 87-86-5 | MS | Pentachlorophenol | 1780 | 0.00 | U | 1080 | 61 | 22-108 |
| 85-01-8 | MS | Phenanthrene | 1780 | 0.00 | U | 1120 | 63 | 28-119 |
| 120-12-7 | MS | Anthracene | 1780 | 0.00 | U | 1150 | 65 | 36-104 |
| 84-74-2 | MS | Di-n-butylphthalate | 1780 | 0.00 | U | 1250 | 70 | 42-119 |
| 206-44-0 | MS | Fluoranthene | 1780 | 0.00 | U | 1150 | 65 | 32-115 |
| 129-00-0 | MS | Pyrene | 1780 | 0.00 | U | 1220 | 69 | 25-119 |
| 85-68-7 | MS | Butylbenzylphthalate | 1780 | 0.00 | U | 1360 | 77 | 33-121 |
| 117-81-7 | MS | bis(2-Ethylhexyl)phthalate | 1780 | 0.00 | U | 1350 | 76 | 33-124 |
| 56-55-3 | MS | Benzo(a)anthracene | 1780 | 0.00 | U | 1330 | 75 | 27-120 |
| 218-01-9 | MS | Chrysene | 1780 | 0.00 | U | 1360 | 77 | 33-114 |
| 117-84-0 | MS | Di-n-octylphthalate | 1780 | 0.00 | U | 1400 | 79 | 36-115 |
| 205-99-2 | MS | Benzo(b)fluoranthene | 1780 | 0.00 | U | 1390 | 78 | 30-119 |
| 207-08-9 | MS | Benzo(k)fluoranthene | 1780 | 0.00 | U | 1440 | 81 | 31-125 |
| 50-32-8 | MS | Benzo(a)pyrene | 1780 | 0.00 | U | 1370 | 77 | 31-116 |
| 193-39-5 | MS | Indeno(1,2,3-cd)pyrene | 1780 | 0.00 | U | 1100 | 62 | 29-117 |
| 53-70-3 | MS | Dibenzo(a,h)anthracene | 1780 | 0.00 | U | 1300 | 73 | 26-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Sample Type:** | **Matrix Spike** |
| **Client ID:** | **RE57-14-84187MS** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203128641** | **%Moisture:** | **6.3** |
| **Instrument:** | **MSD8.I** | **Analysis Date:** | **07/18/2014 16:59** |
| **Analyst:** | **RMB** | **Prep Batch ID:** | **1403911** |
| **Inj. Vol:** | **1 uL** | **Batch ID:** | **1403912** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MS | Benzo(ghi)perylene | 1780 | 0.00 | U | 1020 | 58 | 30-109 |
| 91-94-1 | MS | 3,3'-Dichlorobenzidine | 1780 | 0.00 | U | 1180 | 67 | 28-105 |
| 120-82-1 | MS | 1,2,4-Trichlorobenzene | 1780 | 0.00 | U | 845 | 48 | 25-102 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187MSD**
**Lab Sample ID** **1203128642**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 17:31**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MSD | N-Methyl-N-nitrosomethylam | 1780 | 0.00 | U | 1020 | 58 | 24-86 | 26 | 0-30 |
| 110-86-1 | MSD | Pyridine | 1780 | 0.00 | U | 856 | 48 | 24-87 | 30 | 0-30 |
| 62-53-3 | MSD | Aniline | 1780 | 0.00 | U | 1090 | 61 | 28-91 | 17 | 0-30 |
| 108-95-2 | MSD | Phenol | 1780 | 0.00 | U | 1210 | 68 | 28-108 | 25 | 0-30 |
| 111-44-4 | MSD | bis(2-Chloroethyl) ether | 1780 | 0.00 | U | 1080 | 61 | 25-102 | 28 | 0-30 |
| 95-57-8 | MSD | 2-Chlorophenol | 1780 | 0.00 | U | 1180 | 67 | 28-108 | 29 | 0-30 |
| 541-73-1 | MSD | 1,3-Dichlorobenzene | 1780 | 0.00 | U | 979 | 55 | 24-96 | 35 * | 0-30 |
| 106-46-7 | MSD | 1,4-Dichlorobenzene | 1780 | 0.00 | U | 1000 | 57 | 24-97 | 35 * | 0-30 |
| 95-50-1 | MSD | 1,2-Dichlorobenzene | 1780 | 0.00 | U | 1040 | 59 | 25-99 | 33 * | 0-30 |
| 108-60-1 | MSD | bis(2-Chloro-1-methylethyl)et | 1780 | 0.00 | U | 1060 | 60 | 25-105 | 41 * | 0-30 |
| 100-51-6 | MSD | Benzyl alcohol | 1780 | 0.00 | U | 1110 | 63 | 21-109 | 31 * | 0-30 |
| 95-48-7 | MSD | o-Cresol | 1780 | 0.00 | U | 1240 | 70 | 27-105 | 29 | 0-30 |
| 65794-96-9 | MSD | m,p-Cresols | 1780 | 0.00 | U | 1430 | 81 | 32-123 | 31 * | 0-30 |
| 621-64-7 | MSD | N-Nitrosodipropylamine | 1780 | 0.00 | U | 1170 | 66 | 23-117 | 34 * | 0-30 |
| 67-72-1 | MSD | Hexachloroethane | 1780 | 0.00 | U | 962 | 54 | 24-102 | 36 * | 0-30 |
| 98-95-3 | MSD | Nitrobenzene | 1780 | 0.00 | U | 1200 | 68 | 25-104 | 37 * | 0-30 |
| 78-59-1 | MSD | Isophorone | 1780 | 0.00 | U | 1260 | 71 | 24-108 | 35 * | 0-30 |
| 88-75-5 | MSD | 2-Nitrophenol | 1780 | 0.00 | U | 1220 | 69 | 24-106 | 33 * | 0-30 |
| 105-67-9 | MSD | 2,4-Dimethylphenol | 1780 | 0.00 | U | 1180 | 67 | 30-109 | 29 | 0-30 |
| 111-91-1 | MSD | bis(2-Chloroethoxy)methane | 1780 | 0.00 | U | 1120 | 63 | 27-104 | 27 | 0-30 |
| 120-83-2 | MSD | 2,4-Dichlorophenol | 1780 | 0.00 | U | 1250 | 70 | 31-103 | 27 | 0-30 |
| 65-85-0 | MSD | Benzoic acid | 3550 | 0.00 | U | 2130 | 60 | 15-115 | 23 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187MSD**
**Lab Sample ID** **1203128642**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 17:31**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MSD | 4-Chloroaniline | 1780 | 0.00 | U | 915 | 52 | 27-100 | 7 | 0-30 |
| 87-68-3 | MSD | Hexachlorobutadiene | 1780 | 0.00 | U | 1050 | 59 | 24-105 | 30 | 0-30 |
| 59-50-7 | MSD | 4-Chloro-3-methylphenol | 1780 | 0.00 | U | 1300 | 74 | 32-112 | 21 | 0-30 |
| 91-57-6 | MSD | 2-Methylnaphthalene | 1780 | 0.00 | U | 1080 | 61 | 23-107 | 29 | 0-30 |
| 91-20-3 | MSD | Naphthalene | 1780 | 0.00 | U | 1070 | 60 | 21-107 | 28 | 0-30 |
| 77-47-4 | MSD | Hexachlorocyclopentadiene | 1780 | 0.00 | U | 473 | 27 | 12-106 | 8 | 0-30 |
| 88-06-2 | MSD | 2,4,6-Trichlorophenol | 1780 | 0.00 | U | 1140 | 64 | 32-103 | 20 | 0-30 |
| 95-95-4 | MSD | 2,4,5-Trichlorophenol | 1780 | 0.00 | U | 1180 | 66 | 38-109 | 13 | 0-30 |
| 91-58-7 | MSD | 2-Chloronaphthalene | 1780 | 0.00 | U | 1110 | 63 | 27-109 | 24 | 0-30 |
| 88-74-4 | MSD | 2-Nitroaniline<br>*o-Nitroaniline* | 1780 | 0.00 | U | 1160 | 65 | 37-114 | 18 | 0-30 |
| 99-09-2 | MSD | 3-Nitroaniline<br>*m-Nitroaniline* | 1780 | 0.00 | U | 1130 | 64 | 31-110 | 0 | 0-30 |
| 131-11-3 | MSD | Dimethylphthalate | 1780 | 0.00 | U | 1190 | 67 | 38-110 | 14 | 0-30 |
| 606-20-2 | MSD | 2,6-Dinitrotoluene | 1780 | 0.00 | U | 1200 | 68 | 36-107 | 15 | 0-30 |
| 121-14-2 | MSD | 2,4-Dinitrotoluene | 1780 | 0.00 | U | 1220 | 69 | 36-115 | 7 | 0-30 |
| 208-96-8 | MSD | Acenaphthylene | 1780 | 0.00 | U | 1150 | 65 | 32-103 | 23 | 0-30 |
| 83-32-9 | MSD | Acenaphthene | 1780 | 0.00 | U | 1080 | 61 | 28-102 | 23 | 0-30 |
| 51-28-5 | MSD | 2,4-Dinitrophenol | 1780 | 0.00 | U | 642 | 36 | 19-101 | 7 | 0-30 |
| 132-64-9 | MSD | Dibenzofuran | 1780 | 0.00 | U | 1120 | 63 | 28-117 | 21 | 0-30 |
| 84-66-2 | MSD | Diethylphthalate | 1780 | 0.00 | U | 1170 | 66 | 40-113 | 5 | 0-30 |
| 100-02-7 | MSD | 4-Nitrophenol | 1780 | 0.00 | U | 1260 | 71 | 12-128 | 7 | 0-30 |
| 86-73-7 | MSD | Fluorene | 1780 | 0.00 | U | 1140 | 64 | 30-115 | 19 | 0-30 |
| 7005-72-3 | MSD | 4-Chlorophenylphenylether | 1780 | 0.00 | U | 1130 | 64 | 37-110 | 19 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187MSD**
**Lab Sample ID** **1203128642**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 17:31**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MSD | 4-Nitroaniline<br>*p-Nitroaniline* | 1780 | 0.00 | U | 1430 | 81 | 36-141 | 1 | 0-30 |
| 534-52-1 | MSD | 2-Methyl-4,6-dinitrophenol | 1780 | 0.00 | U | 988 | 56 | 14-116 | 0 | 0-30 |
| 122-39-4 | MSD | Diphenylamine | 1780 | 0.00 | U | 1230 | 69 | 34-111 | 8 | 0-30 |
| 122-66-7 | MSD | Azobenzene<br>*1,2-Diphenylhydrazine* | 1780 | 0.00 | U | 1260 | 71 | 35-105 | 15 | 0-30 |
| 101-55-3 | MSD | 4-Bromophenylphenylether | 1780 | 0.00 | U | 1320 | 74 | 37-112 | 13 | 0-30 |
| 118-74-1 | MSD | Hexachlorobenzene | 1780 | 0.00 | U | 1450 | 82 | 34-111 | 8 | 0-30 |
| 87-86-5 | MSD | Pentachlorophenol | 1780 | 0.00 | U | 1110 | 62 | 22-108 | 2 | 0-30 |
| 85-01-8 | MSD | Phenanthrene | 1780 | 0.00 | U | 1150 | 65 | 28-119 | 2 | 0-30 |
| 120-12-7 | MSD | Anthracene | 1780 | 0.00 | U | 1190 | 67 | 36-104 | 3 | 0-30 |
| 84-74-2 | MSD | Di-n-butylphthalate | 1780 | 0.00 | U | 1220 | 69 | 42-119 | 3 | 0-30 |
| 206-44-0 | MSD | Fluoranthene | 1780 | 0.00 | U | 1130 | 64 | 32-115 | 1 | 0-30 |
| 129-00-0 | MSD | Pyrene | 1780 | 0.00 | U | 1150 | 65 | 25-119 | 6 | 0-30 |
| 85-68-7 | MSD | Butylbenzylphthalate | 1780 | 0.00 | U | 1240 | 70 | 33-121 | 9 | 0-30 |
| 117-81-7 | MSD | bis(2-Ethylhexyl)phthalate | 1780 | 0.00 | U | 1240 | 70 | 33-124 | 9 | 0-30 |
| 56-55-3 | MSD | Benzo(a)anthracene | 1780 | 0.00 | U | 1260 | 71 | 27-120 | 5 | 0-30 |
| 218-01-9 | MSD | Chrysene | 1780 | 0.00 | U | 1310 | 74 | 33-114 | 4 | 0-30 |
| 117-84-0 | MSD | Di-n-octylphthalate | 1780 | 0.00 | U | 1360 | 76 | 36-115 | 3 | 0-30 |
| 205-99-2 | MSD | Benzo(b)fluoranthene | 1780 | 0.00 | U | 1310 | 74 | 30-119 | 6 | 0-30 |
| 207-08-9 | MSD | Benzo(k)fluoranthene | 1780 | 0.00 | U | 1380 | 78 | 31-125 | 4 | 0-30 |
| 50-32-8 | MSD | Benzo(a)pyrene | 1780 | 0.00 | U | 1300 | 73 | 31-116 | 6 | 0-30 |
| 193-39-5 | MSD | Indeno(1,2,3-cd)pyrene | 1780 | 0.00 | U | 1010 | 57 | 29-117 | 8 | 0-30 |
| 53-70-3 | MSD | Dibenzo(a,h)anthracene | 1780 | 0.00 | U | 1200 | 68 | 26-128 | 8 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3719**
**Client ID:** **RE57-14-84187MSD**
**Lab Sample ID** **1203128642**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 17:31**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MSD | Benzo(ghi)perylene | 1780 | 0.00 | U | 947 | 53 | 30-109 | 8 | 0-30 |
| 91-94-1 | MSD | 3,3'-Dichlorobenzidine | 1780 | 0.00 | U | 1090 | 61 | 28-105 | 8 | 0-30 |
| 120-82-1 | MSD | 1,2,4-Trichlorobenzene | 1780 | 0.00 | U | 1100 | 62 | 25-102 | 26 | 0-30 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1403911** | **Instrument ID:** | **MSD8.I** | **Data File:** | **s071814.B\s8G1804.D** |
| **Lab Sample ID:** | **1203128639** | **Prep Date:** | **07/17/2014 10:55** | **Analyzed:** | **07/18/14 09:00** |
| **Column:** | **DB-5ms** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1403911 | 1203128640 | s071814.B\s8G1805.D | 07/18/14 | 0932 |
| 02 | RE57-14-84187 | 352465001 | s071814.B\s8G1818.D | 07/18/14 | 1627 |
| 03 | RE57-14-84187MS | 1203128641 | s071814.B\s8G1819.D | 07/18/14 | 1659 |
| 04 | RE57-14-84187MSD | 1203128642 | s071814.B\s8G1820.D | 07/18/14 | 1731 |
| 05 | RE57-14-84195 | 352465002 | s071814.B\s8G1821.D | 07/18/14 | 1803 |

# Quality Control Data

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128639** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:00** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1804.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 122-66-7 | Azobenzene | U | 333 | ug/kg | 100 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 333 | ug/kg | 100 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 333 | ug/kg | 100 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | U | 333 | ug/kg | 100 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | U | 333 | ug/kg | 100 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | U | 666 | ug/kg | 100 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 333 | ug/kg | 100 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 333 | ug/kg | 100 | 333 |
| 91-58-7 | 2-Chloronaphthalene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 95-57-8 | 2-Chlorophenol | U | 333 | ug/kg | 100 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 333 | ug/kg | 100 | 333 |
| 91-57-6 | 2-Methylnaphthalene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 88-75-5 | 2-Nitrophenol | U | 333 | ug/kg | 100 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 333 | ug/kg | 100 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | U | 333 | ug/kg | 100 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 333 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | U | 333 | ug/kg | 100 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 333 | ug/kg | 100 | 333 |
| 100-02-7 | 4-Nitrophenol | U | 333 | ug/kg | 100 | 333 |
| 83-32-9 | Acenaphthene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 208-96-8 | Acenaphthylene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 62-53-3 | Aniline | U | 333 | ug/kg | 100 | 333 |
| 120-12-7 | Anthracene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 65-85-0 | Benzoic acid | U | 666 | ug/kg | 167 | 666 |
| 100-51-6 | Benzyl alcohol | U | 333 | ug/kg | 100 | 333 |
| 85-68-7 | Butylbenzylphthalate | U | 333 | ug/kg | 100 | 333 |
| 218-01-9 | Chrysene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | U | 333 | ug/kg | 100 | 333 |
| 117-84-0 | Di-n-octylphthalate | U | 333 | ug/kg | 100 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128639** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:00** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1804.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 132-64-9 | Dibenzofuran | U | 333 | ug/kg | 100 | 333 |
| 84-66-2 | Diethylphthalate | U | 333 | ug/kg | 100 | 333 |
| 131-11-3 | Dimethylphthalate | U | 333 | ug/kg | 100 | 333 |
| 122-39-4 | Diphenylamine | U | 333 | ug/kg | 100 | 333 |
| 206-44-0 | Fluoranthene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 86-73-7 | Fluorene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 118-74-1 | Hexachlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 87-68-3 | Hexachlorobutadiene | U | 333 | ug/kg | 100 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 333 | ug/kg | 100 | 333 |
| 67-72-1 | Hexachloroethane | U | 333 | ug/kg | 100 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 78-59-1 | Isophorone | U | 333 | ug/kg | 100 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 333 | ug/kg | 100 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | U | 333 | ug/kg | 100 | 333 |
| 91-20-3 | Naphthalene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 98-95-3 | Nitrobenzene | U | 333 | ug/kg | 100 | 333 |
| 87-86-5 | Pentachlorophenol | U | 333 | ug/kg | 100 | 333 |
| 85-01-8 | Phenanthrene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 108-95-2 | Phenol | U | 333 | ug/kg | 100 | 333 |
| 129-00-0 | Pyrene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 110-86-1 | Pyridine | U | 333 | ug/kg | 100 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 333 | ug/kg | 100 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 333 | ug/kg | 100 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 333 | ug/kg | 100 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 333 | ug/kg | 100 | 333 |
| 65794-96-9 | m,p-Cresols | U | 333 | ug/kg | 100 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 333 | ug/kg | 100 | 333 |
| 95-48-7 | o-Cresol | U | 333 | ug/kg | 100 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 333 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 333 | ug/kg | 100 | 333 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.224 | 275 | ug/kg | 94 | NJ |
| | Unknown Aldol Condensate | 4.155 | 4090 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128639** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:00** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1804.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 6.454 | 156 | ug/kg | 0 | J |
| 000296-56-0 | Cycloeicosane | 15.676 | 272 | ug/kg | 98 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128640** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1805.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1260 | ug/kg | 99.9 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1190 | ug/kg | 99.9 | 333 |
| 122-66-7 | Azobenzene | | 1320 | ug/kg | 99.9 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 1100 | ug/kg | 99.9 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1140 | ug/kg | 99.9 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1190 | ug/kg | 99.9 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1160 | ug/kg | 99.9 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | | 1300 | ug/kg | 99.9 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | | 1240 | ug/kg | 99.9 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | J | 666 | ug/kg | 99.9 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1270 | ug/kg | 99.9 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1250 | ug/kg | 99.9 | 333 |
| 91-58-7 | 2-Chloronaphthalene | | 1220 | ug/kg | 9.99 | 33.3 |
| 95-57-8 | 2-Chlorophenol | | 1290 | ug/kg | 99.9 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 1170 | ug/kg | 99.9 | 333 |
| 91-57-6 | 2-Methylnaphthalene | | 1200 | ug/kg | 9.99 | 33.3 |
| 88-75-5 | 2-Nitrophenol | | 1310 | ug/kg | 99.9 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1280 | ug/kg | 99.9 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | | 1280 | ug/kg | 99.9 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1340 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | | 1080 | ug/kg | 99.9 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1160 | ug/kg | 99.9 | 333 |
| 100-02-7 | 4-Nitrophenol | | 1200 | ug/kg | 99.9 | 333 |
| 83-32-9 | Acenaphthene | | 1180 | ug/kg | 9.99 | 33.3 |
| 208-96-8 | Acenaphthylene | | 1230 | ug/kg | 9.99 | 33.3 |
| 62-53-3 | Aniline | | 1280 | ug/kg | 99.9 | 333 |
| 120-12-7 | Anthracene | | 1230 | ug/kg | 9.99 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | | 1340 | ug/kg | 9.99 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | | 1350 | ug/kg | 9.99 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | | 1270 | ug/kg | 9.99 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | | 1390 | ug/kg | 9.99 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | | 1290 | ug/kg | 9.99 | 33.3 |
| 65-85-0 | Benzoic acid | | 2180 | ug/kg | 167 | 666 |
| 100-51-6 | Benzyl alcohol | | 1240 | ug/kg | 99.9 | 333 |
| 85-68-7 | Butylbenzylphthalate | | 1190 | ug/kg | 99.9 | 333 |
| 218-01-9 | Chrysene | | 1400 | ug/kg | 9.99 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | | 1330 | ug/kg | 99.9 | 333 |
| 117-84-0 | Di-n-octylphthalate | | 1410 | ug/kg | 99.9 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128640** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1805.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1640 | ug/kg | 9.99 | 33.3 |
| 132-64-9 | Dibenzofuran | | 1190 | ug/kg | 99.9 | 333 |
| 84-66-2 | Diethylphthalate | | 1250 | ug/kg | 99.9 | 333 |
| 131-11-3 | Dimethylphthalate | | 1260 | ug/kg | 99.9 | 333 |
| 122-39-4 | Diphenylamine | | 1210 | ug/kg | 99.9 | 333 |
| 206-44-0 | Fluoranthene | | 1350 | ug/kg | 9.99 | 33.3 |
| 86-73-7 | Fluorene | | 1200 | ug/kg | 9.99 | 33.3 |
| 118-74-1 | Hexachlorobenzene | | 1480 | ug/kg | 99.9 | 333 |
| 87-68-3 | Hexachlorobutadiene | | 1230 | ug/kg | 99.9 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | | 705 | ug/kg | 99.9 | 333 |
| 67-72-1 | Hexachloroethane | | 1130 | ug/kg | 99.9 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1410 | ug/kg | 9.99 | 33.3 |
| 78-59-1 | Isophorone | | 1370 | ug/kg | 99.9 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1200 | ug/kg | 99.9 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | | 1300 | ug/kg | 99.9 | 333 |
| 91-20-3 | Naphthalene | | 1240 | ug/kg | 9.99 | 33.3 |
| 98-95-3 | Nitrobenzene | | 1300 | ug/kg | 99.9 | 333 |
| 87-86-5 | Pentachlorophenol | | 1170 | ug/kg | 99.9 | 333 |
| 85-01-8 | Phenanthrene | | 1200 | ug/kg | 9.99 | 33.3 |
| 108-95-2 | Phenol | | 1270 | ug/kg | 99.9 | 333 |
| 129-00-0 | Pyrene | | 1020 | ug/kg | 9.99 | 33.3 |
| 110-86-1 | Pyridine | | 933 | ug/kg | 99.9 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 1240 | ug/kg | 99.9 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1270 | ug/kg | 99.9 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1200 | ug/kg | 99.9 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1180 | ug/kg | 99.9 | 333 |
| 65794-96-9 | m,p-Cresols | | 1460 | ug/kg | 99.9 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1190 | ug/kg | 99.9 | 333 |
| 95-48-7 | o-Cresol | | 1310 | ug/kg | 99.9 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1240 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1500 | ug/kg | 99.9 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203128641** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 16:59** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1819.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 845 | ug/kg | 107 | 355 |
| 95-50-1 | 1,2-Dichlorobenzene | | 746 | ug/kg | 107 | 355 |
| 122-66-7 | Azobenzene | | 1080 | ug/kg | 107 | 355 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 688 | ug/kg | 107 | 355 |
| 106-46-7 | 1,4-Dichlorobenzene | | 707 | ug/kg | 107 | 355 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1030 | ug/kg | 107 | 355 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 936 | ug/kg | 107 | 355 |
| 120-83-2 | 2,4-Dichlorophenol | | 958 | ug/kg | 107 | 355 |
| 105-67-9 | 2,4-Dimethylphenol | | 880 | ug/kg | 107 | 355 |
| 51-28-5 | 2,4-Dinitrophenol | J | 599 | ug/kg | 107 | 710 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1140 | ug/kg | 107 | 355 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1030 | ug/kg | 107 | 355 |
| 91-58-7 | 2-Chloronaphthalene | | 873 | ug/kg | 10.7 | 35.5 |
| 95-57-8 | 2-Chlorophenol | | 886 | ug/kg | 107 | 355 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 988 | ug/kg | 107 | 355 |
| 91-57-6 | 2-Methylnaphthalene | | 807 | ug/kg | 10.7 | 35.5 |
| 88-75-5 | 2-Nitrophenol | | 880 | ug/kg | 107 | 355 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1180 | ug/kg | 107 | 355 |
| 101-55-3 | 4-Bromophenylphenylether | | 1160 | ug/kg | 107 | 355 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1050 | ug/kg | 142 | 355 |
| 106-47-8 | 4-Chloroaniline | | 851 | ug/kg | 107 | 355 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 933 | ug/kg | 107 | 355 |
| 100-02-7 | 4-Nitrophenol | | 1180 | ug/kg | 107 | 355 |
| 83-32-9 | Acenaphthene | | 856 | ug/kg | 10.7 | 35.5 |
| 208-96-8 | Acenaphthylene | | 909 | ug/kg | 10.7 | 35.5 |
| 62-53-3 | Aniline | | 915 | ug/kg | 107 | 355 |
| 120-12-7 | Anthracene | | 1150 | ug/kg | 10.7 | 35.5 |
| 56-55-3 | Benzo(a)anthracene | | 1330 | ug/kg | 10.7 | 35.5 |
| 50-32-8 | Benzo(a)pyrene | | 1370 | ug/kg | 10.7 | 35.5 |
| 205-99-2 | Benzo(b)fluoranthene | | 1390 | ug/kg | 10.7 | 35.5 |
| 191-24-2 | Benzo(ghi)perylene | | 1020 | ug/kg | 10.7 | 35.5 |
| 207-08-9 | Benzo(k)fluoranthene | | 1440 | ug/kg | 10.7 | 35.5 |
| 65-85-0 | Benzoic acid | | 1700 | ug/kg | 178 | 710 |
| 100-51-6 | Benzyl alcohol | | 818 | ug/kg | 107 | 355 |
| 85-68-7 | Butylbenzylphthalate | | 1360 | ug/kg | 107 | 355 |
| 218-01-9 | Chrysene | | 1360 | ug/kg | 10.7 | 35.5 |
| 84-74-2 | Di-n-butylphthalate | | 1250 | ug/kg | 107 | 355 |
| 117-84-0 | Di-n-octylphthalate | | 1400 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203128641** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 16:59** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1819.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1300 | ug/kg | 10.7 | 35.5 |
| 132-64-9 | Dibenzofuran | | 902 | ug/kg | 107 | 355 |
| 84-66-2 | Diethylphthalate | | 1110 | ug/kg | 107 | 355 |
| 131-11-3 | Dimethylphthalate | | 1040 | ug/kg | 107 | 355 |
| 122-39-4 | Diphenylamine | | 1130 | ug/kg | 107 | 355 |
| 206-44-0 | Fluoranthene | | 1150 | ug/kg | 10.7 | 35.5 |
| 86-73-7 | Fluorene | | 939 | ug/kg | 10.7 | 35.5 |
| 118-74-1 | Hexachlorobenzene | | 1340 | ug/kg | 107 | 355 |
| 87-68-3 | Hexachlorobutadiene | | 774 | ug/kg | 107 | 355 |
| 77-47-4 | Hexachlorocyclopentadiene | | 436 | ug/kg | 107 | 355 |
| 67-72-1 | Hexachloroethane | | 671 | ug/kg | 107 | 355 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1100 | ug/kg | 10.7 | 35.5 |
| 78-59-1 | Isophorone | | 886 | ug/kg | 107 | 355 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 786 | ug/kg | 107 | 355 |
| 621-64-7 | N-Nitrosodipropylamine | | 835 | ug/kg | 107 | 355 |
| 91-20-3 | Naphthalene | | 802 | ug/kg | 10.7 | 35.5 |
| 98-95-3 | Nitrobenzene | | 823 | ug/kg | 107 | 355 |
| 87-86-5 | Pentachlorophenol | | 1080 | ug/kg | 107 | 355 |
| 85-01-8 | Phenanthrene | | 1120 | ug/kg | 10.7 | 35.5 |
| 108-95-2 | Phenol | | 943 | ug/kg | 107 | 355 |
| 129-00-0 | Pyrene | | 1220 | ug/kg | 10.7 | 35.5 |
| 110-86-1 | Pyridine | | 632 | ug/kg | 107 | 355 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 701 | ug/kg | 107 | 355 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 850 | ug/kg | 107 | 355 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 810 | ug/kg | 107 | 355 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1350 | ug/kg | 107 | 355 |
| 65794-96-9 | m,p-Cresols | | 1050 | ug/kg | 107 | 355 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1130 | ug/kg | 107 | 355 |
| 95-48-7 | o-Cresol | | 927 | ug/kg | 107 | 355 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 973 | ug/kg | 117 | 355 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1420 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203128642** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 17:31** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1820.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1100 | ug/kg | 107 | 355 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1040 | ug/kg | 107 | 355 |
| 122-66-7 | Azobenzene | | 1260 | ug/kg | 107 | 355 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 979 | ug/kg | 107 | 355 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1000 | ug/kg | 107 | 355 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1180 | ug/kg | 107 | 355 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1140 | ug/kg | 107 | 355 |
| 120-83-2 | 2,4-Dichlorophenol | | 1250 | ug/kg | 107 | 355 |
| 105-67-9 | 2,4-Dimethylphenol | | 1180 | ug/kg | 107 | 355 |
| 51-28-5 | 2,4-Dinitrophenol | J | 642 | ug/kg | 107 | 710 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1220 | ug/kg | 107 | 355 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1200 | ug/kg | 107 | 355 |
| 91-58-7 | 2-Chloronaphthalene | | 1110 | ug/kg | 10.7 | 35.5 |
| 95-57-8 | 2-Chlorophenol | | 1180 | ug/kg | 107 | 355 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 988 | ug/kg | 107 | 355 |
| 91-57-6 | 2-Methylnaphthalene | | 1080 | ug/kg | 10.7 | 35.5 |
| 88-75-5 | 2-Nitrophenol | | 1220 | ug/kg | 107 | 355 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1090 | ug/kg | 107 | 355 |
| 101-55-3 | 4-Bromophenylphenylether | | 1320 | ug/kg | 107 | 355 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1300 | ug/kg | 142 | 355 |
| 106-47-8 | 4-Chloroaniline | | 915 | ug/kg | 107 | 355 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1130 | ug/kg | 107 | 355 |
| 100-02-7 | 4-Nitrophenol | | 1260 | ug/kg | 107 | 355 |
| 83-32-9 | Acenaphthene | | 1080 | ug/kg | 10.7 | 35.5 |
| 208-96-8 | Acenaphthylene | | 1150 | ug/kg | 10.7 | 35.5 |
| 62-53-3 | Aniline | | 1090 | ug/kg | 107 | 355 |
| 120-12-7 | Anthracene | | 1190 | ug/kg | 10.7 | 35.5 |
| 56-55-3 | Benzo(a)anthracene | | 1260 | ug/kg | 10.7 | 35.5 |
| 50-32-8 | Benzo(a)pyrene | | 1300 | ug/kg | 10.7 | 35.5 |
| 205-99-2 | Benzo(b)fluoranthene | | 1310 | ug/kg | 10.7 | 35.5 |
| 191-24-2 | Benzo(ghi)perylene | | 947 | ug/kg | 10.7 | 35.5 |
| 207-08-9 | Benzo(k)fluoranthene | | 1380 | ug/kg | 10.7 | 35.5 |
| 65-85-0 | Benzoic acid | | 2130 | ug/kg | 178 | 710 |
| 100-51-6 | Benzyl alcohol | | 1110 | ug/kg | 107 | 355 |
| 85-68-7 | Butylbenzylphthalate | | 1240 | ug/kg | 107 | 355 |
| 218-01-9 | Chrysene | | 1310 | ug/kg | 10.7 | 35.5 |
| 84-74-2 | Di-n-butylphthalate | | 1220 | ug/kg | 107 | 355 |
| 117-84-0 | Di-n-octylphthalate | | 1360 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3719** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203128642** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 17:31** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1820.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1200 | ug/kg | 10.7 | 35.5 |
| 132-64-9 | Dibenzofuran | | 1120 | ug/kg | 107 | 355 |
| 84-66-2 | Diethylphthalate | | 1170 | ug/kg | 107 | 355 |
| 131-11-3 | Dimethylphthalate | | 1190 | ug/kg | 107 | 355 |
| 122-39-4 | Diphenylamine | | 1230 | ug/kg | 107 | 355 |
| 206-44-0 | Fluoranthene | | 1130 | ug/kg | 10.7 | 35.5 |
| 86-73-7 | Fluorene | | 1140 | ug/kg | 10.7 | 35.5 |
| 118-74-1 | Hexachlorobenzene | | 1450 | ug/kg | 107 | 355 |
| 87-68-3 | Hexachlorobutadiene | | 1050 | ug/kg | 107 | 355 |
| 77-47-4 | Hexachlorocyclopentadiene | | 473 | ug/kg | 107 | 355 |
| 67-72-1 | Hexachloroethane | | 962 | ug/kg | 107 | 355 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1010 | ug/kg | 10.7 | 35.5 |
| 78-59-1 | Isophorone | | 1260 | ug/kg | 107 | 355 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1020 | ug/kg | 107 | 355 |
| 621-64-7 | N-Nitrosodipropylamine | | 1170 | ug/kg | 107 | 355 |
| 91-20-3 | Naphthalene | | 1070 | ug/kg | 10.7 | 35.5 |
| 98-95-3 | Nitrobenzene | | 1200 | ug/kg | 107 | 355 |
| 87-86-5 | Pentachlorophenol | | 1110 | ug/kg | 107 | 355 |
| 85-01-8 | Phenanthrene | | 1150 | ug/kg | 10.7 | 35.5 |
| 108-95-2 | Phenol | | 1210 | ug/kg | 107 | 355 |
| 129-00-0 | Pyrene | | 1150 | ug/kg | 10.7 | 35.5 |
| 110-86-1 | Pyridine | | 856 | ug/kg | 107 | 355 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 1060 | ug/kg | 107 | 355 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1120 | ug/kg | 107 | 355 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1080 | ug/kg | 107 | 355 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1240 | ug/kg | 107 | 355 |
| 65794-96-9 | m,p-Cresols | | 1430 | ug/kg | 107 | 355 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1130 | ug/kg | 107 | 355 |
| 95-48-7 | o-Cresol | | 1240 | ug/kg | 107 | 355 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1160 | ug/kg | 117 | 355 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1430 | ug/kg | 107 | 355 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 22-JUL-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| SEMIVOA GC/MS | SW846 3541/8270D | Solid | ARSL (LANL) |
| **Batch ID:** | **Sample Numbers:** | | |
| 1403912 | See Below | | |

**Potentially affected work order(s)(SDG): 352460(2014-3718),352465(2014-3719)**

**Application Issues:**

Failed RPD for MS/MSD, or PS/PSD

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Multiple RPD values between the 1203128641MS and 1203128642MSD were not within the 0-30% limits. Please see the QC Summary/Spike Recovery Report for the specific analytes and associated RPD values. | 1. These RPD failures are attributed to the large difference in the recovery values between analyte pairs in the MS and MSD. The MS and MSD passed recoveries for all the analytes. The LCS passed recoveries for all the analytes. The data are reported. |

**Originator's Name:**

Richard Bomar 23-JUL-14

**Data Validator/Group Leader:**

Herbert Maier 23-JUL-14

# Perchlorates by LCMSMS Analysis

# Case Narrative

**Perchlorate by LC-MS/MS**
**ARS International, LLC (ARSL)**
**SDG 2014-3719**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography-Mass Spectrometry/Mass Spectrometry (LC-MS/MS) by EPA Method 6850 Modified (6850M)** |
| Analytical Method: | SW846 6850 Modified |
| Prep Method: | SW846 6850 Modified |
| Analytical Batch Number: | 1402719 |
| Prep Batch Number: | 1402718 |

## Sample Analysis

| Sample ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 1203125790 | Interference Check Sample (ICS) |
| 1203125786 | Method Blank (MB) |
| 1203125787 | Laboratory Control Sample (LCS) |
| 1203125788 | 352460002(RE57-14-84134) Matrix Spike (MS) |
| 1203125789 | 352460002(RE57-14-84134) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP).

The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 11.

## Calibration Information

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

**ICV Requirements**
The initial calibration verification standard (ICV) met the acceptance criteria.

**CCB Requirements**
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

**CCV Requirements**
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

**Low Level Standard (CRI) Requirements**
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Interference Check Sample (ICS)**
The ICS spike recoveries met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Client sample 352460002 (RE57-14-84134) from SDG 2014-3718 was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
The RPDs between the MS and MSD met the acceptance limits.

**Retention Time Standard Area Acceptance**
The retention time standard areas were within the required acceptance criteria for all samples and QC.

**Retention Time**
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard.

The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used.

In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

## Technical Information

**Holding Time Specifications**
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-extractions or re-analyses were not required in this SDG.

## Miscellaneous Information

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents.

A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

**Method Comments**
The samples in this SDG were not originally analyzed using EPA Method 314.0.

**Additional Comments**
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred.

Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

**Perchlorate Isotope Ratio**
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples.

Please see the isotope ratio criteria in the Miscellaneous Section.

## System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for Perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1 and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for Perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package.

Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

## Chromatographic Columns

Chromatographic separation of Perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

## Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3719  GEL Work Order: 352465

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Michael A. Penny Jr.  **Name: Michael Penny**

**Date: 17 JUL 2014**  **Title: Group Leader**

# Sample Data Summary

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84187

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3719

**GEL Sample ID:** 352465001

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.7

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .528 | 2.11 | 2.11 | ug/kg | U | 1 | 14-JUL-14 21:20 | per0714061a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 21:20 | per0714061a |
| 14797-73-0 | Perchlorate-101 | .528 | 2.11 | 2.11 | ug/kg | U | 1 | 14-JUL-14 21:20 | per0714061a |
| | Perchlorate-O(18) | | | 4.98 | ug/kg | | 1 | 14-JUL-14 21:20 | per0714061a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84195

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3719

**GEL Sample ID:** 352465002

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.9

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .524 | 2.1 | 2.10 | ug/kg | U | 1 | 14-JUL-14 21:29 | per0714062a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 21:29 | per0714062a |
| 14797-73-0 | Perchlorate-101 | .524 | 2.1 | 2.10 | ug/kg | U | 1 | 14-JUL-14 21:29 | per0714062a |
| | Perchlorate-O(18) | | | 4.88 | ug/kg | | 1 | 14-JUL-14 21:29 | per0714062a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Quality Control Summary

## Perchlorate Laboratory Control Sample

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No. (SDG):** 2014-3719

**Extract Batch Code:** 1402718

**Date Filtered:** 14-JUL-14

**Matrix:** SOIL

**Sample ID:** 1203125787

| Analyte^ | True | Found | Units | %Rec | Q | Control Limits |
|---|---|---|---|---|---|---|
| Perchlorate | 1.98 | 1.86 | ug/kg | 93.7 | | 70 - 130 |
| Perchlorate Isotope Ratio | | 3.14 | | | | - |
| Perchlorate-101 | 1.98 | 1.86 | ug/kg | 94.2 | | 70 - 130 |
| Perchlorate-O(18) | | 4.87 | ug/kg | | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

## Perchlorate Spike/Spike Duplicate Summary

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No (SDG):** 2014-3719

**Extract Batch Code:** 1402718

**Date Extracted:** 14-JUL-14

**GEL MS/PS ID:** 1203125788

**Client ID:** RE57-14-84134

**GEL MSD/PSD ID:** 1203125789

**QC Type:** MS

| Compound^ | Spike Added | Sample Conc | Units | MS Conc | MS Rec # | MSD Conc | MSD Rec # | RPD # | RPD Limit | Recovery Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 2.12 | 5.16 | ug/kg | 7.08 | 90.8 | 7.35 | 104 | 3.75 | 30 | 75 - 125 |
| Perchlorate Isotope Ratio | 0 | 3.11 | | 3.07 | | 3.15 | | 2.55 | | - |
| Perchlorate-101 | 2.12 | 5.22 | ug/kg | 7.27 | 96.7 | 7.35 | 101 | 1.19 | 30 | 75 - 125 |
| Perchlorate-O(18) | 0 | 5.13 | ug/kg | 5.07 | | 5.16 | | 1.74 | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

# Quality Control Data

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
MB

**Date Received:** 14-JUL-14

**GEL Job No (SDG):** 2014-3719

**GEL Sample ID:** 1203125786

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .493 | 1.97 | 1.97 | ug/kg | U | 1 | 14-JUL-14 18:03 | per0714039a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 18:03 | per0714039a |
| 14797-73-0 | Perchlorate-101 | .493 | 1.97 | 1.97 | ug/kg | U | 1 | 14-JUL-14 18:03 | per0714039a |
| | Perchlorate-O(18) | | | 4.79 | ug/kg | | 1 | 14-JUL-14 18:03 | per0714039a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
LCS

**Date Received:** 14-JUL-14

**GEL Job No (SDG):** 2014-3719

**GEL Sample ID:** 1203125787

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .495 | 1.98 | 1.86 | ug/kg | J | 1 | 14-JUL-14 18:12 | per0714040a |
| | Perchlorate Isotope Ratio | | | 3.14 | | | 1 | 14-JUL-14 18:12 | per0714040a |
| 14797-73-0 | Perchlorate-101 | .495 | 1.98 | 1.86 | ug/kg | J | 1 | 14-JUL-14 18:12 | per0714040a |
| | Perchlorate-O(18) | | | 4.87 | ug/kg | | 1 | 14-JUL-14 18:12 | per0714040a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
ICS

**Date Received:**

**GEL Job No (SDG):** 2014-3719

**GEL Sample ID:** 1203125790

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .5 | 2 | 1.85 | ug/kg | J | 1 | 14-JUL-14 18:21 | per0714041a |
| | Perchlorate Isotope Ratio | | | 3.13 | | | 1 | 14-JUL-14 18:21 | per0714041a |
| 14797-73-0 | Perchlorate-101 | .5 | 2 | 1.87 | ug/kg | J | 1 | 14-JUL-14 18:21 | per0714041a |
| | Perchlorate-O(18) | | | 4.83 | ug/kg | | 1 | 14-JUL-14 18:21 | per0714041a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84134MS

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3719

**GEL Sample ID:** 1203125788

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .529 | 2.12 | 7.08 | ug/kg | | 1 | 14-JUL-14 18:48 | per0714044a |
| | Perchlorate Isotope Ratio | | | 3.07 | | | 1 | 14-JUL-14 18:48 | per0714044a |
| 14797-73-0 | Perchlorate-101 | .529 | 2.12 | 7.27 | ug/kg | | 1 | 14-JUL-14 18:48 | per0714044a |
| | Perchlorate-O(18) | | | 5.07 | ug/kg | | 1 | 14-JUL-14 18:48 | per0714044a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84134MSD

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3719

**GEL Sample ID:** 1203125789

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .529 | 2.12 | 7.35 | ug/kg | | 1 | 14-JUL-14 18:57 | per0714045a |
| | Perchlorate Isotope Ratio | | | 3.15 | | | 1 | 14-JUL-14 18:57 | per0714045a |
| 14797-73-0 | Perchlorate-101 | .529 | 2.12 | 7.35 | ug/kg | | 1 | 14-JUL-14 18:57 | per0714045a |
| | Perchlorate-O(18) | | | 5.16 | ug/kg | | 1 | 14-JUL-14 18:57 | per0714045a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Metals Analysis

# Case Narrative

**Metals Fractional Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3719**

**Sample Analysis**

| Sample ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 352465003 | RE57-14-84197 |
| 1203126083 | Method Blank (MB) **ICP** |
| 1203127124 | Method Blank (MB) **ICP** |
| 1203126084 | Laboratory Control Sample (LCS) |
| 1203127125 | Laboratory Control Sample (LCS) |
| 1203126081 | 352431006(CAMO-14-81584L) Serial Dilution (SD) |
| 1203127128 | 352465001(RE57-14-84187L) Serial Dilution (SD) |
| 1203126080 | 352431006(CAMO-14-81584D) Sample Duplicate (DUP) |
| 1203127126 | 352465001(RE57-14-84187D) Sample Duplicate (DUP) |
| 1203126082 | 352431006(CAMO-14-81584S) Matrix Spike (MS) |
| 1203127127 | 352465001(RE57-14-84187S) Matrix Spike (MS) |
| 1203143922 | 352465001(RE57-14-84187PS) Post Spike (PS) |
| 1203126094 | Method Blank (MB) **ICP-MS** |
| 1203126211 | Method Blank (MB) **ICP-MS** |
| 1203126095 | Laboratory Control Sample (LCS) |
| 1203126212 | Laboratory Control Sample (LCS) |
| 1203126098 | 352465001(RE57-14-84187L) Serial Dilution (SD) |
| 1203126215 | 352519002(CAMO-14-84010L) Serial Dilution (SD) |
| 1203126096 | 352465001(RE57-14-84187D) Sample Duplicate (DUP) |
| 1203126213 | 352519002(CAMO-14-84010D) Sample Duplicate (DUP) |
| 1203126097 | 352465001(RE57-14-84187S) Matrix Spike (MS) |
| 1203126214 | 352519002(CAMO-14-84010S) Matrix Spike (MS) |
| 1203129977 | Method Blank (MB) **CVAA** |
| 1203132299 | Method Blank (MB) **CVAA** |

| | |
|---|---|
| 1203129978 | Laboratory Control Sample (LCS) |
| 1203132300 | Laboratory Control Sample (LCS) |
| 1203132303 | 352465001(RE57-14-84187L) Serial Dilution (SD) |
| 1203129981 | 352465003(RE57-14-84197L) Serial Dilution (SD) |
| 1203132301 | 352465001(RE57-14-84187D) Sample Duplicate (DUP) |
| 1203129979 | 352465003(RE57-14-84197D) Sample Duplicate (DUP) |
| 1203132302 | 352465001(RE57-14-84187S) Matrix Spike (MS) |
| 1203129980 | 352465003(RE57-14-84197S) Matrix Spike (MS) |

The samples in this SDG were analyzed on an "as received" basis.

**Method/Analysis Information**

| | |
|---|---|
| **Analytical Batch:** | 1402847, 1403245, 1402860, 1402900, 1404427 and 1405302 |
| **Prep Batch :** | 1402846, 1403244, 1402858, 1402898, 1404425 and 1405301 |
| **Standard Operating Procedures:** | GL-MA-E-013 REV# 22, GL-MA-E-006 REV# 11, GL-MA-E-009 REV# 24, GL-MA-E-014 REV# 25 and GL-MA-E-010 REV# 28 |
| **Analytical Method:** | SW846 3005A/6010C, SW846 3050B/6010C, SW846 3050B/6020A, SW846 3005A/6020A, EPA 245.1/245.2 and SW846 7471A |
| **Prep Method :** | SW846 3005A, SW846 3050B, EPA 245.1/245.2 Prep and SW846 7471A Prep |

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**System Configuration**

The Metals analysis-ICP was performed on a PE 7300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with an ESI SC-FAST introduction, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 0.4L/min, argon gas flows of 13 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

**Calibration Information**

**Instrument Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**CRDL/PQL Requirements**
The PQL standard recoveries for SW846 6010C met the control limits except for magnesium in file 072214A-3 at 14:40 and 15:58. Magnesium recovered high in the initial and closing PQL standards; however the analyte concentrations in the associated client samples were either greater than two times the PQL or not detected above the MDL. Therefore, the data were not adversely affected. ICP. The PQL standard recoveries for SW846 6010C

met the control limits except for lead and antimony in file 073114-1 at 11:29 and 16:51, respectively. Lead recovered high in the initial PQL standard and antimony recovered high in the closing PQL standard. The analyte concentrations in the associated client samples were less than the MDL for antimony and greater than two times the PQL for lead, therefore the data were not adversely affected. ICP.

**ICSA/ICSAB Statement**
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blanks (CCB) Requirements**
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**
The following samples were selected as the quality control (QC) samples for this SDG: 352431006 (CAMO-14-81584)-ICP, 352465001 (RE57-14-84187)-ICP, ICP-MS and CVAA, 352519002 (CAMO-14-84010)-ICP-MS and 352465003 (RE57-14-84197)-CVAA.

**Matrix Spike (MS) Recovery Statement**
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. Not all the applicable analyte recoveries were within the acceptance criteria. Recoveries for chromium, potassium, and sodium were not within the acceptance limits in sample 1203127127 (RE57-14-84187)-ICP.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. Not all the applicable analyte RPD values met the acceptance criteria. The RPD value for calcium was not within the acceptance limits in sample 1203127126 (RE57-14-84187)-ICP.

**Serial Dilution % Difference Statement**
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the established acceptance percent difference criteria.

**Post Spike (PS) Recovery Statement**
The percent recoveries (%R) obtained from the PS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. Not all the applicable analyte recoveries in the PS met the recommended quality control acceptance criteria. Recoveries for potassium and sodium in sample 1203143922 (RE57-14-84187)-ICP were not within the acceptance limits and verifies the presence of matrix interferences.

**Technical Information**

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample

collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Sample Dilutions**
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times. ICP-MS. Sample 1203132300 (LCS)-CVAA was diluted to ensure that the analyte concentration was within the linear calibration range of the instrument.

**Preparation Information**
The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. Data exception reports were included behind the Case Narrative or in the Miscellaneous Data section of this data package. The following DER was generated for this SDG: 1321939. ICP.

**Additional Comments**
Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:** Pat Steele **Date:** 08/13/2014

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3719  GEL Work Order: 352465

**The Qualifiers in this report are defined as follows:**

* A quality control analyte recovery is outside of specified acceptance criteria

J Value is estimated

N Metals--The Matrix spike sample recovery is not within specified control limits

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Pat Steele 08/13/2014

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3719 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352465001 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84187 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.7

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3200000 | ug/kg | | 6940 | 20400 | 20400 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 1020 | ug/kg | U | 337 | 1020 | 1020 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 989 | ug/kg | J | 213 | 1060 | 1060 | 2 | MS | BAJ | 08/10/14 09:07 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 42600 | ug/kg | | 102 | 510 | 510 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 535 | ug/kg | | 21.3 | 106 | 106 | 2 | MS | BAJ | 08/10/14 09:07 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 140 | ug/kg | J | 102 | 510 | 510 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 362000 | ug/kg | * | 8160 | 25500 | 25500 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 113000 | ug/kg | N | 153 | 510 | 510 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 1270 | ug/kg | | 153 | 510 | 510 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 4550 | ug/kg | | 306 | 1020 | 1020 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 7930000 | ug/kg | | 8160 | 25500 | 25500 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 9050 | ug/kg | | 337 | 1020 | 1020 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 112000 | ug/kg | | 8670 | 30600 | 30600 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 415000 | ug/kg | | 204 | 1020 | 1020 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 11.2 | ug/kg | J | 4.27 | 12.8 | 12.8 | 1 | AV | MTM1 | 07/23/14 10:54 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 6250 | ug/kg | | 106 | 425 | 425 | 2 | MS | BAJ | 08/10/14 09:07 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 712000 | ug/kg | N | 6530 | 25500 | 25500 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1060 | ug/kg | U | 351 | 1060 | 1060 | 2 | MS | BAJ | 08/10/14 09:07 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 510 | ug/kg | U | 102 | 510 | 510 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 418000 | ug/kg | N | 7140 | 25500 | 25500 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 425 | ug/kg | U | 63.8 | 425 | 425 | 2 | MS | BAJ | 08/10/14 09:07 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 1730 | ug/kg | | 102 | 510 | 510 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 66500 | ug/kg | | 408 | 1020 | 1020 | 1 | P | HSC | 07/31/14 15:25 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.502 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.523 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.502 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3719 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352465002 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84195 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.9

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3090000 | ug/kg | | 6990 | 20600 | 20600 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 1030 | ug/kg | U | 339 | 1030 | 1030 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 1480 | ug/kg | | 193 | 964 | 964 | 2 | MS | BAJ | 08/10/14 09:29 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 47700 | ug/kg | | 103 | 514 | 514 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 513 | ug/kg | | 19.3 | 96.4 | 96.4 | 2 | MS | BAJ | 08/10/14 09:29 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 514 | ug/kg | U | 103 | 514 | 514 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 294000 | ug/kg | * | 8220 | 25700 | 25700 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 87800 | ug/kg | N | 154 | 514 | 514 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 1260 | ug/kg | | 154 | 514 | 514 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 3960 | ug/kg | | 308 | 1030 | 1030 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 8210000 | ug/kg | | 8220 | 25700 | 25700 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 9290 | ug/kg | | 339 | 1030 | 1030 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 132000 | ug/kg | | 8730 | 30800 | 30800 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 452000 | ug/kg | | 206 | 1030 | 1030 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 10.2 | ug/kg | J | 3.76 | 11.2 | 11.2 | 1 | AV | MTM1 | 07/23/14 11:06 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 6550 | ug/kg | | 96.4 | 386 | 386 | 2 | MS | BAJ | 08/10/14 09:29 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 706000 | ug/kg | N | 6580 | 25700 | 25700 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 964 | ug/kg | U | 318 | 964 | 964 | 2 | MS | BAJ | 08/10/14 09:29 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 514 | ug/kg | U | 103 | 514 | 514 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 437000 | ug/kg | N | 7190 | 25700 | 25700 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 386 | ug/kg | U | 57.9 | 386 | 386 | 2 | MS | BAJ | 08/10/14 09:29 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 1770 | ug/kg | | 103 | 514 | 514 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 68800 | ug/kg | | 411 | 1030 | 1030 | 1 | P | HSC | 07/31/14 16:44 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.552 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.518 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.569 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2014−3719 **CONTRACT:** LANL00114 **METHOD TYPE:** EPA

**SAMPLE ID:** 352465003 **BASIS:** As Received **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84197 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** W **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7439−97−6 | Mercury | 0.20 | ug/L | U | 0.067 | 0.2 | 0.2 | 1 | AV | MTM1 | 07/21/14 09:45 | 072114W1−10 | 1404427 |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3719 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352465003 **BASIS:** As Received **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84197 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** W **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 200 | ug/L | U | 68 | 200 | 200 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7440−36−0 | Antimony | 3 | ug/L | U | 1 | 3 | 3 | 1 | MS | BAJ | 08/11/14 16:32 | 140811−6 | 1402900 |
| 7440−38−2 | Arsenic | 5 | ug/L | U | 1.7 | 5 | 5 | 1 | MS | BAJ | 08/10/14 21:13 | 140810−8 | 1402900 |
| 7440−39−3 | Barium | 1.49 | ug/L | J | 1 | 5 | 5 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7440−41−7 | Beryllium | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7440−43−9 | Cadmium | 1 | ug/L | U | 0.11 | 1 | 1 | 1 | MS | BAJ | 08/10/14 21:13 | 140810−8 | 1402900 |
| 7440−70−2 | Calcium | 124 | ug/L | J | 50 | 200 | 200 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7440−47−3 | Chromium | 3.99 | ug/L | J | 2 | 10 | 10 | 1 | MS | BAJ | 08/10/14 21:13 | 140810−8 | 1402900 |
| 7440−48−4 | Cobalt | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7440−50−8 | Copper | 10 | ug/L | U | 3 | 10 | 10 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7439−89−6 | Iron | 100 | ug/L | U | 30 | 100 | 100 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7439−92−1 | Lead | 2 | ug/L | U | 0.5 | 2 | 2 | 1 | MS | BAJ | 08/11/14 16:32 | 140811−6 | 1402900 |
| 7439−95−4 | Magnesium | 300 | ug/L | U | 110 | 300 | 300 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7439−96−5 | Manganese | 4.08 | ug/L | J | 2 | 10 | 10 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7440−02−0 | Nickel | 1.64 | ug/L | J | 0.5 | 2 | 2 | 1 | MS | BAJ | 08/10/14 21:13 | 140810−8 | 1402900 |
| 7440−09−7 | Potassium | 60.5 | ug/L | J | 50 | 150 | 150 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7782−49−2 | Selenium | 5 | ug/L | U | 1.5 | 5 | 5 | 1 | MS | BAJ | 08/10/14 21:13 | 140810−8 | 1402900 |
| 7440−22−4 | Silver | 1 | ug/L | U | 0.2 | 1 | 1 | 1 | MS | BAJ | 08/10/14 21:13 | 140810−8 | 1402900 |
| 7440−23−5 | Sodium | 649 | ug/L | | 100 | 300 | 300 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7440−28−0 | Thallium | 2 | ug/L | U | 0.45 | 2 | 2 | 1 | MS | BAJ | 08/11/14 16:32 | 140811−6 | 1402900 |
| 7440−62−2 | Vanadium | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |
| 7440−66−6 | Zinc | 10 | ug/L | U | 3.3 | 10 | 10 | 1 | P | HSC | 07/22/14 15:46 | 072214A−3 | 1402847 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402847 | 1402846 | SW846 3005A | 50 | mL | 50 | mL | 07/14/14 | JXO1 |
| 1402900 | 1402898 | SW846 3005A | 50 | mL | 50 | mL | 07/14/14 | JXO1 |
| 1404427 | 1404425 | EPA 245.1/245.2 Prep | 20 | mL | 20 | mL | 07/18/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **AV** | **EPA 245.1/245.2** |

# Quality Control Summary

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3719

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| 1203126083 | | | | | | | | |
| | Magnesium | 110 | ug/L | +/−300 | U | P | 110 | 300 |
| | Manganese | 2 | ug/L | +/−10 | U | P | 2 | 10 |
| | Potassium | 50 | ug/L | +/−150 | U | P | 50 | 150 |
| | Sodium | 100 | ug/L | +/−300 | U | P | 100 | 300 |
| | Vanadium | −1.42 | ug/L | +/−5 | J | P | 1 | 5 |
| | Barium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Calcium | 50 | ug/L | +/−200 | U | P | 50 | 200 |
| | Copper | 3 | ug/L | +/−10 | U | P | 3 | 10 |
| | Iron | −30.8 | ug/L | +/−100 | J | P | 30 | 100 |
| | Cobalt | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Beryllium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Aluminum | 68 | ug/L | +/−200 | U | P | 68 | 200 |
| | Zinc | 3.3 | ug/L | +/−10 | U | P | 3.3 | 10 |
| 1203126094 | | | | | | | | |
| | Arsenic | 195 | ug/kg | +/−977 | U | MS | 195 | 977 |
| | Beryllium | 19.5 | ug/kg | +/−97.7 | U | MS | 19.5 | 97.7 |
| | Nickel | 97.7 | ug/kg | +/−391 | U | MS | 97.7 | 391 |
| | Selenium | 322 | ug/kg | +/−977 | U | MS | 322 | 977 |
| | Thallium | 58.6 | ug/kg | +/−391 | U | MS | 58.6 | 391 |
| 1203126211 | | | | | | | | |
| | Antimony | 1 | ug/L | +/−3 | U | MS | 1 | 3 |
| | Arsenic | 1.7 | ug/L | +/−5 | U | MS | 1.7 | 5 |
| | Cadmium | 0.11 | ug/L | +/−1 | U | MS | 0.11 | 1 |
| | Chromium | 2 | ug/L | +/−10 | U | MS | 2 | 10 |
| | Lead | 0.5 | ug/L | +/−2 | U | MS | 0.5 | 2 |
| | Nickel | 0.5 | ug/L | +/−2 | U | MS | 0.5 | 2 |
| | Selenium | 1.5 | ug/L | +/−5 | U | MS | 1.5 | 5 |
| | Silver | 0.2 | ug/L | +/−1 | U | MS | 0.2 | 1 |
| | Thallium | 0.45 | ug/L | +/−2 | U | MS | 0.45 | 2 |
| 1203127124 | | | | | | | | |
| | Aluminum | 6680 | ug/kg | +/−19600 | U | P | 6680 | 19600 |
| | Antimony | 324 | ug/kg | +/−982 | U | P | 324 | 982 |
| | Barium | 98.2 | ug/kg | +/−491 | U | P | 98.2 | 491 |
| | Cadmium | 98.2 | ug/kg | +/−491 | U | P | 98.2 | 491 |
| | Calcium | 7860 | ug/kg | +/−24600 | U | P | 7860 | 24600 |
| | Chromium | 147 | ug/kg | +/−491 | U | P | 147 | 491 |
| | Cobalt | 147 | ug/kg | +/−491 | U | P | 147 | 491 |

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3719

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| | Copper | 295 | ug/kg | +/−982 | U | P | 295 | 982 |
| | Iron | 7860 | ug/kg | +/−24600 | U | P | 7860 | 24600 |
| | Lead | 591 | ug/kg | +/−982 | J | P | 324 | 982 |
| | Magnesium | 8350 | ug/kg | +/−29500 | U | P | 8350 | 29500 |
| | Manganese | 196 | ug/kg | +/−982 | U | P | 196 | 982 |
| | Potassium | 6290 | ug/kg | +/−24600 | U | P | 6290 | 24600 |
| | Zinc | 393 | ug/kg | +/−982 | U | P | 393 | 982 |
| | Silver | 98.2 | ug/kg | +/−491 | U | P | 98.2 | 491 |
| | Sodium | −9120 | ug/kg | +/−24600 | J | P | 6880 | 24600 |
| | Vanadium | 98.2 | ug/kg | +/−491 | U | P | 98.2 | 491 |
| 1203129977 | | | | | | | | |
| | Mercury | 0.067 | ug/L | +/−0.2 | U | AV | 0.067 | 0.2 |
| 1203132299 | | | | | | | | |
| | Mercury | 4.02 | ug/kg | +/−12 | U | AV | 4.02 | 12 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |
| **AV** | **EPA 245.1/245.2** |

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3719 **Client ID** CAMO−14−81584S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352431006 **Spike ID:** 1203126082

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | 75−125 | 5050 | | 68 | U | 5000 | 99.8 | | P |
| Barium | ug/L | 75−125 | 558 | | 32 | | 500 | 105 | | P |
| Beryllium | ug/L | 75−125 | 512 | | 1 | U | 500 | 102 | | P |
| Calcium | ug/L | 75−125 | 16000 | | 11400 | | 5000 | 92.6 | | P |
| Cobalt | ug/L | 75−125 | 526 | | 1 | U | 500 | 105 | | P |
| Copper | ug/L | 75−125 | 533 | | 3 | U | 500 | 106 | | P |
| Iron | ug/L | 75−125 | 5070 | | 30 | U | 5000 | 101 | | P |
| Magnesium | ug/L | 75−125 | 8840 | | 3760 | | 5000 | 101 | | P |
| Manganese | ug/L | 75−125 | 519 | | 2 | U | 500 | 103 | | P |
| Potassium | ug/L | 75−125 | 6580 | | 1470 | | 5000 | 102 | | P |
| Sodium | ug/L | 75−125 | 16900 | | 11800 | | 5000 | 101 | | P |
| Vanadium | ug/L | 75−125 | 552 | | 4.49 | J | 500 | 110 | | P |
| Zinc | ug/L | 75−125 | 526 | | 3.3 | U | 500 | 105 | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84187S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 93.7

**Sample ID:** 352465001 **Spike ID:** 1203126097

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | 75−125 | 6110 | | 989 | J | 5090 | 101 | | MS |
| Beryllium | ug/kg | 75−125 | 5510 | | 535 | | 5090 | 97.8 | | MS |
| Nickel | ug/kg | 75−125 | 11300 | | 6250 | | 5090 | 98.9 | | MS |
| Selenium | ug/kg | 75−125 | 5180 | | 351 | U | 5090 | 97.4 | | MS |
| Thallium | ug/kg | 75−125 | 4720 | | 63.8 | U | 5090 | 92.8 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3719 **Client ID** CAMO−14−84010S

**Contract:** LANL00114 **Level:** Low

**Matrix:** GROUND WATER **% Solids:**

**Sample ID:** 352519002 **Spike ID:** 1203126214

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | 75−125 | 54 | | 1 | U | 50 | 108 | | MS |
| Arsenic | ug/L | 75−125 | 49.9 | | 1.7 | U | 50 | 98.2 | | MS |
| Cadmium | ug/L | 75−125 | 52 | | 0.11 | U | 50 | 104 | | MS |
| Chromium | ug/L | 75−125 | 72.1 | | 18.7 | | 50 | 107 | | MS |
| Lead | ug/L | 75−125 | 50.1 | | 0.5 | U | 50 | 100 | | MS |
| Nickel | ug/L | 75−125 | 56.4 | | 0.694 | J | 50 | 111 | | MS |
| Selenium | ug/L | 75−125 | 53.3 | | 1.5 | U | 50 | 106 | | MS |
| Silver | ug/L | 75−125 | 50.4 | | 0.2 | U | 50 | 101 | | MS |
| Thallium | ug/L | 75−125 | 48.9 | | 0.45 | U | 50 | 97.8 | | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84187S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 93.7

**Sample ID:** 352465001 **Spike ID:** 1203127127

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | | 4890000 | | 3200000 | | 516000 | 327 | N/A | P |
| Antimony | ug/kg | 75−125 | 45200 | | 337 | U | 51600 | 87.6 | | P |
| Barium | ug/kg | 75−125 | 89800 | | 42600 | | 51600 | 91.4 | | P |
| Cadmium | ug/kg | 75−125 | 49500 | | 140 | J | 51600 | 95.7 | | P |
| Calcium | ug/kg | 75−125 | 798000 | | 362000 | | 516000 | 84.5 | | P |
| Chromium | ug/kg | 75−125 | 127000 | | 113000 | | 51600 | 28.1 | N | P |
| Cobalt | ug/kg | 75−125 | 49700 | | 1270 | | 51600 | 93.8 | | P |
| Copper | ug/kg | 75−125 | 57400 | | 4550 | | 51600 | 102 | | P |
| Iron | ug/kg | | 8020000 | | 7930000 | | 516000 | 16.4 | N/A | P |
| Lead | ug/kg | 75−125 | 61400 | | 9050 | | 51600 | 102 | | P |
| Magnesium | ug/kg | 75−125 | 643000 | | 112000 | | 516000 | 103 | | P |
| Manganese | ug/kg | | 420000 | | 415000 | | 51600 | 10.4 | N/A | P |
| Potassium | ug/kg | 75−125 | 1670000 | | 712000 | | 516000 | 186 | N | P |
| Silver | ug/kg | 75−125 | 48800 | | 102 | U | 51600 | 94.7 | | P |
| Sodium | ug/kg | 75−125 | 1160000 | | 418000 | | 516000 | 144 | N | P |
| Vanadium | ug/kg | 75−125 | 52700 | | 1730 | | 51600 | 98.8 | | P |
| Zinc | ug/kg | 75−125 | 114000 | | 66500 | | 51600 | 92.6 | | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84197S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352465003 **Spike ID:** 1203129980

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | 75−125 | 2.05 | | 0.067 | U | 2 | 103 | | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84187S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 93.7

**Sample ID:** 352465001 **Spike ID:** 1203132302

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | 80−120 | 132 | | 11.2 | J | 123 | 97.7 | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−5a−**

**Spike Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84187PS

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 93.7

**Sample ID:** 352465001 **Spike ID:** 1203143922

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium | ug/L | 80−120 | 1640 | | 1100 | | 500 | 107 | | P |
| Potassium | ug/L | 80−120 | 13700 | | 6980 | | 5000 | 134 | N | P |
| Sodium | ug/L | 80−120 | 10700 | | 4100 | | 5000 | 132 | N | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3719 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** CAMO−14−81584D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352431006 **Duplicate ID:** 1203126080 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | | 68 | U | 68 | U | | | P |
| Barium | ug/L | +/−20% | 32 | | 31.9 | | .15 | | P |
| Beryllium | ug/L | | 1 | U | 1 | U | | | P |
| Calcium | ug/L | +/−20% | 11400 | | 11100 | | 3.06 | | P |
| Cobalt | ug/L | | 1 | U | 1 | U | | | P |
| Copper | ug/L | | 3 | U | 3 | U | | | P |
| Iron | ug/L | | 30 | U | 30 | U | | | P |
| Magnesium | ug/L | +/−20% | 3760 | | 3840 | | 2.1 | | P |
| Manganese | ug/L | | 2 | U | 2 | U | | | P |
| Potassium | ug/L | +/−20% | 1470 | | 1600 | | 8.13 | | P |
| Sodium | ug/L | +/−20% | 11800 | | 11700 | | .332 | | P |
| Vanadium | ug/L | +/−5 | 4.49 | J | 4.98 | J | 10.3 | | P |
| Zinc | ug/L | | 3.3 | U | 3.3 | U | | | P |

***Analytical Methods:**

**P SW846 3005A/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3719 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84187D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352465001 **Duplicate ID:** 1203126096 **Percent Solids for Dup:** 93.7

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | +/−1050 | 989 | J | 969 | J | 2.09 | | MS |
| Beryllium | ug/kg | +/−105 | 535 | | 498 | | 7.3 | | MS |
| Nickel | ug/kg | +/−20% | 6250 | | 6050 | | 3.26 | | MS |
| Selenium | ug/kg | | 351 | U | 347 | U | | | MS |
| Thallium | ug/kg | | 63.8 | U | 63.1 | U | | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3719 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** CAMO−14−84010D

**Matrix:** GROUND WATER **Level:** Low

**Sample ID:** 352519002 **Duplicate ID:** 1203126213 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | | 1 | U | 1 | U | | | MS |
| Arsenic | ug/L | | 1.7 | U | 1.7 | U | | | MS |
| Cadmium | ug/L | | 0.11 | U | 0.11 | U | | | MS |
| Chromium | ug/L | +/−10 | 18.7 | | 18.1 | | 2.87 | | MS |
| Lead | ug/L | | 0.5 | U | 0.5 | U | | | MS |
| Nickel | ug/L | +/−2 | 0.694 | J | 0.653 | J | 6.09 | | MS |
| Selenium | ug/L | | 1.5 | U | 1.5 | U | | | MS |
| Silver | ug/L | | 0.2 | U | 0.2 | U | | | MS |
| Thallium | ug/L | | 0.45 | U | 0.45 | U | | | MS |

***Analytical Methods:**

**MS SW846 3005A/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3719 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84187D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352465001 **Duplicate ID:** 1203127126 **Percent Solids for Dup:** 93.7

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | +/−20% | 3200000 | | 3060000 | | 4.62 | | P |
| Antimony | ug/kg | | 337 | U | 348 | U | | | P |
| Barium | ug/kg | +/−20% | 42600 | | 38900 | | 9.16 | | P |
| Cadmium | ug/kg | | 140 | J | 105 | U | 200 | | P |
| Calcium | ug/kg | +/−20% | 362000 | | 267000 | | 30.2 | * | P |
| Chromium | ug/kg | +/−20% | 113000 | | 106000 | | 6.1 | | P |
| Cobalt | ug/kg | +/−527 | 1270 | | 1220 | | 4.42 | | P |
| Copper | ug/kg | +/−1050 | 4550 | | 4230 | | 7.36 | | P |
| Iron | ug/kg | +/−20% | 7930000 | | 7570000 | | 4.65 | | P |
| Lead | ug/kg | +/−20% | 9050 | | 7770 | | 15.1 | | P |
| Magnesium | ug/kg | +/−31600 | 112000 | | 92100 | | 19.5 | | P |
| Manganese | ug/kg | +/−20% | 415000 | | 389000 | | 6.48 | | P |
| Potassium | ug/kg | +/−20% | 712000 | | 705000 | | 1.05 | | P |
| Silver | ug/kg | | 102 | U | 105 | U | | | P |
| Sodium | ug/kg | +/−20% | 418000 | | 424000 | | 1.46 | | P |
| Vanadium | ug/kg | +/−527 | 1730 | | 1460 | | 17.2 | | P |
| Zinc | ug/kg | +/−20% | 66500 | | 64600 | | 2.87 | | P |

***Analytical Methods:**

**P SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3719 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84197D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352465003 **Duplicate ID:** 1203129979 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | | 0.067 | U | 0.067 | U | | | AV |

***Analytical Methods:**

**AV EPA 245.1/245.2**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3719 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84187D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352465001 **Duplicate ID:** 1203132301 **Percent Solids for Dup:** 93.7

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | +/−12.7 | 11.2 | J | 10.6 | J | 5.84 | | AV |

***Analytical Methods:**

**AV SW846 7471A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3719

**Contract:** LANL00114

**Aqueous LCS Source:** OS2I **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203126084 | | | | | | | | |
| | Aluminum | ug/L | 5000 | 5180 | | 104 | 80−120 | P |
| | Barium | ug/L | 500 | 515 | | 103 | 80−120 | P |
| | Beryllium | ug/L | 500 | 519 | | 104 | 80−120 | P |
| | Calcium | ug/L | 5000 | 4990 | | 99.7 | 80−120 | P |
| | Cobalt | ug/L | 500 | 526 | | 105 | 80−120 | P |
| | Copper | ug/L | 500 | 502 | | 100 | 80−120 | P |
| | Iron | ug/L | 5000 | 5050 | | 101 | 80−120 | P |
| | Magnesium | ug/L | 5000 | 5310 | | 106 | 80−120 | P |
| | Manganese | ug/L | 500 | 509 | | 102 | 80−120 | P |
| | Potassium | ug/L | 5000 | 5380 | | 108 | 80−120 | P |
| | Sodium | ug/L | 5000 | 5060 | | 101 | 80−120 | P |
| | Vanadium | ug/L | 500 | 534 | | 107 | 80−120 | P |
| | Zinc | ug/L | 500 | 513 | | 103 | 80−120 | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3719

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203126095 | | | | | | | | |
| | Arsenic | ug/kg | 137000 | 138000 | | 101 | 83.2−117.5 | MS |
| | Beryllium | ug/kg | 138000 | 148000 | | 108 | 84.1−115.9 | MS |
| | Nickel | ug/kg | 159000 | 176000 | | 110 | 84.3−115.7 | MS |
| | Selenium | ug/kg | 43500 | 48200 | | 111 | 77.9−122.3 | MS |
| | Thallium | ug/kg | 146000 | 149000 | | 102 | 81.5−119.2 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3719

**Contract:** LANL00114

**Aqueous LCS Source:** O2Si **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203126212 | | | | | | | | |
| | Antimony | ug/L | 50 | 51.6 | | 103 | 80−120 | MS |
| | Arsenic | ug/L | 50 | 49.8 | | 99.7 | 80−120 | MS |
| | Cadmium | ug/L | 50 | 51.3 | | 103 | 80−120 | MS |
| | Chromium | ug/L | 50 | 54.7 | | 109 | 80−120 | MS |
| | Lead | ug/L | 50 | 55.4 | | 111 | 80−120 | MS |
| | Nickel | ug/L | 50 | 56.4 | | 113 | 80−120 | MS |
| | Selenium | ug/L | 50 | 53.3 | | 107 | 80−120 | MS |
| | Silver | ug/L | 50 | 50.5 | | 101 | 80−120 | MS |
| | Thallium | ug/L | 50 | 54.4 | | 109 | 80−120 | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3719

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203127125 | | | | | | | | |
| | Aluminum | ug/kg | 8680000 | 6780000 | | 78.1 | 44.9−154.4 | P |
| | Antimony | ug/kg | 166000 | 114000 | | 68.5 | 33.1−167.3 | P |
| | Barium | ug/kg | 290000 | 278000 | | 95.7 | 82.8−117.6 | P |
| | Cadmium | ug/kg | 85000 | 82900 | | 97.5 | 84−115.9 | P |
| | Calcium | ug/kg | 6120000 | 6040000 | | 98.7 | 83.2−117 | P |
| | Chromium | ug/kg | 168000 | 167000 | | 99.3 | 81.5−117.9 | P |
| | Cobalt | ug/kg | 87000 | 85800 | | 98.6 | 84.8−114.9 | P |
| | Copper | ug/kg | 187000 | 191000 | | 102 | 84−116.6 | P |
| | Iron | ug/kg | 12500000 | 12700000 | | 102 | 50.5−148.8 | P |
| | Lead | ug/kg | 120000 | 113000 | | 93.8 | 83.3−116.7 | P |
| | Magnesium | ug/kg | 2920000 | 2750000 | | 94.2 | 75−125.3 | P |
| | Manganese | ug/kg | 310000 | 297000 | | 95.8 | 82.6−117.4 | P |
| | Potassium | ug/kg | 2780000 | 2420000 | | 87.1 | 69.1−130.9 | P |
| | Silver | ug/kg | 55200 | 52900 | | 95.8 | 66.3−133.7 | P |
| | Sodium | ug/kg | 504000 | 484000 | | 96 | 73.6−126.4 | P |
| | Vanadium | ug/kg | 138000 | 143000 | | 104 | 79.7−120.3 | P |
| | Zinc | ug/kg | 206000 | 195000 | | 94.6 | 82−118 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3719

**Contract:** LANL00114

**Aqueous LCS Source:** GEL **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203129978 | | | | | | | | |
| | Mercury | ug/L | 2 | 2.02 | | 101 | 85−115 | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3719

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203132300 | | | | | | | | |
| | Mercury | ug/kg | 7690 | 9130 | | 119 | 71.4−129 | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3719 **Client ID** CAMO−14−81584L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352431006 **Serial Dilution ID:** 1203126081

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 68 | U | 340 | U | | | | P |
| Barium | 32 | | 31.8 | | .602 | | | P |
| Beryllium | 1 | U | 5 | U | | | | P |
| Calcium | 11400 | | 11300 | | 1.19 | | 10 | P |
| Cobalt | 1 | U | 5 | U | | | | P |
| Copper | 3 | U | 15 | U | | | | P |
| Iron | 30 | U | 150 | U | | | | P |
| Magnesium | 3760 | | 4260 | | 13.1 | | | P |
| Manganese | 2 | U | 10 | U | | | | P |
| Potassium | 1470 | | 1360 | | 7.92 | | | P |
| Sodium | 11800 | | 12000 | | 1.88 | | 10 | P |
| Vanadium | 4.49 | J | 5 | U | 100 | | | P |
| Zinc | 3.3 | U | 16.5 | U | | | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84187L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352465001 **Serial Dilution ID:** 1203126098

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.65 | J | 6.51 | J | 39.8 | | | MS |
| Beryllium | 2.52 | | 2.67 | | 5.8 | | | MS |
| Nickel | 29.4 | | 29.1 | | 1.06 | | | MS |
| Selenium | 1.65 | U | 8.25 | U | | | | MS |
| Thallium | .3 | U | 1.5 | U | | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3719 **Client ID** CAMO−14−84010L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352519002 **Serial Dilution ID:** 1203126215

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Antimony | 1 | U | 5 | U | | | | MS |
| Arsenic | 1.7 | U | 8.5 | U | | | | MS |
| Cadmium | .11 | U | .55 | U | | | | MS |
| Chromium | 18.7 | | 17.5 | J | 6.42 | | | MS |
| Lead | .5 | U | 2.5 | U | | | | MS |
| Nickel | .694 | J | 2.5 | U | 100 | | | MS |
| Selenium | 1.5 | U | 7.5 | U | | | | MS |
| Silver | .2 | U | 1 | U | | | | MS |
| Thallium | .45 | U | 2.25 | U | | | | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84187L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352465001 **Serial Dilution ID:** 1203127128

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 31400 | | 31900 | | 1.69 | | 10 | P |
| Antimony | 3.3 | U | 16.5 | U | | | | P |
| Barium | 418 | | 437 | | 4.46 | | 10 | P |
| Cadmium | 1.37 | J | 5 | U | 100 | | | P |
| Calcium | 3550 | | 3690 | | 4 | | | P |
| Chromium | 1100 | | 1140 | | 3.34 | | 10 | P |
| Cobalt | 12.5 | | 12.8 | J | 2.45 | | | P |
| Copper | 44.6 | | 46.7 | J | 4.72 | | | P |
| Iron | 77800 | | 78500 | | .9 | | 10 | P |
| Lead | 88.7 | | 87.7 | | 1.2 | | | P |
| Magnesium | 1100 | | 1250 | J | 13.7 | | | P |
| Manganese | 4070 | | 4280 | | 5.2 | | 10 | P |
| Potassium | 6980 | | 6740 | | 3.43 | | 10 | P |
| Silver | 1 | U | 5 | U | | | | P |
| Sodium | 4100 | | 4070 | | .737 | | 10 | P |
| Vanadium | 17 | | 13.7 | J | 19.2 | | | P |
| Zinc | 652 | | 676 | | 3.74 | | 10 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84197L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352465003 **Serial Dilution ID:** 1203129981

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .067 | U | .335 | U | | | | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3719 **Client ID** RE57−14−84187L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352465001 **Serial Dilution ID:** 1203132303

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .176 | J | .335 | U | 100 | | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 07-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| ICP | SW846 3050B/6010C | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1403245 | See Below | | |

**Potentially affected work order(s)(SDG): 352446(2014-3716),352460(2014-3718),352465(2014-3719)**

**Application Issues:**

Failed Recovery for MS/PS

Failed RPD for DUP

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed Recovery for MS/PS:<br><br>QC 1203127127MS,1203143922PS<br><br>2. Failed RPD for DUP:<br><br>QC 1203127126DUP | 1. The matrix spike recovery failed outside of the control limits for chromium,potassium and sodium. The post spike failed outside the required control limits for potassium and sodium but passed for all other analytes. This verifies the presence of a matrix interference for potassium and sodium and verifies the absence of a matrix interference for all the other analytes.<br><br>2. The sample and sample duplicate % RPD failed outside the control limits for calcium due to possible sample non-homogeneity and/or matrix interference. |

**Originator's Name:**

Helen Camello 07-AUG-14

**Data Validator/Group Leader:**

Louise Smith 07-AUG-14

# General Chem Analysis

# Case Narrative

**General Chemistry Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3719**

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Cyanide and Total** | | |
| **Analytical Batch:** | 1402234 | **Method:** | SW9012A Cyanide and Total |
| **Prep Batch :** | 1402233 | **Method:** | SSW846 9010B Prep |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| Sample ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 1203124664 | MB for batch 1402233 |
| 1203124669 | Laboratory Control Sample (LCS) |
| 1203124666 | 352306001(RE57-14-84178) Sample Duplicate (DUP) |
| 1203124668 | 352306001(RE57-14-84178) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 17.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

## Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following sample was selected for QC analysis: 352306001 (RE57-14-84178).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recovery for this sample set was within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1203124666 (RE57-14-84178).

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**
All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**
The following sample in this sample group was diluted due to high concentration: 1203124669 (LCS).

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**

Additional comments were not required for this SDG.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Ion Chromatography** | | |
| **Analytical Batch:** | 1403036 | **Method:** | EPA 300.0 Nitrate in Soil |
| **Prep Batch :** | 1403034 | **Method:** | EPA 300.0 PREP |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

| Sample ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 1203126607 | MB for batch 1403034 |
| 1203126612 | Laboratory Control Sample (LCS) |
| 1203126608 | 352460011(RE57-14-84158) Sample Duplicate (DUP) |
| 1203126609 | 352460012(RE57-14-84137) Sample Duplicate (DUP) |
| 1203126610 | 352460011(RE57-14-84158) Matrix Spike (MS) |
| 1203126611 | 352460012(RE57-14-84137) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 22.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

## Calibration Information

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following samples were selected for QC analysis: 352460011 (RE57-14-84158) and 352460012 (RE57-14-84137).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recoveries for this sample set were within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD between the sample and its duplicate met the acceptance limits.

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
The following sample from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1203126608 (RE57-14-84158).

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:**_____ **Date:** 8/7/14

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis Report
## for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3719  GEL Work Order: 352465

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

**  Analyte is a surrogate compound

B  The target analyte was detected in the associated blank.

H  Analytical holding time was exceeded

J  Value is estimated

N  Metals--The Matrix spike sample recovery is not within specified control limits

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____ 8/7/14

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3719

Client Sample ID: RE57-14-84187
Sample ID: 352465001
Matrix: SO
Collect Date: 09-JUL-14 09:04
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.26%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 82.5 | 247 | ug/kg | 1 | AXH3 | 07/14/14 | 1414 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 2.21 | 0.352 | 1.07 | mg/kg | 1 | RXB5 | 07/15/14 | 0500 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3719

Client Sample ID: RE57-14-84195
Sample ID: 352465002
Matrix: SO
Collect Date: 09-JUL-14 09:04
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.07%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 80.8 | 242 | ug/kg | 1 | AXH3 | 07/14/14 | 1415 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 2.38 | 0.351 | 1.06 | mg/kg | 1 | RXB5 | 07/15/14 | 0629 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# Quality Control Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: August 7, 2014**



**Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**
**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352465**

| Parmname | NOM | | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flow Injection Analysis** | | | | | | | | | | | |
| Batch 1402234 | | | | | | | | | | | |
| QC1203124666 352306001 DUP | | | | | | | | | | | |
| Cyanide, Total | | U | ND | U | ND | ug/kg | N/A | | | AXH3 | 07/14/14 13:50 |
| QC1203124669 LCS | | | | | | | | | | | |
| Cyanide, Total | 90600 | | | | 94300 | ug/kg | | 104 | (68%-140%) | | 07/14/14 13:43 |
| QC1203124664 MB | | | | | | | | | | | |
| Cyanide, Total | | | | U | 250 | ug/kg | | | | | 07/14/14 13:42 |
| QC1203124668 352306001 MS | | | | | | | | | | | |
| Cyanide, Total | 4910 | U | ND | | 5210 | ug/kg | | 106 | (55%-125%) | | 07/14/14 13:51 |
| **Ion Chromatography** | | | | | | | | | | | |
| Batch 1403036 | | | | | | | | | | | |
| QC1203126608 352460011 DUP | | | | | | | | | | | |
| Nitrate-N | | J | 0.521 | J | 0.594 | mg/kg | 13.1 ^ | | (+/-1.07) | RXB5 | 07/15/14 02:00 |
| QC1203126609 352460012 DUP | | | | | | | | | | | |
| Nitrate-N | | U | ND | U | ND | mg/kg | N/A | | | | 07/15/14 03:30 |
| QC1203126612 LCS | | | | | | | | | | | |
| Nitrate-N | 25.0 | | | | 23.6 | mg/kg | | 94.5 | (90%-110%) | | 07/15/14 01:00 |
| QC1203126607 MB | | | | | | | | | | | |
| Nitrate-N | | | | U | 1.00 | mg/kg | | | | | 07/15/14 00:31 |
| QC1203126610 352460011 MS | | | | | | | | | | | |
| Nitrate-N | 26.8 | J | 0.521 | | 26.3 | mg/kg | | 96 | (90%-110%) | | 07/15/14 02:30 |
| QC1203126611 352460012 MS | | | | | | | | | | | |
| Nitrate-N | 26.0 | U | ND | | 25.1 | mg/kg | | 96.4 | (90%-110%) | | 07/15/14 04:00 |

**Notes:**

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- H Analytical holding time was exceeded
- J Value is estimated

## QC Summary

**Workorder:** **352465**



| Parmname | NOM | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Z | Paint Filter Test--Particulates passed through the filter, however no free liquids were observed. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| d | 5-day BOD--The 2:1 depletion requirement was not met for this sample |
| e | 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# Radiological Analysis

**Radiochemistry Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3719**
**Work Order 352465**

## Method/Analysis Information

| | |
|---|---|
| **Product:** | **ISOU** |
| Analytical Method: | DOE EML HASL-300, U-02-RC Modified |
| Prep Method: | Dry Soil Prep |
| Analytical Batch Number: | 1402588 |
| Prep Batch Number: | 1402575 |

| Sample ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 1203125485 | MB for batch 1402588 |
| 1203125487 | Laboratory Control Sample (LCS) |
| 1203125486 | 352446001(SFBMACRO-14-83950) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 25.

## Calibration Information:

**Calibration Information**
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244. The initial Calibration was performed in July 2014.

**Standards Information**
Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used before the expiration dates.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

## Quality Control (QC) Information:

**Blank Information**
Aliquot for sample 1203125485 (MB) was changed to 1.0 per client request.

**Designated QC**
The following sample was used for QC: 352446001 (SFBMACRO-14-83950). The QC was from ARSL work order 352446.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integration**
No manual integrations were performed on data in this batch.

**Sample-Specific MDA/MDC**
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

**Additional Comments**
The MDCs (and Lc if requested) are calculated using a blank population.

**Blank Decision Level**
The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **Dry Weight-Percent Moisture** |
| Analytical Method: | Dry Soil Prep |
| Analytical Batch Number: | 1402575 |

| Sample ID | Client ID |
|---|---|
| 352465001 | RE57-14-84187 |
| 352465002 | RE57-14-84195 |
| 1203125473 | 352460001(RE57-14-84119) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 10 and GL-RAD-A-021 REV# 20.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Designated QC**
The following sample was used for QC: 352460001 (RE57-14-84119). The QC was from ARSL work order 352460.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
Not applicable. The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this sample set.

**Blank Decision Level**

Not Applicable. The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3719  GEL Work Order: 352465

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Heather M. McCarty  **Name:** **Heather McCarty**

**Date:** **31 JUL 2014**  **Title:** **Analyst II**

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545 Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84187
Sample ID: 352465001
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.26%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.43 | +/-0.0733 | 0.0925 | 0.0413 | +/-0.117 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | | 0.0956 | +/-0.0228 | 0.0664 | 0.027 | +/-0.0236 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.30 | +/-0.0694 | 0.0579 | 0.024 | +/-0.108 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 95.5 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84195
Sample ID: 352465002
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.07%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.33 | +/-0.0787 | 0.114 | 0.051 | +/-0.117 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1752 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0787 | +/-0.0239 | 0.082 | 0.0334 | +/-0.0244 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.36 | +/-0.0795 | 0.0716 | 0.0296 | +/-0.119 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 78.6 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# Quality Control Data

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: July 31, 2014**


**Client :** **Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**

**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352465**

| Parmname | NOM | | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Rad Alpha Spec** | | | | | | | | | | | |
| Batch 1402588 | | | | | | | | | | | |
| QC1203125486 352446001 DUP | | | | | | | | | | | |
| Uranium-233/234 | | | 1.54 | | 1.69 | pCi/g | 0.271 | | (0-1) | JXD2 | 07/26/1417:52 |
| | | TPU: | +/-0.134 | | +/-0.138 | | | | | | |
| Uranium-235/236 | | U | 0.0785 | U | 0.0684 | pCi/g | 0.103 | | (0-1) | | |
| | | TPU: | +/-0.0268 | | +/-0.0222 | | | | | | |
| Uranium-238 | | | 1.48 | | 1.55 | pCi/g | 0.134 | | (0-1) | | |
| | | TPU: | +/-0.130 | | +/-0.129 | | | | | | |
| **Uranium-232 Tracer | 4.34 | | 3.53 | | 3.58 | pCi/g | | 82.5 | (50%-105%) | | |
| | | TPU: | +/-0.323 | | +/-0.312 | | | | | | |
| QC1203125487 LCS | | | | | | | | | | | |
| Uranium-233/234 | | | | | 6.22 | pCi/g | | | | JXD2 | 07/26/1417:52 |
| | | TPU: | | | +/-0.554 | | | | | | |
| Uranium-235/236 | | | | U | 0.184 | pCi/g | | | | | |
| | | TPU: | | | +/-0.132 | | | | | | |
| Uranium-238 | 5.75 | | | | 5.56 | pCi/g | | 96.8 | (75%-125%) | | |
| | | TPU: | | | +/-0.511 | | | | | | |
| **Uranium-232 Tracer | 21.7 | | | | 17.6 | pCi/g | | 81.2 | (50%-105%) | | |
| | | TPU: | | | +/-1.57 | | | | | | |
| QC1203125485 MB | | | | | | | | | | | |
| Uranium-233/234 | | | | U | -0.00585 | pCi/g | | | | JXD2 | 07/26/1417:52 |
| | | TPU: | | | +/-0.0117 | | | | | | |
| Uranium-235/236 | | | | U | 0.0108 | pCi/g | | | | | |
| | | TPU: | | | +/-0.0109 | | | | | | |
| Uranium-238 | | | | U | 0.00 | pCi/g | | | | | |
| | | TPU: | | | +/-0.0101 | | | | | | |
| **Uranium-232 Tracer | 2.19 | | | | 1.31 | pCi/g | | 59.6 | (50%-105%) | | |
| | | TPU: | | | +/-0.168 | | | | | | |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

| | |
|---|---|
| ** | Analyte is a Tracer compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| BD | Results are either below the MDC or tracer recovery is low |
| FA | Failed analysis. |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| K | Analyte present. Reported value may be biased high. Actual value is expected to be lower. |
| L | Analyte present. Reported value may be biased low. Actual value is expected to be higher. |

## QC Summary

**Workorder:** **352465**



| Parmname | NOM | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| M | M if above MDC and less than LLD |
| M | REMP Result > MDC/CL and < RDL |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| UI | Gamma Spectroscopy--Uncertain identification |
| UJ | Gamma Spectroscopy--Uncertain identification |
| UL | Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | Other specific qualifiers were required to properly define the results. Consult case narrative. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
** Indicates analyte is a surrogate/tracer compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

COC/Lab Request #: 2014-3718



Client Contact:

Lab Agreement # : 126310011

Project Number :

Site Name: Los Alamos National Laboratory

Analysis Turnaround Time:

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 | Metals(W) |
|---|---|---|---|---|---|---|---|
| RE57-14-84119 | Jul 9 2014 | 08:10 | SO | 1 | 1 | 1 | |
| RE57-14-84134 | Jul 9 2014 | 07:50 | SO | 1 | 1 | 1 | |
| RE57-14-84145 | Jul 9 2014 | 08:10 | SO | 1 | 1 | 1 | |
| RE57-14-84156 | Jul 9 2014 | 8:50 | SO | 1 | 1 | 1 | |
| RE57-14-84135 | Jul 9 2014 | 10:47 | SO | 1 | 1 | 1 | |
| RE57-14-84146 | Jul 9 2014 | 11:15 | SED | 1 | 1 | 1 | |
| RE57-14-84124 | Jul 9 2014 | 10:00 | W | | | | 1 |
| RE57-14-84129 | Jul 9 2014 | 09:45 | SO | 1 | | | |
| RE57-14-84136 | Jul 9 2014 | 09:10 | SO | 1 | 1 | 1 | |
| RE57-14-84147 | Jul 9 2014 | 09:45 | SO | 1 | 1 | 1 | |
| RE57-14-84158 | Jul 9 2014 | 12:00 | SO | 1 | 1 | 1 | |
| RE57-14-84137 | Jul 9 2014 | 13:55 | SO | 1 | 1 | 1 | |
| RE57-14-84148 | Jul 9 2014 | 11:50 | SO | 1 | 1 | 1 | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| | Melissa Montoya | 7/10/14 3:00 | | | |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84119 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/09/14 | FIELD MATRIX: | JLS 7-09-14 ~~S~~ R | Rock |
| TIME COLLECTED (HH:MM): | | 0810 | MEDIA: | | Qbt3 |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | UNK | 57-4011 ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | | 57-4011 ok | FIELD QC TYPE: | FD | ok |
| TOP DEPTH: | | 1 ft | SAMPLE USAGE: | QC | ok |
| BOTTOM DEPTH: | | 2 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** tuff, gray, slightly weathered, moderately welded, sl. moist, no HC odor

**LOCATION COMMENTS:** 7-1 QC of RE57-14-84145

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha TRS 7/9/14 ~~17.32~~ 14 dpm

Beta/Gamma TRS 7/9/14 ~~1816~~ 1460 dpm

PID Ambient Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Bobbie Rappe

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sanchez, Wayne<br>(Signature) Wayne Sanchez | 7/9/14 1545 | (Printed Name) K. Green<br>(Signature) | 7/9/14 3:45 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84124 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/09/14 | FIELD MATRIX: | W | | ok |
| TIME COLLECTED (HH:MM): | | | 1000 | MEDIA: | | | NA |
| PRS ID: | 57-007 | | ok | SAMPLE TECH CODE: | DC | | ok |
| LOCATION ID: | UNK | | 57-4013 | FIELD PREP: | UF | | ok |
| LOCATION TYPE: | | | 57-4013 | FIELD QC TYPE: | FR | | ok |
| TOP DEPTH: | | | 1 ft | SAMPLE USAGE: | QC | | ok |
| BOTTOM DEPTH: | | | 2 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | Metals(W) | 1 LITER POLY | 1 | HNO3 | Y | N/A |

**SAMPLE COMMENTS:** Equipment rinseate from hand auger bucket for sample RE57-14-84147

**LOCATION COMMENTS:** 7-3 1-2 ft (1 ft above tuff)

**FIELD PARAMETERS:** NA

**COLLECTED BY (PRINT)** James Torch

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Torch J. Torch | 7-9-14 1545 | K. Greene | 7-9-14 1545 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84129 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/09/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0945 | MEDIA: | | POA 07/09/14 ~~Native soil~~ Sand |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | DC | OK |
| LOCATION ID: | UNK | 57-4013 | FIELD PREP: | NA | |
| LOCATION TYPE: | | 57-4013 | FIELD QC TYPE: | FTB | |
| TOP DEPTH: | | 1 ft | SAMPLE USAGE: | QC | |
| BOTTOM DEPTH: | | 2 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |

**SAMPLE COMMENTS:** QC of RE57-14-84147

**LOCATION COMMENTS:** 7-3 (1 ft above Qbt 3 tuff contact)

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha NA dpm PID Ambient / Reading = 0.0 / 0.0 ppm

Beta/Gamma NA dpm

**COLLECTED BY (PRINT)** James Jordan

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Bobbie Rapp Bonapp | 07/09/14 1545 | K. Greene | 7/9/14 3:45 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84134 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/09/14 | FIELD MATRIX: | S | | ok |
| TIME COLLECTED (HH:MM): | | | 0750 | MEDIA: | | | fill / soil |
| PRS ID: | 57-007 | | ok | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 57-4011 | | ok | FIELD PREP: | NA | | ok |
| LOCATION TYPE: | 57-4011 | | ok | FIELD QC TYPE: | REG | | ok |
| TOP DEPTH: | | | 0 ft | SAMPLE USAGE: | INV | | ok |
| BOTTOM DEPTH: | | | 1 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** fill / soil, grayish-brown, moist, no HC odor

**LOCATION COMMENTS:** 7-1

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 14 dpm

Beta/Gamma 1566 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** James Jordan

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Sandoz, Wayne | 7/9/14 1545 | K. Greek | 7/9/14 1545 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84135 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7-9-14 | FIELD MATRIX: | S | ok |
| TIME COLLECTED (HH:MM): | | 1547 | MEDIA: | | NA soil |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4012 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4012 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 0 ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 1 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** Soil, brown, Sandy clay, moist, no HC odor

**LOCATION COMMENTS:** 7-2 0-1 ft below

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm

Beta/Gamma 1554 dpm

PID Ambient 0.4 / Reading 0.4 = 0.4 ppm

**COLLECTED BY (PRINT)** Wayne Sanchez

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| J. Jude | 7-09-14 1545 | K. Greene | 7-09-14 1545 |
| **RELINQUISHED BY (Printed Name) (Signature)** | **Date/Time** | **RECEIVED BY (Printed Name) (Signature)** | **Date/Time** |
| | | | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84136 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/09/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0910 | MEDIA: | | Fill |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4013 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4013 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 0 ft | SAMPLE USAGE: | INV | |
| BOTTOM DEPTH: | | 1 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | |

**SAMPLE COMMENTS:** fill; slightly moist, light brown to reddish brown

**LOCATION COMMENTS:** 7-3 0-1 ft bgs

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 19 dpm PID Ambient = 0.0 ppm

Beta/Gamma 1563 dpm Reading 0.0 ppm

**COLLECTED BY (PRINT)** B. Rappe

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Bobbie Rappe [signature] | 07/09/14 1545 | K. Greene [signature] | 7/9/14 3145 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84137

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7-9-14 | FIELD MATRIX: | S | ~~ok~~ Rock |
| TIME COLLECTED (HH:MM): | | ~~1050~~ 1355 TRS 7/9/14 | MEDIA: | | ~~leach field~~ Qbt3 |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4014 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4014 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 1.5 ft ~~0 ft~~ TRS 7/9/14 | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 2.5 ft ~~1 ft~~ TRS 7/9/14 | EXCAVATED: | | YES / NO / NA |

PQL 07/09/14

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** ~~Fill, Sandy gravel, brown moist no HC odor, plastic liner no 5 ft bgs~~ Qbt3; light grey moderately welded

**LOCATION COMMENTS:** 7-4 0-1 ft below leachfield

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 24 dpm

Beta/Gamma 1572 dpm

PID Ambient Reading = 0.0 ~~0.3~~ TRS 7/9/14 / 0.0 ~~0.3~~ TRS 7/9/14 ppm

**COLLECTED BY (PRINT)** Tom Sonner

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Sanchez, Adrian (Signature) | 7/9/14 1545 | (Printed Name) K. Greene (Signature) | 7/9/14 3:45 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84145

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/09/14 | FIELD MATRIX: | ~~S~~ R 7/9/14 | Rock |
| TIME COLLECTED (HH:MM): | | 0810 | MEDIA: | | Qbt3 |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4011 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4011 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 1 ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 2 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** tuff, gray, slightly weathered, moderately welded, sl. moist, no HC odor

**LOCATION COMMENTS:** 7-1

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 44 dpm

Beta/Gamma 1657 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Bobbie Rappe

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Sanchez, Wayne (Wayne Sanchez) | 7/9/14 1542 | K. Green | 7/9/14 3145 |
| **RELINQUISHED BY (Printed Name) (Signature)** | **Date/Time** | **RECEIVED BY (Printed Name) (Signature)** | **Date/Time** |
| | | | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84146 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/09/14 | FIELD MATRIX: | S | ~~ok~~ KP 7-9-14 ok |
| TIME COLLECTED (HH:MM): | | 11:15 AM | MEDIA: | SED | ~~FTH QBT 3~~ KP 7-9-14 |
| PRS ID: | 57-007 | OK 7-9-14 | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4012 | ~~7-2~~ KP OK | FIELD PREP: | NA | |
| LOCATION TYPE: | 57-4012 | OK | FIELD QC TYPE: | REG | |
| TOP DEPTH: | | 1.25 ft | SAMPLE USAGE: | INV | |
| BOTTOM DEPTH: | | 2.25 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| N/A | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | N/A |
| N/A | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | N/A |

**SAMPLE COMMENTS:** Native soils/sediment

**LOCATION COMMENTS:** 7-2 1 foot above tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm

Beta/Gamma 1569 dpm

PID Ambient / Reading = 0.3 / 0.3 ppm

**COLLECTED BY (PRINT)** Paffett, Kyle

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| J. Jord | 7-09-14 1545 | K. Green | 7-09-14 1545 |
| **RELINQUISHED BY (Printed Name) (Signature)** | **Date/Time** | **RECEIVED BY (Printed Name) (Signature)** | **Date/Time** |
| | | | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84147 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7-09-14 | FIELD MATRIX: | S | ok |
| TIME COLLECTED (HH:MM): | | 0945 | MEDIA: | | native soil |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4013 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4013 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 1 ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 2 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** soil, dark brown, sandy clay, moist, no HC odor

**LOCATION COMMENTS:** 7-3 (1ft above Qbt3 tuff contact)

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

**Alpha** 24 **dpm** **PID** Ambient / Reading = 0.0 ppm

**Beta/Gamma** 1524 **dpm**

**COLLECTED BY (PRINT)** James Jordan

| | | | |
|---|---|---|---|
| RELINQUISHED BY (Printed Name) Bobbie Rappe (Signature) Bonappe | Date/Time 07/09/14 1545 | RECEIVED BY (Printed Name) K. Greene (Signature) | Date/Time 7/9/14 3:45 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84148 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/9/14 | FIELD MATRIX: | S | o/c |
| TIME COLLECTED (HH:MM): | | 11:50 | MEDIA: | | Fill |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4014 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | 57-4014 | OK | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | | 1 ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | | 2 ft | EXCAVATED: | | YES / NO (NA) |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | ↓ |

**SAMPLE COMMENTS:** Fill Brown Soil, very gravel

**LOCATION COMMENTS:** 7-4 1ft above tuff

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 34 dpm PID Ambient Reading = 1-0 / 1-0 ppm

Beta/Gamma 1481 dpm

**COLLECTED BY (PRINT)** Tom Sower

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Bobbie Rappe<br>(Signature) Bonappe | 07/09/14 1545 | (Printed Name) K. Green<br>(Signature) | 7/9/14 3145 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84156

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/09/14 | FIELD MATRIX: | ~~S~~ R | Rock |
| TIME COLLECTED (HH:MM): | | 0850 | MEDIA: | | Debris |
| PRS ID: | 57-007 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4011 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4011 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 3 ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 4 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| N/A | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | N/A |
| ↓ | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| ↓ | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | ↓ |

**SAMPLE COMMENTS:** tuff, gray, moderately welded, sl. moist, no HC odor

**LOCATION COMMENTS:** 7-1 (2-3 ft below tuff)

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm

Beta/Gamma 1415 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Maurice Sherdo

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Bobbie Rappe (Signature) Bonappe | 07/09/14 1545 | K. Greene | 7/9/14 3:45 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5756 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-007

**SAMPLE ID:** RE57-14-84158 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/09/2014 | FIELD MATRIX: | S | ROCK |
| TIME COLLECTED (HH:MM): | | 1200 | MEDIA: | | Qbt3 |
| PRS ID: | 57-007 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4013 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4013 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 4 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 5 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | |

**SAMPLE COMMENTS:** Qbt3; light grey to white; sanidine and Quartz moderately welded

**LOCATION COMMENTS:** 7-3 4-ft-5ft (2-3 ft into tuff)

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 24 dpm

Beta/Gamma 1506 dpm

PID Ambient / Reading = 0.9 / 0.9 ppm

**COLLECTED BY (PRINT)** J. Jordan

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| Sandoval, Wayne | 7/9/14 1545 | K. Greene | 7/9/14 1545 |
| | | | |

Report Date 06/26/2014

# DATA VALIDATION REPORT

Chain Of Custody No. 2014-3718

1. Distribution Of Samples In EDD.

| SDG | Analytical Method | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks |
|---|---|---|---|---|---|---|
| 352460 | EPA:245.2 | | | | | |
| 352460 | EPA:300.0 | 10 | 1 | | | |
| 352460 | HASL-300:ISOU | 10 | 1 | | | |
| 352460 | SW-846:6010C | 10 | 1 | | | |
| 352460 | SW-846:6020 | 10 | 1 | | | |
| 352460 | SW-846:6850 | 10 | 1 | | | |
| 352460 | SW-846:7471A | 10 | 1 | | | |
| 352460 | SW-846:8260B | 10 | 1 | 1 | | |
| 352460 | SW-846:8270D | 10 | 1 | | | |
| 352460 | SW-846:9012A | 10 | 1 | | | |

| SDG | Analytical Method | Analysis Lot ID | Prep Lot ID | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks | Method Blanks | Matrix Spikes | Matrix Spike Dups | Analytical Spikes | Post-Digestion Spikes | Lab Control Samples | Lab Control Sample Dups | Blank Spike | Blank Spike Dups | Lab Duplicates | Storage Blanks | Preparation Blanks | Reagent Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 352460 | EPA:245.2 | 1404427 | 1404425 | | | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352460 | EPA:300.0 | 1403032 | 1403027 | 7 | 1 | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352460 | EPA:300.0 | 1403036 | 1403034 | 3 | | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352460 | HASL-300:ISOU | 1402588 | 1402588 | 10 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352460 | SW-846:6010C | 1402847 | 1402846 | | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352460 | SW-846:6010C | 1403245 | 1403244 | 10 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352460 | SW-846:6020 | 1402860 | 1402858 | 10 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352460 | SW-846:6020 | 1402900 | 1402898 | | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352460 | SW-846:6850 | 1402719 | 1402718 | 10 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352460 | SW-846:7471A | 1405302 | 1405301 | 10 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352460 | SW-846:8260B | 1407979 | 1407977 | 10 | 1 | 1 | | | 2 | | | | | 4 | | | | | | | |
| 352460 | SW-846:8270D | 1403912 | 1403911 | 10 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352460 | SW-846:9012A | 1402824 | 1402823 | 10 | 1 | | | | 1 | | | | | 1 | | | | 2 | | | |

# DATA VALIDATION REPORT

2. Distribution Of Analytes In EDD.

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| EPA:245.2 | INORGANIC | LCS | 1203129978 | LCS | 0 | 0 | 1 | 0 |
| EPA:245.2 | INORGANIC | MB | 1203129977 | MB | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84124 | 352460007 | FR | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84197 | 1203129979 | DUP | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | WT_IPC-14-55927 | 1203129982 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | LCS | 1203126595 | LCS | 0 | 0 | 1 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | LCS | 1203126612 | LCS | 0 | 0 | 1 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | MB | 1203126590 | MB | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | MB | 1203126607 | MB | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84119 | 352460001 | FD | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84134 | 352460002 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84135 | 352460005 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84136 | 352460009 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84137 | 1203126609 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84137 | 352460012 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84145 | 352460003 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84146 | 352460006 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84147 | 352460010 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84148 | 352460013 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84156 | 352460004 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84158 | 1203126608 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84158 | 352460011 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84179 | 1203126592 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84182 | 1203126591 | DUP | 1 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | LCS | 1203125487 | LCS | 0 | 0 | 1 | 0 |
| HASL-300:ISOU | RAD | MB | 1203125485 | MB | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84119 | 352460001 | FD | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84134 | 352460002 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84135 | 352460005 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84136 | 352460009 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84137 | 352460012 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84145 | 352460003 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84146 | 352460006 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84147 | 352460010 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84148 | 352460013 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84156 | 352460004 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84158 | 352460011 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | SFBMACRO-14-83950 | 1203125486 | DUP | 3 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:6010C | INORGANIC | CAMO-14-81584 | 1203126080 | DUP | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203126084 | LCS | 0 | 0 | 13 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203127125 | LCS | 0 | 0 | 17 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203126083 | MB | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203127124 | MB | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84119 | 352460001 | FD | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84124 | 352460007 | FR | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84134 | 352460002 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84135 | 352460005 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84136 | 352460009 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84137 | 352460012 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84145 | 352460003 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84146 | 352460006 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84147 | 352460010 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84148 | 352460013 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84156 | 352460004 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84158 | 352460011 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84187 | 1203127126 | DUP | 17 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | CAMO-14-84010 | 1203126213 | DUP | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203126095 | LCS | 0 | 0 | 5 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203126212 | LCS | 0 | 0 | 9 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203126094 | MB | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203126211 | MB | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84119 | 352460001 | FD | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84124 | 352460007 | FR | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84134 | 352460002 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84135 | 352460005 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84136 | 352460009 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84137 | 352460012 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84145 | 352460003 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84146 | 352460006 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84147 | 352460010 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84148 | 352460013 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84156 | 352460004 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84158 | 352460011 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84187 | 1203126096 | DUP | 5 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | LCS | 1203125787 | LCS | 0 | 0 | 1 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | MB | 1203125786 | MB | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84119 | 352460001 | FD | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84134 | 352460002 | REG | 1 | 0 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84135 | 352460005 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84136 | 352460009 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84137 | 352460012 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84145 | 352460003 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84146 | 352460006 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84147 | 352460010 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84148 | 352460013 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84156 | 352460004 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84158 | 352460011 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | LCS | 1203132300 | LCS | 0 | 0 | 1 | 0 |
| SW-846:7471A | INORGANIC | MB | 1203132299 | MB | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84119 | 352460001 | FD | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84134 | 352460002 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84135 | 352460005 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84136 | 352460009 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84137 | 352460012 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84145 | 352460003 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84146 | 352460006 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84147 | 352460010 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84148 | 352460013 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84156 | 352460004 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84158 | 352460011 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84187 | 1203132301 | DUP | 1 | 0 | 0 | 0 |
| SW-846:8260B | VOC | LCS | 1203139144 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203139145 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | LCS | 1203139146 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203139147 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | MB | 1203139138 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | MB | 1203139139 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84119 | 352460001 | FD | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84129 | 352460008 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84134 | 352460002 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84135 | 352460005 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84136 | 352460009 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84137 | 352460012 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84145 | 352460003 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84146 | 352460006 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84147 | 352460010 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84148 | 352460013 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84156 | 352460004 | REG | 62 | 3 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:8260B | VOC | RE57-14-84158 | 352460011 | REG | 62 | 3 | 0 | 0 |
| SW-846:8270D | SVOC | LCS | 1203128640 | LCS | 0 | 6 | 69 | 0 |
| SW-846:8270D | SVOC | MB | 1203128639 | MB | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84119 | 352460001 | FD | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84134 | 352460002 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84135 | 352460005 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84136 | 352460009 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84137 | 352460012 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84145 | 352460003 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84146 | 352460006 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84147 | 352460010 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84148 | 352460013 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84156 | 352460004 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84158 | 352460011 | REG | 69 | 6 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | LCS | 1203126022 | LCS | 0 | 0 | 1 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | MB | 1203126017 | MB | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84119 | 1203126018 | DUP | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84119 | 352460001 | FD | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84134 | 352460002 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84135 | 352460005 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84136 | 352460009 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84137 | 352460012 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84145 | 352460003 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84146 | 352460006 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84147 | 352460010 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84148 | 352460013 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84156 | 352460004 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84157 | 1203126019 | DUP | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84158 | 352460011 | REG | 1 | 0 | 0 | 0 |

3. Are any analytes missing?

No.

4. Were any holding times exceeded?

No.

# DATA VALIDATION REPORT

5. Any contaminants in blanks?

| Blank FS ID | Blank Lab Sample | Blank Type | Analytical Method | Sample | Parameter Name | Blank Lab Result | Lab Qualifier | Blank Lab Units | Blank Lab Detection Limit |
|---|---|---|---|---|---|---|---|---|---|
| MB | 1203126083 | METHOD BLANK | SW-846:6010C | W | Iron | -30.8 | J | ug/L | 100 |
| MB | 1203126083 | METHOD BLANK | SW-846:6010C | W | Vanadium | -1.42 | J | ug/L | 5.00 |
| MB | 1203127124 | METHOD BLANK | SW-846:6010C | SO | Lead | 591 | J | ug/kg | 982 |
| MB | 1203127124 | METHOD BLANK | SW-846:6010C | SO | Sodium | -9120 | J | ug/kg | 24600 |

| Field Sample ID | Blank Lab | Blank Type | Analytical Method | Parameter Name | Blank Lab Result | Blank Lab Units | Lab Result | Lab Qualifier | Lab Detection Limit | Detect Flag | Detect to Nondetect Factor | Detect to Estimated Factor | Use Factors |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84124 | 1203126083 | METHOD BLANK | SW-846:6010C | Iron | -30.8 | ug/L | 166 | | 100 | Y | | | |
| RE57-14-84119 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 137000 | | 23900 | Y | | | |
| RE57-14-84134 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 128000 | | 24400 | Y | | | |
| RE57-14-84145 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 150000 | | 23400 | Y | | | |
| RE57-14-84156 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 174000 | | 25000 | Y | | | |
| RE57-14-84135 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 124000 | | 26400 | Y | | | |
| RE57-14-84146 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 132000 | | 24700 | Y | | | |
| RE57-14-84136 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 108000 | | 25300 | Y | | | |
| RE57-14-84147 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 101000 | | 25400 | Y | | | |
| RE57-14-84158 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 304000 | | 24700 | Y | | | |
| RE57-14-84137 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 295000 | | 24800 | Y | | | |
| RE57-14-84148 | 1203127124 | METHOD BLANK | SW-846:6010C | Sodium | -9120 | ug/kg | 133000 | | 25900 | Y | | | |
| RE57-14-84124 | 1203126083 | METHOD BLANK | SW-846:6010C | Vanadium | -1.42 | ug/L | 8.26 | | 5.00 | Y | | | |

6. Any surrogate recoveries outside the control limits?

No.

7. Any MS/MSD recoveries or RPDs outside the control limits?

No.

8. Any LCS/LCSD or BS/BSD recoveries or RPDs outside the control limits?

No.

9. Any Field Duplicate RPDs outside the desired limits?

No.

10. Any Lab Duplicate RPDs outside the desired limits?

No.

11. Any required reporting limits exceeded?

No.

12. Additional Validator's Comments.

13. Display Flagged Data.

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4011 | 2014-3718 | RE57-14-84119 | FD | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0365 | pCi/g | .0365 | pCi/g | 0.107 | 0.0264 | SD | 07/09/2014 | | 1402588 | VAL | Y |
| 57-4011 | 2014-3718 | RE57-14-84134 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0574 | pCi/g | .0574 | pCi/g | 0.0837 | 0.0229 | SD | 07/09/2014 | | 1402588 | VAL | Y |
| 57-4012 | 2014-3718 | RE57-14-84135 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .067 | pCi/g | .067 | pCi/g | 0.0698 | 0.0192 | SD | 07/09/2014 | | 1402588 | VAL | Y |
| 57-4013 | 2014-3718 | RE57-14-84136 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .065 | pCi/g | .065 | pCi/g | 0.0791 | 0.0203 | SD | 07/09/2014 | | 1402588 | VAL | Y |

# DATA VALIDATION REPORT

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4014 | 2014-3718 | RE57-14-84137 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0642 | pCi/g | .0642 | pCi/g | 0.0721 | 0.0226 | SD | 07/09/2014 | | 1402588 | VAL | Y |
| 57-4011 | 2014-3718 | RE57-14-84145 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0558 | pCi/g | .0558 | pCi/g | 0.074 | 0.0183 | SD | 07/09/2014 | | 1402588 | VAL | Y |
| 57-4012 | 2014-3718 | RE57-14-84146 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0864 | pCi/g | .0864 | pCi/g | 0.140 | 0.0318 | SD | 07/09/2014 | | 1402588 | VAL | Y |
| 57-4013 | 2014-3718 | RE57-14-84147 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0346 | pCi/g | .0346 | pCi/g | 0.072 | 0.0178 | SD | 07/09/2014 | | 1402588 | VAL | Y |
| 57-4014 | 2014-3718 | RE57-14-84148 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0589 | pCi/g | .0589 | pCi/g | 0.0716 | 0.0184 | SD | 07/09/2014 | | 1402588 | VAL | Y |
| 57-4011 | 2014-3718 | RE57-14-84156 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0702 | pCi/g | .0702 | pCi/g | 0.0788 | 0.0223 | SD | 07/09/2014 | | 1402588 | VAL | Y |

| Reason Code | Description |
|---|---|
| J_LAB | The analytical laboratory qualified the detected result as estimated (J) because the result was less the PQL but greater than the MDL |
| NQ | The analytical laboratory did not qualifiy the analyte as not detected and/or any other standard qualifire. The analyte is detected in the sample. |
| R5 | Analyte is not detected because the amount reported is less than the MDC. |
| U_LAB | The analytical laboratory qualified the analyte as not detected. |

14. Usable Result Count.

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84119 | 57-4011 | FD | EPA:300.0 | 0 | 1 |
| RE57-14-84119 | 57-4011 | FD | HASL-300:ISOU | 0 | 3 |
| RE57-14-84119 | 57-4011 | FD | SW-846:6010C | 0 | 17 |
| RE57-14-84119 | 57-4011 | FD | SW-846:6020 | 0 | 5 |
| RE57-14-84119 | 57-4011 | FD | SW-846:6850 | 0 | 1 |
| RE57-14-84119 | 57-4011 | FD | SW-846:7471A | 0 | 1 |
| RE57-14-84119 | 57-4011 | FD | SW-846:8260B | 0 | 62 |
| RE57-14-84119 | 57-4011 | FD | SW-846:8270D | 0 | 69 |
| RE57-14-84119 | 57-4011 | FD | SW-846:9012A | 0 | 1 |
| RE57-14-84124 | 57-4013 | FR | EPA:245.2 | 0 | 1 |
| RE57-14-84124 | 57-4013 | FR | SW-846:6010C | 0 | 13 |
| RE57-14-84124 | 57-4013 | FR | SW-846:6020 | 0 | 9 |
| RE57-14-84129 | 57-4013 | FTB | SW-846:8260B | 0 | 62 |
| RE57-14-84134 | 57-4011 | REG | EPA:300.0 | 0 | 1 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84134 | 57-4011 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84134 | 57-4011 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84134 | 57-4011 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84134 | 57-4011 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84134 | 57-4011 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84134 | 57-4011 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84134 | 57-4011 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84134 | 57-4011 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84135 | 57-4012 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84135 | 57-4012 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84135 | 57-4012 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84135 | 57-4012 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84135 | 57-4012 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84135 | 57-4012 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84135 | 57-4012 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84135 | 57-4012 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84135 | 57-4012 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84136 | 57-4013 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84136 | 57-4013 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84136 | 57-4013 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84136 | 57-4013 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84136 | 57-4013 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84136 | 57-4013 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84136 | 57-4013 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84136 | 57-4013 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84136 | 57-4013 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84137 | 57-4014 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84137 | 57-4014 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84137 | 57-4014 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84137 | 57-4014 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84137 | 57-4014 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84137 | 57-4014 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84137 | 57-4014 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84137 | 57-4014 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84137 | 57-4014 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84145 | 57-4011 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84145 | 57-4011 | REG | HASL-300:ISOU | 0 | 3 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84145 | 57-4011 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84145 | 57-4011 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84145 | 57-4011 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84145 | 57-4011 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84145 | 57-4011 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84145 | 57-4011 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84145 | 57-4011 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84146 | 57-4012 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84146 | 57-4012 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84146 | 57-4012 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84146 | 57-4012 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84146 | 57-4012 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84146 | 57-4012 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84146 | 57-4012 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84146 | 57-4012 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84146 | 57-4012 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84147 | 57-4013 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84147 | 57-4013 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84147 | 57-4013 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84147 | 57-4013 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84147 | 57-4013 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84147 | 57-4013 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84147 | 57-4013 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84147 | 57-4013 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84147 | 57-4013 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84148 | 57-4014 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84148 | 57-4014 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84148 | 57-4014 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84148 | 57-4014 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84148 | 57-4014 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84148 | 57-4014 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84148 | 57-4014 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84148 | 57-4014 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84148 | 57-4014 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84156 | 57-4011 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84156 | 57-4011 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84156 | 57-4011 | REG | SW-846:6010C | 0 | 17 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84156 | 57-4011 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84156 | 57-4011 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84156 | 57-4011 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84156 | 57-4011 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84156 | 57-4011 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84156 | 57-4011 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84158 | 57-4013 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84158 | 57-4013 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84158 | 57-4013 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84158 | 57-4013 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84158 | 57-4013 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84158 | 57-4013 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84158 | 57-4013 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84158 | 57-4013 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84158 | 57-4013 | REG | SW-846:9012A | 0 | 1 |

GEL Laboratories LLC
a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407
P 843.556.8171 F 843.766.1178
www.gel.com

August 07, 2014

Mr. Keith Greene
Los Alamos National Laboratory
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER
Work Order: 352460
SDG: 2014-3718

Dear Mr. Greene:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on July 11, 2014, and analyzed for GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Hope Taylor for
Valerie Davis
Project Manager

Chain of Custody: 2014-3718
Enclosures

**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Work Order #: 352460**
**SDG: 2014-3718**

Table of Contents

Case Narrative.....1

Chain of Custody and Supporting Documentation.....5

Data Review Qualifier Flag Definition Sheet.....15

Volatile Analysis.....18

Case Narrative.....19

Sample Data Summary.....25

Quality Control Summary.....50

Quality Control Data.....70

Miscellaneous.....91

Semi-Volatile Analysis.....93

Case Narrative.....94

Sample Data Summary.....100

Quality Control Summary.....134

Quality Control Data.....149

Miscellaneous.....159

Perchlorates by LCMSMS Analysis.....161

Case Narrative.....162

Sample Data Summary.....168

Quality Control Summary.....180

Quality Control Data.....183

Metals Analysis.....189

Case Narrative.....190

Sample Data Summary.....196

Quality Control Summary.....211

Miscellaneous.....239

General Chem Analysis.....241

Case Narrative.....242

Sample Data Summary.....250

Quality Control Summary.....263

Radiological Analysis.....267

Sample Data Summary.....273

Quality Control Data.....285

# Case Narrative

**Case Narrative for**
**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Workorder #: 352460**
**SDG # : 2014-3718**

**August 07, 2014**

**Laboratory Identification:**

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on July 11, 2014 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C). Shipping container temperatures were checked, documented, and within specifications. There are no additional comments concerning sample receipt.

**Sample Identification** The laboratory received the following samples:

| Laboratory ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460007 | RE57-14-84124 |
| 352460008 | RE57-14-84129 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package**

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Hope Taylor for
Valerie Davis
Project Manager

**List of current GEL Certifications as of 07 August 2014**

| State | Certification |
|---|---|
| Alaska | UST−110 |
| Arkansas | 88−0651 |
| CLIA | 42D0904046 |
| California NELAP | 01151CA |
| Colorado | SC00012 |
| Connecticut | PH−0169 |
| Delaware | SC000122013−10 |
| DoD ELAP/ ISO17025 A2LA | 2567.01 |
| Florida NELAP | E87156 |
| Foreign Soils Permit | P330−12−00283, P330−12−00284 |
| Georgia | SC00012 |
| Georgia SDWA | 967 |
| Hawaii | SC000122013−10 |
| Idaho Chemistry | SC00012 |
| Idaho Radiochemistry | SC00012 |
| Illinois NELAP | 200029 |
| Indiana | C−SC−01 |
| Kansas NELAP | E−10332 |
| Kentucky | 90129 |
| Louisiana NELAP | 03046 (AI33904) |
| Louisiana SDWA | LA130005 |
| Maryland | 270 |
| Massachusetts | M−SC012 |
| Michigan | 9976 |
| Mississippi | SC000122013−10 |
| Nebraska | NE−OS−26−13 |
| Nevada | SC000122014−1 |
| New Hampshire NELAP | 2054 |
| New Jersey NELAP | SC002 |
| New Mexico | SC00012 |
| New York NELAP | 11501 |
| North Carolina | 233 |
| North Carolina SDWA | 45709 |
| Oklahoma | 9904 |
| Pennsylvania NELAP | 68−00485 |
| Plant Material Permit | PDEP−12−00260 |
| South Carolina Chemistry | 10120001 |
| South Carolina GVL | 23611001 |
| South Carolina Radiochemi | 10120002 |
| Tennessee | TN 02934 |
| Texas NELAP | T104704235−14−9 |
| Utah NELAP | SC000122014−14 |
| Vermont | VT87156 |
| Virginia NELAP | 460202 |
| Washington | C780−12 |
| Wisconsin | 999887790 |

# Chain of Custody and Supporting Documentation

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

352460

# Chain of Custody/Analysis Request

COC/Lab Request #: 2014-3718

Page 1 of 1

Client Contact:

Lab Agreement # : 126310011

Project Number :

Analysis Turnaround Time:

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Site Name: Los Alamos National Laboratory

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 | Metals(W) |
|---|---|---|---|---|---|---|---|
| RE57-14-84119 | Jul 9 2014 | 08:10 | SO | 1 | 1 | 1 | |
| RE57-14-84134 | Jul 9 2014 | 07:50 | SO | 1 | 1 | 1 | |
| RE57-14-84145 | Jul 9 2014 | 08:10 | SO | 1 | 1 | 1 | |
| RE57-14-84156 | Jul 9 2014 | 8:50 | SO | 1 | 1 | 1 | |
| RE57-14-84135 | Jul 9 2014 | 10:47 | SO | 1 | 1 | 1 | |
| RE57-14-84146 | Jul 9 2014 | 11:15 | SED | 1 | 1 | 1 | |
| RE57-14-84124 | Jul 9 2014 | 10:00 | W | | | | 1 |
| RE57-14-84129 | Jul 9 2014 | 09:45 | SO | 1 | | | |
| RE57-14-84136 | Jul 9 2014 | 09:10 | SO | 1 | 1 | 1 | |
| RE57-14-84147 | Jul 9 2014 | 09:45 | SO | 1 | 1 | 1 | |
| RE57-14-84158 | Jul 9 2014 | 12:00 | SO | 1 | 1 | 1 | |
| RE57-14-84137 | Jul 9 2014 | 13:55 | SO | 1 | 1 | 1 | |
| RE57-14-84148 | Jul 9 2014 | 11:50 | SO | 1 | 1 | 1 | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| | Melissa Montoya | 7/10/14 3:00 | P. Wert | Patricia Dent | 7-11-14 0900 |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

GEL Laboratories LLC

# SAMPLE RECEIPT & REVIEW FORM

| | |
|---|---|
| Client: LANL | SDG/AR/COC/Work Order: 2014-3718 |
| Received By: P. Nelent | Date Received: 7-11-14 |

| Suspected Hazard Information | Yes | No | *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. |
|---|---|---|---|
| COC/Samples marked as radioactive? | | X | Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0CPM |
| Classified Radioactive II or III by RSO? | | X | If yes, Were swipes taken of sample contatiners < action levels? |
| COC/Samples marked containing PCBs? | | X | |
| Package, COC, and/or Samples marked as beryllium or asbestos containing? | | X | If yes, samples are to be segregeated as Safety Controlled Samples, and opened by the GEL Safety Group. |
| Shipped as a DOT Hazardous? | | X | Hazard Class Shipped: UN#: |
| Samples identified as Foreign Soil? | | X | |

| | Sample Receipt Criteria | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items) |
|---|---|---|---|---|---|
| 1 | Shipping containers received intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 2 | Samples requiring cold preservation within (0 ≤ 6 deg. C)?* | X | | | Preservation Method: Ice bags Blue ice Dry ice None Other (describe) 3-6,17c *all temperatures are recorded in Celsius |
| 2a | Daily check performed and passed on IR temperature gun? | X | | | Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 130462966 |
| 3 | Chain of custody documents included with shipment? | X | | | |
| 4 | Sample containers intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 5 | Samples requiring chemical preservation at proper pH? | X | | | Sample ID's, containers affected and observed pH: If Preservation added, Lot#: |
| 6 | VOA vials free of headspace (defined as < 6mm bubble)? | X | | | Sample ID's and containers affected: |
| 7 | Are Encore containers present? | | | X | (If yes, immediately deliver to Volatiles laboratory) |
| 8 | Samples received within holding time? | X | | | ID's and tests affected: |
| 9 | Sample ID's on COC match ID's on bottles? | X | | | Sample ID's and containers affected: |
| 10 | Date & time on COC match date & time on bottles? | X | | | Sample ID's affected: |
| 11 | Number of containers received match number indicated on COC? | | | X | Sample ID's affected: SEE Continuation Sheet |
| 12 | Are sample containers identifiable as GEL provided? | | | X | |
| 13 | COC form is properly signed in relinquished/received sections? | X | | | |
| 14 | Carrier and tracking number. | | | | Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other<br>5908 1777 2681-4 / 5908 1777 2626-17c<br>5908 1777 2729-5 / 5908 1777 2660-5c<br>5908 1777 2659-4 / 5908 1777 2670-5c<br>5908 1777 2707-3c / 5908 1777 2637-3c<br>5908 1777 2692-4c<br>5908 1777 2648-4c / 5908 1777 2718-5c |

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials OP Date 7-14-14 Page 1 of 2

GEL Laboratories LLC **SAMPLE RECEIPT & REVIEW CONTINUATION FORM**

Client: LANL Received By: P. Allred Date Received: 7-11-14 SDG/AR/COC/Work Order: 2014-3718

CAMO-14-81465, 81477 For 8260b Lab rec'd (1) Container each Chain indicates (2) each.

~~CAMO-14-84466~~ PD 7-11-14
CAMO-14-81566, 81567 For 8260b Lab rec'd (1) Container Each Chain indicates (2) each.

WST36-14-84545, 84546 For SVOA, HEXP & O+G Lab rec'd (1) Containers Each Chain indicates (3) Each

~~WST3~~ P.D. 7-11-14
WTESR-14-78699 For SR90 Lab rec'd (1) Container Chain indicates (3).

PM (or PMA) review: Initials JP Date 7-14-14 Page 2 of 2

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 44.0 LB MAN
CAD: 0014176/CAFE2804

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TA00 BLDG 1237 DPU 03

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ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2804

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(843) 556-8171
REF: WE991158W100

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ACTWGT: 19.0 LB MAN
CAD: 0014176/CAFE2804

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TRK# 0201 5908 1777 2670

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Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
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TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 54.0 LB MAN
CAD: 0014176/CAFE2804

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CHARLESTON SC 29407
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REF: MR1A015AGWF0

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521C2/ED4F/6F03

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1 of 2

TRK# 0201 5908 1777 2637
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Part # 156148-434 RIT2 10/11

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LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 10JUL14
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

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GENERAL ENGINEERING LAB
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CHARLESTON SC 29407
(843) 556-8171
REF: WE991155W300

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2 of 3
MPS# 0263 5908 1777 2718
Mstr# 5908 1777 2707

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Part # 156148-434 RITZ 10/11

# Data Review Qualifier Flag Definition Sheet

## Data Review Qualifier Definitions

| Qualifier | Explanation |
|---|---|
| * | A quality control analyte recovery is outside of specified acceptance criteria |
| ** | Analyte is a surrogate compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL |
| A | The TIC is a suspected aldol-condensation product |
| B | Target analyte was detected in the associated blank |
| B | Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL |
| BD | Results are either below the MDC or tracer recovery is low |
| C | Analyte has been confirmed by GC/MS analysis |
| D | Results are reported from a diluted aliquot of the sample |
| d | 5-day BOD-The 2:1 depletion requirement was not met for this sample |
| E | Organics-Concentration of the target analyte exceeds the instrument calibration range |
| E | Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria |
| H | Analytical holding time was exceeded |
| h | Preparation or preservation holding time was exceeded |
| J | Value is estimated |
| N | Metals-The Matrix spike sample recovery is not within specified control limits |
| N | Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more |
| ND | Analyte concentration is not detected above the reporting limit |
| UI | Gamma Spectroscopy-Uncertain identification |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | QC Samples were not spiked with this compound |
| Z | Paint Filter Test-Particulates passed through the filter, however no free liquids were observed. |

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

# Volatile Analysis

# Case Narrative

**ChemStation Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3718**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer** |
| Analytical Method: | SW846 8260B |
| Prep Method: | SW846 5030 |
| Analytical Batch Number: | 1407979 |
| Prep Batch Number: | 1407977 |

## Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

| Sample ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460008 | RE57-14-84129 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |
| 1203139138 | Method Blank (MB) |
| 1203139139 | Method Blank (MB) |
| 1203139140 | 352465001(RE57-14-84187) Post Spike (PS) |
| 1203139141 | 352465001(RE57-14-84187) Post Spike (PS) |
| 1203139142 | 352465001(RE57-14-84187) Post Spike Duplicate (PSD) |
| 1203139143 | 352465001(RE57-14-84187) Post Spike Duplicate (PSD) |
| 1203139144 | Laboratory Control Sample (LCS) |
| 1203139145 | Laboratory Control Sample (LCS) |
| 1203139146 | Laboratory Control Sample (LCS) |
| 1203139147 | Laboratory Control Sample (LCS) |

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 352460 001, 002, 003, 004, 005, 006, 009, 010, 011, 012 and 013 in this SDG were analyzed on an "dry weight" basis. Samples 352460 008 in this SDG were analyzed on a "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 21.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

**Calibration Information**

A complete list of the initial calibration data files with the correct dates and times of analysis are shown in the Calibration History report located in the Standard Data section of the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L or 20 ug/L for low level analyses. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

**Initial Calibration**

At the request of the client, linear curve fits, for target analytes that did not meet the x-intercept criteria of less than or equal to 3 times the MDL and had %RSDs less than 60%, were set to use the average response factor to quantitate data in this SDG.

**Continuing Calibration Verification Requirements**

All associated calibration verification standard(s) (CCV) met the acceptance criteria.

**Quality Control (QC) Information**

**Blank (MB) Statement**

Target analytes were detected in the blank 1203139139 (MB) below the reporting limit.

**Surrogate Recoveries**

Surrogate recoveries in all client and quality control samples were within the acceptance limits.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**

Sample 352465001 (RE57-14-84187) was designated for spike analysis.

**Matrix Spike (PS) Recovery Statement**

The spike recoveries were within the required acceptance limits.

**Matrix Spike Duplicate (PSD) Recovery Statement**

The spike duplicate recoveries were within the required acceptance limits.

**Relative Percent Difference (RPD) Statement**

The RPDs between the matrix spike pair met the acceptance limits.

**Internal Standard (ISTD) Acceptance**

In samples 352460006 (RE57-14-84146), 352460009 (RE57-14-84136), 352460010 (RE57-14-84147) and

352460013 (RE57-14-84148), internal standard responses were outside the required acceptance criteria. Sample re-analysis confirmed matrix interference. See the Data Exception Report in the miscellaneous section of the deliverable.

## Technical Information

### Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. Samples were not analyzed within the recommended holding. However, the samples were analyzed within two times the holding period. This satisfies the client criteria.

### Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

### Sample Dilutions/Methanol Dilutions
The samples in this SDG did not require dilutions.

### Sample Re-extraction/Re-analysis
Re-analyses were not required for samples in this SDG.

## Miscellaneous Information

### Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

### Data Exception (DER) Documentation
The following DER was generated for this SDG: 1320761.

### Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

### TIC Comment
Tentatively identified compounds (TIC) were requested for this sample delivery group/work order. Please note that non-requested target analytes that are reported on the quantitation reports will be present on the Form I. These detected analytes are included in the calibrated method and as a result will be reported on the Sample Data Summary (Form I) or Certificate of Analysis (C of A). TIC data are included on the Sample Data Summary (Form I).

### Additional Comments
Additional comments were not required for this SDG.

### Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

**System Configuration**

The Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description | P & T Trap |
|---|---|---|---|---|---|
| VOA9.I | Agilent 6890/5973 GC/MS w/ OI Eclipse/Archon Autosampler | HP6890/HP5973 | DB-624 | J&W, 60m x 0.25mm x 1.4um | Trap 10 |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3718  GEL Work Order: 352460

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

B  The target analyte was detected in the associated blank.

H  Analytical holding time was exceeded

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Erin Haubert  **Name:** **Erin Haubert**

**Date:** **07 AUG 2014**  **Title:** **Data Validator**

# Sample Data Summary

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84119** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 12:16** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:29** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X411.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.04 | ug/kg | 0.519 | 1.04 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 78-93-3 | 2-Butanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 591-78-6 | 2-Hexanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 67-64-1 | Acetone | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 71-43-2 | Benzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-86-1 | Bromobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-97-5 | Bromochloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-27-4 | Bromodichloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-25-2 | Bromoform | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-83-9 | Bromomethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-15-0 | Carbon disulfide | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-90-7 | Chlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-00-3 | Chloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 67-66-3 | Chloroform | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-87-3 | Chloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84119** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 12:16** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:29** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X411.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-95-3 | Dibromomethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 100-41-4 | Ethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-88-4 | Iodomethane | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 98-82-8 | Isopropylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-09-2 | Methylene chloride | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 100-42-5 | Styrene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-88-3 | Toluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-01-6 | Trichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.19 | ug/kg | 1.73 | 5.19 |
| 75-01-4 | Vinyl chloride | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.08 | ug/kg | 0.692 | 2.08 |
| 104-51-8 | n-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 103-65-1 | n-Propylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-47-6 | o-Xylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 9.58 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 07:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84134** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 12:44** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X412.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.537 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.37 | ug/kg | 1.79 | 5.37 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.37 | ug/kg | 1.79 | 5.37 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.37 | ug/kg | 1.79 | 5.37 |
| 67-64-1 | Acetone | HUh | 5.37 | ug/kg | 1.79 | 5.37 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.37 | ug/kg | 1.79 | 5.37 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 07:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84134** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 12:44** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X412.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.37 | ug/kg | 1.79 | 5.37 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.37 | ug/kg | 1.79 | 5.37 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.37 | ug/kg | 1.79 | 5.37 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.15 | ug/kg | 0.717 | 2.15 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.358 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 7.25 | ug/kg | 0 | J |
| | unknown | 5.307 | 9.38 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460003** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84145** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 13:12** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:31** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X413.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.04 | ug/kg | 0.518 | 1.04 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 78-93-3 | 2-Butanone | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 591-78-6 | 2-Hexanone | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 67-64-1 | Acetone | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 71-43-2 | Benzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-86-1 | Bromobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-97-5 | Bromochloromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-27-4 | Bromodichloromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-25-2 | Bromoform | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-83-9 | Bromomethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-15-0 | Carbon disulfide | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-90-7 | Chlorobenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-00-3 | Chloroethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 67-66-3 | Chloroform | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-87-3 | Chloromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460003** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84145** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 13:12** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:31** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X413.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-95-3 | Dibromomethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 100-41-4 | Ethylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 74-88-4 | Iodomethane | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 98-82-8 | Isopropylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-09-2 | Methylene chloride | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 100-42-5 | Styrene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 108-88-3 | Toluene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 79-01-6 | Trichloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.18 | ug/kg | 1.73 | 5.18 |
| 75-01-4 | Vinyl chloride | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.07 | ug/kg | 0.691 | 2.07 |
| 104-51-8 | n-Butylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 103-65-1 | n-Propylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 95-47-6 | o-Xylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.345 | 1.04 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 9.51 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460004** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84156** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 13:40** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:32** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X414.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.05 | ug/kg | 0.527 | 1.05 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 78-93-3 | 2-Butanone | HUh | 5.27 | ug/kg | 1.76 | 5.27 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 591-78-6 | 2-Hexanone | HUh | 5.27 | ug/kg | 1.76 | 5.27 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.27 | ug/kg | 1.76 | 5.27 |
| 67-64-1 | Acetone | HUh | 5.27 | ug/kg | 1.76 | 5.27 |
| 71-43-2 | Benzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-86-1 | Bromobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-97-5 | Bromochloromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-27-4 | Bromodichloromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-25-2 | Bromoform | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-83-9 | Bromomethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-15-0 | Carbon disulfide | HUh | 5.27 | ug/kg | 1.76 | 5.27 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-90-7 | Chlorobenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-00-3 | Chloroethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 67-66-3 | Chloroform | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-87-3 | Chloromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460004** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84156** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 13:40** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:32** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X414.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-95-3 | Dibromomethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 100-41-4 | Ethylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 74-88-4 | Iodomethane | HUh | 5.27 | ug/kg | 1.76 | 5.27 |
| 98-82-8 | Isopropylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-09-2 | Methylene chloride | HUh | 5.27 | ug/kg | 1.76 | 5.27 |
| 100-42-5 | Styrene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 108-88-3 | Toluene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 79-01-6 | Trichloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.27 | ug/kg | 1.76 | 5.27 |
| 75-01-4 | Vinyl chloride | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.11 | ug/kg | 0.703 | 2.11 |
| 104-51-8 | n-Butylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 103-65-1 | n-Propylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 95-47-6 | o-Xylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.351 | 1.05 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 9.21 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 10:47** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460005** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **10.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84135** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 12:27** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:54** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y212.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.12 | ug/kg | 0.558 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 78-93-3 | 2-Butanone | HUh | 5.58 | ug/kg | 1.86 | 5.58 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 591-78-6 | 2-Hexanone | HUh | 5.58 | ug/kg | 1.86 | 5.58 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.58 | ug/kg | 1.86 | 5.58 |
| 67-64-1 | Acetone | HUh | 5.58 | ug/kg | 1.86 | 5.58 |
| 71-43-2 | Benzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 108-86-1 | Bromobenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 74-97-5 | Bromochloromethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-27-4 | Bromodichloromethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-25-2 | Bromoform | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 74-83-9 | Bromomethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-15-0 | Carbon disulfide | HUh | 5.58 | ug/kg | 1.86 | 5.58 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 108-90-7 | Chlorobenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-00-3 | Chloroethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 67-66-3 | Chloroform | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 74-87-3 | Chloromethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 10:47** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460005** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **10.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84135** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 12:27** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:54** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y212.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 74-95-3 | Dibromomethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 100-41-4 | Ethylbenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 74-88-4 | Iodomethane | HUh | 5.58 | ug/kg | 1.86 | 5.58 |
| 98-82-8 | Isopropylbenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-09-2 | Methylene chloride | HUh | 5.58 | ug/kg | 1.86 | 5.58 |
| 100-42-5 | Styrene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 108-88-3 | Toluene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 79-01-6 | Trichloroethylene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.58 | ug/kg | 1.86 | 5.58 |
| 75-01-4 | Vinyl chloride | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.23 | ug/kg | 0.744 | 2.23 |
| 104-51-8 | n-Butylbenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 103-65-1 | n-Propylbenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 95-47-6 | o-Xylene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.371 | 1.12 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 24.7 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:15** | **Matrix:** | **SED** |
| **Lab Sample ID:** | **352460006** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **4.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84146** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 14:37** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:34** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X416.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.05 | ug/kg | 0.525 | 1.05 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 106-46-7 | 1,4-Dichlorobenzene | HJh | 0.357 | ug/kg | 0.350 | 1.05 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 78-93-3 | 2-Butanone | HUh | 5.25 | ug/kg | 1.75 | 5.25 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 591-78-6 | 2-Hexanone | HUh | 5.25 | ug/kg | 1.75 | 5.25 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.25 | ug/kg | 1.75 | 5.25 |
| 67-64-1 | Acetone | HUh | 5.25 | ug/kg | 1.75 | 5.25 |
| 71-43-2 | Benzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 108-86-1 | Bromobenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 74-97-5 | Bromochloromethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-27-4 | Bromodichloromethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-25-2 | Bromoform | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 74-83-9 | Bromomethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-15-0 | Carbon disulfide | HUh | 5.25 | ug/kg | 1.75 | 5.25 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 108-90-7 | Chlorobenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-00-3 | Chloroethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 67-66-3 | Chloroform | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 74-87-3 | Chloromethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:15** | **Matrix:** | **SED** |
| **Lab Sample ID:** | **352460006** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **4.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84146** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 14:37** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:34** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X416.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 74-95-3 | Dibromomethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 100-41-4 | Ethylbenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 74-88-4 | Iodomethane | HUh | 5.25 | ug/kg | 1.75 | 5.25 |
| 98-82-8 | Isopropylbenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-09-2 | Methylene chloride | HJh | 2.99 | ug/kg | 1.75 | 5.25 |
| 100-42-5 | Styrene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 108-88-3 | Toluene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 79-01-6 | Trichloroethylene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.25 | ug/kg | 1.75 | 5.25 |
| 75-01-4 | Vinyl chloride | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.10 | ug/kg | 0.700 | 2.10 |
| 104-51-8 | n-Butylbenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 103-65-1 | n-Propylbenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 95-47-6 | o-Xylene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.05 | ug/kg | 0.350 | 1.05 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 29.8 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460008** | **Date Received:** | **07/11/2014 09:00** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84129** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 10:51** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:26** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X408.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460008** | **Date Received:** | **07/11/2014 09:00** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84129** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 10:51** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:26** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X408.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 10.8 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460009** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **7.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84136** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 15:04** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:35** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X417.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.08 | ug/kg | 0.541 | 1.08 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 78-93-3 | 2-Butanone | HUh | 5.41 | ug/kg | 1.80 | 5.41 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 591-78-6 | 2-Hexanone | HUh | 5.41 | ug/kg | 1.80 | 5.41 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.41 | ug/kg | 1.80 | 5.41 |
| 67-64-1 | Acetone | HUh | 5.41 | ug/kg | 1.80 | 5.41 |
| 71-43-2 | Benzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 108-86-1 | Bromobenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 74-97-5 | Bromochloromethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-27-4 | Bromodichloromethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-25-2 | Bromoform | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 74-83-9 | Bromomethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-15-0 | Carbon disulfide | HUh | 5.41 | ug/kg | 1.80 | 5.41 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 108-90-7 | Chlorobenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-00-3 | Chloroethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 67-66-3 | Chloroform | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 74-87-3 | Chloromethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460009** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **7.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84136** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 15:04** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:35** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X417.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 74-95-3 | Dibromomethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 100-41-4 | Ethylbenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 74-88-4 | Iodomethane | HUh | 5.41 | ug/kg | 1.80 | 5.41 |
| 98-82-8 | Isopropylbenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-09-2 | Methylene chloride | HUh | 5.41 | ug/kg | 1.80 | 5.41 |
| 100-42-5 | Styrene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 108-88-3 | Toluene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 79-01-6 | Trichloroethylene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.41 | ug/kg | 1.80 | 5.41 |
| 75-01-4 | Vinyl chloride | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.16 | ug/kg | 0.721 | 2.16 |
| 104-51-8 | n-Butylbenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 103-65-1 | n-Propylbenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 95-47-6 | o-Xylene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.08 | ug/kg | 0.360 | 1.08 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 24.9 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460010** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 15:32** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:36** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X418.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.06 | ug/kg | 0.528 | 1.06 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 78-93-3 | 2-Butanone | HUh | 5.28 | ug/kg | 1.76 | 5.28 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 591-78-6 | 2-Hexanone | HUh | 5.28 | ug/kg | 1.76 | 5.28 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.28 | ug/kg | 1.76 | 5.28 |
| 67-64-1 | Acetone | HUh | 5.28 | ug/kg | 1.76 | 5.28 |
| 71-43-2 | Benzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 108-86-1 | Bromobenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 74-97-5 | Bromochloromethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-27-4 | Bromodichloromethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-25-2 | Bromoform | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 74-83-9 | Bromomethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-15-0 | Carbon disulfide | HUh | 5.28 | ug/kg | 1.76 | 5.28 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 108-90-7 | Chlorobenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-00-3 | Chloroethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 67-66-3 | Chloroform | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 74-87-3 | Chloromethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460010** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84147** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 15:32** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:36** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X418.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 74-95-3 | Dibromomethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 100-41-4 | Ethylbenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 74-88-4 | Iodomethane | HUh | 5.28 | ug/kg | 1.76 | 5.28 |
| 98-82-8 | Isopropylbenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-09-2 | Methylene chloride | HUh | 5.28 | ug/kg | 1.76 | 5.28 |
| 100-42-5 | Styrene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 108-88-3 | Toluene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 79-01-6 | Trichloroethylene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.28 | ug/kg | 1.76 | 5.28 |
| 75-01-4 | Vinyl chloride | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.11 | ug/kg | 0.704 | 2.11 |
| 104-51-8 | n-Butylbenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 103-65-1 | n-Propylbenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 95-47-6 | o-Xylene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.06 | ug/kg | 0.352 | 1.06 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 22 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460011** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84158** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:01** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:37** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X419.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.536 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 67-64-1 | Acetone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460011** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84158** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:01** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:37** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X419.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.15 | ug/kg | 0.715 | 2.15 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 13.7 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 13:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460012** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84137** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:29** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:38** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X420.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.04 | ug/kg | 0.520 | 1.04 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 78-93-3 | 2-Butanone | HUh | 5.20 | ug/kg | 1.73 | 5.20 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 591-78-6 | 2-Hexanone | HUh | 5.20 | ug/kg | 1.73 | 5.20 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.20 | ug/kg | 1.73 | 5.20 |
| 67-64-1 | Acetone | HUh | 5.20 | ug/kg | 1.73 | 5.20 |
| 71-43-2 | Benzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-86-1 | Bromobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-97-5 | Bromochloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-27-4 | Bromodichloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-25-2 | Bromoform | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-83-9 | Bromomethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-15-0 | Carbon disulfide | HUh | 5.20 | ug/kg | 1.73 | 5.20 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-90-7 | Chlorobenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-00-3 | Chloroethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 67-66-3 | Chloroform | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-87-3 | Chloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 13:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460012** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84137** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:29** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:38** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X420.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-95-3 | Dibromomethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 100-41-4 | Ethylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 74-88-4 | Iodomethane | HUh | 5.20 | ug/kg | 1.73 | 5.20 |
| 98-82-8 | Isopropylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-09-2 | Methylene chloride | HUh | 5.20 | ug/kg | 1.73 | 5.20 |
| 100-42-5 | Styrene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 108-88-3 | Toluene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 79-01-6 | Trichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.20 | ug/kg | 1.73 | 5.20 |
| 75-01-4 | Vinyl chloride | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.08 | ug/kg | 0.694 | 2.08 |
| 104-51-8 | n-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 103-65-1 | n-Propylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 95-47-6 | o-Xylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.04 | ug/kg | 0.346 | 1.04 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 12.8 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460013** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84148** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:57** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:39** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X421.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.536 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HJh | 0.375 | ug/kg | 0.357 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 67-64-1 | Acetone | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460013** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84148** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 16:57** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 09:39** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X421.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.36 | ug/kg | 1.79 | 5.36 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.14 | ug/kg | 0.715 | 2.14 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.357 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 27.2 | ug/kg | 0 | J |
| | unknown | 5.319 | 11.7 | ug/kg | 0 | J |

# Quality Control Summary

**Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3718**

**Matrix Type: SOLID**

| Sample ID | Client ID | DCED4 %REC | TOL %REC | BFB %REC |
|---|---|---|---|---|
| 1203139144 | LCS for batch 1407977 | 83 | 93 | 88 |
| 1203139145 | LCS for batch 1407977 | 85 | 98 | 90 |
| 1203139138 | MB for batch 1407977 | 89 | 98 | 92 |
| 352460008 | RE57-14-84129 | 86 | 100 | 87 |
| 352460001 | RE57-14-84119 | 88 | 109 | 113 |
| 352460002 | RE57-14-84134 | 89 | 99 | 91 |
| 352460003 | RE57-14-84145 | 92 | 104 | 103 |
| 352460004 | RE57-14-84156 | 90 | 99 | 98 |
| 352460006 | RE57-14-84146 | 90 | 115 | 118 |
| 352460009 | RE57-14-84136 | 92 | 107 | 104 |
| 352460010 | RE57-14-84147 | 89 | 116 | 113 |
| 352460011 | RE57-14-84158 | 87 | 99 | 91 |
| 352460012 | RE57-14-84137 | 91 | 100 | 94 |
| 352460013 | RE57-14-84148 | 96 | 110 | 106 |
| 1203139146 | LCS for batch 1407977 | 81 | 92 | 86 |
| 1203139147 | LCS for batch 1407977 | 88 | 95 | 93 |
| 1203139139 | MB for batch 1407977 | 87 | 96 | 89 |
| 1203139140 | RE57-14-84187PS | 81 | 96 | 89 |
| 1203139142 | RE57-14-84187PSD | 86 | 97 | 85 |
| 1203139141 | RE57-14-84187PS | 83 | 99 | 94 |
| 1203139143 | RE57-14-84187PSD | 86 | 98 | 93 |
| 352460005 | RE57-14-84135 | 91 | 99 | 88 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| DCED4 | = 1,2-Dichloroethane-d4 | (76%-122%) |
| TOL | = Toluene-d8 | (80%-120%) |
| BFB | = Bromofluorobenzene | (80%-120%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PS | m,p-Xylenes | 100 | 0.00 | HUh | 98.5 | 98 | 62-124 |
| 67-64-1 | PS | Acetone | 250 | 0.00 | HUh | 220 | 88 | 42-147 |
| 74-88-4 | PS | Iodomethane | 250 | 0.00 | HUh | 243 | 97 | 68-121 |
| 75-15-0 | PS | Carbon disulfide | 250 | 0.00 | HUh | 244 | 98 | 64-147 |
| 78-93-3 | PS | 2-Butanone | 250 | 0.00 | HUh | 228 | 91 | 44-145 |
| 108-10-1 | PS | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 243 | 97 | 71-133 |
| 591-78-6 | PS | 2-Hexanone | 250 | 0.00 | HUh | 247 | 99 | 47-147 |
| 75-71-8 | PS | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 38.7 | 77 | 46-134 |
| 74-87-3 | PS | Chloromethane | 50.0 | 0.00 | HUh | 58.9 | 118 | 54-139 |
| 75-01-4 | PS | Vinyl chloride | 50.0 | 0.00 | HUh | 62.1 | 124 | 47-141 |
| 74-83-9 | PS | Bromomethane | 50.0 | 0.00 | HUh | 48.7 | 97 | 47-135 |
| 75-00-3 | PS | Chloroethane | 50.0 | 0.00 | HUh | 52.2 | 104 | 52-129 |
| 75-69-4 | PS | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 44.8 | 90 | 61-126 |
| 75-35-4 | PS | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 45.6 | 91 | 67-135 |
| 75-09-2 | PS | Methylene chloride | 50.0 | 0.00 | HUh | 44.5 | 89 | 68-123 |
| 156-60-5 | PS | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 46.8 | 94 | 67-129 |
| 75-34-3 | PS | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 46.8 | 94 | 70-125 |
| 156-59-2 | PS | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 46.7 | 93 | 70-125 |
| 594-20-7 | PS | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 44.6 | 89 | 67-129 |
| 74-97-5 | PS | Bromochloromethane | 50.0 | 0.00 | HUh | 48.5 | 97 | 73-123 |
| 67-66-3 | PS | Chloroform | 50.0 | 0.00 | HUh | 42.4 | 85 | 70-123 |
| 71-55-6 | PS | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 44.3 | 89 | 71-128 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PS | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 43.0 | 86 | 68-129 |
| 56-23-5 | PS | Carbon tetrachloride | 50.0 | 0.00 | HUh | 44.6 | 89 | 70-129 |
| 107-06-2 | PS | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 39.1 | 78 | 67-119 |
| 71-43-2 | PS | Benzene | 50.0 | 0.00 | HUh | 48.6 | 97 | 67-124 |
| 79-01-6 | PS | Trichloroethylene | 50.0 | 0.00 | HUh | 45.9 | 92 | 68-130 |
| 78-87-5 | PS | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.1 | 96 | 69-122 |
| 74-95-3 | PS | Dibromomethane | 50.0 | 0.00 | HUh | 45.5 | 91 | 73-120 |
| 75-27-4 | PS | Bromodichloromethane | 50.0 | 0.00 | HUh | 44.6 | 89 | 67-124 |
| 10061-01-5 | PS | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 45.5 | 91 | 67-127 |
| 108-88-3 | PS | Toluene | 50.0 | 0.00 | HUh | 46.2 | 92 | 64-124 |
| 10061-02-6 | PS | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 42.2 | 84 | 68-122 |
| 79-00-5 | PS | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 44.5 | 89 | 73-121 |
| 142-28-9 | PS | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 42.1 | 84 | 69-119 |
| 127-18-4 | PS | Tetrachloroethylene | 50.0 | 0.00 | HUh | 48.5 | 97 | 64-123 |
| 124-48-1 | PS | Dibromochloromethane | 50.0 | 0.00 | HUh | 48.9 | 98 | 66-122 |
| 106-93-4 | PS | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 45.1 | 90 | 73-125 |
| 108-90-7 | PS | Chlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 68-120 |
| 100-41-4 | PS | Ethylbenzene | 50.0 | 0.00 | HUh | 45.4 | 91 | 63-122 |
| 95-47-6 | PS | o-Xylene | 50.0 | 0.00 | HUh | 48.7 | 97 | 64-122 |
| 100-42-5 | PS | Styrene | 50.0 | 0.00 | HUh | 47.1 | 94 | 70-126 |
| 75-25-2 | PS | Bromoform | 50.0 | 0.00 | HUh | 46.0 | 92 | 54-131 |
| 98-82-8 | PS | Isopropylbenzene | 50.0 | 0.00 | HUh | 48.2 | 96 | 64-132 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187PS**
**Lab Sample ID** **1203139140**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:06**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 48.3 | 97 | 68-132 |
| 96-18-4 | PS | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 42.6 | 85 | 66-131 |
| 108-86-1 | PS | Bromobenzene | 50.0 | 0.00 | HUh | 47.8 | 96 | 67-124 |
| 103-65-1 | PS | n-Propylbenzene | 50.0 | 0.00 | HUh | 43.9 | 88 | 60-127 |
| 108-67-8 | PS | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 46.5 | 93 | 62-129 |
| 95-49-8 | PS | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 47.6 | 95 | 63-125 |
| 106-43-4 | PS | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 43.7 | 87 | 63-124 |
| 98-06-6 | PS | tert-Butylbenzene | 50.0 | 0.00 | HUh | 49.0 | 98 | 64-131 |
| 95-63-6 | PS | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 44.9 | 90 | 63-126 |
| 135-98-8 | PS | sec-Butylbenzene | 50.0 | 0.00 | HUh | 46.4 | 93 | 59-133 |
| 99-87-6 | PS | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 46.1 | 92 | 58-130 |
| 541-73-1 | PS | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 62-125 |
| 106-46-7 | PS | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 62-122 |
| 104-51-8 | PS | n-Butylbenzene | 50.0 | 0.00 | HUh | 41.0 | 82 | 55-133 |
| 96-12-8 | PS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 43.8 | 88 | 54-133 |
| 630-20-6 | PS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 48.1 | 96 | 72-126 |
| 95-50-1 | PS | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.4 | 93 | 63-123 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PSD | m,p-Xylenes | 100 | 0.00 | HUh | 96.1 | 96 | 62-124 | 2 | 0-20 |
| 67-64-1 | PSD | Acetone | 250 | 0.00 | HUh | 247 | 99 | 42-147 | 12 | 0-20 |
| 74-88-4 | PSD | Iodomethane | 250 | 0.00 | HUh | 250 | 100 | 68-121 | 3 | 0-20 |
| 75-15-0 | PSD | Carbon disulfide | 250 | 0.00 | HUh | 246 | 98 | 64-147 | 1 | 0-20 |
| 78-93-3 | PSD | 2-Butanone | 250 | 0.00 | HUh | 254 | 102 | 44-145 | 11 | 0-20 |
| 108-10-1 | PSD | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 253 | 101 | 71-133 | 4 | 0-20 |
| 591-78-6 | PSD | 2-Hexanone | 250 | 0.00 | HUh | 261 | 105 | 47-147 | 6 | 0-20 |
| 75-71-8 | PSD | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 36.6 | 73 | 46-134 | 6 | 0-20 |
| 74-87-3 | PSD | Chloromethane | 50.0 | 0.00 | HUh | 54.8 | 110 | 54-139 | 7 | 0-20 |
| 75-01-4 | PSD | Vinyl chloride | 50.0 | 0.00 | HUh | 57.5 | 115 | 47-141 | 8 | 0-20 |
| 74-83-9 | PSD | Bromomethane | 50.0 | 0.00 | HUh | 45.6 | 91 | 47-135 | 6 | 0-20 |
| 75-00-3 | PSD | Chloroethane | 50.0 | 0.00 | HUh | 49.0 | 98 | 52-129 | 6 | 0-20 |
| 75-69-4 | PSD | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 42.6 | 85 | 61-126 | 5 | 0-20 |
| 75-35-4 | PSD | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 46.5 | 93 | 67-135 | 2 | 0-20 |
| 75-09-2 | PSD | Methylene chloride | 50.0 | 0.00 | HUh | 47.0 | 94 | 68-123 | 6 | 0-20 |
| 156-60-5 | PSD | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 47.7 | 95 | 67-129 | 2 | 0-20 |
| 75-34-3 | PSD | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 47.3 | 95 | 70-125 | 1 | 0-20 |
| 156-59-2 | PSD | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 47.6 | 95 | 70-125 | 2 | 0-20 |
| 594-20-7 | PSD | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 43.4 | 87 | 67-129 | 3 | 0-20 |
| 74-97-5 | PSD | Bromochloromethane | 50.0 | 0.00 | HUh | 51.2 | 102 | 73-123 | 5 | 0-20 |
| 67-66-3 | PSD | Chloroform | 50.0 | 0.00 | HUh | 43.9 | 88 | 70-123 | 3 | 0-20 |
| 71-55-6 | PSD | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 44.1 | 88 | 71-128 | 1 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PSD | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 42.3 | 85 | 68-129 | 2 | 0-20 |
| 56-23-5 | PSD | Carbon tetrachloride | 50.0 | 0.00 | HUh | 45.7 | 91 | 70-129 | 3 | 0-20 |
| 107-06-2 | PSD | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 40.9 | 82 | 67-119 | 5 | 0-20 |
| 71-43-2 | PSD | Benzene | 50.0 | 0.00 | HUh | 48.0 | 96 | 67-124 | 1 | 0-20 |
| 79-01-6 | PSD | Trichloroethylene | 50.0 | 0.00 | HUh | 46.4 | 93 | 68-130 | 1 | 0-20 |
| 78-87-5 | PSD | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.5 | 97 | 69-122 | 1 | 0-20 |
| 74-95-3 | PSD | Dibromomethane | 50.0 | 0.00 | HUh | 46.9 | 94 | 73-120 | 3 | 0-20 |
| 75-27-4 | PSD | Bromodichloromethane | 50.0 | 0.00 | HUh | 45.7 | 91 | 67-124 | 2 | 0-20 |
| 10061-01-5 | PSD | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 45.2 | 90 | 67-127 | 1 | 0-20 |
| 108-88-3 | PSD | Toluene | 50.0 | 0.00 | HUh | 46.2 | 92 | 64-124 | 0 | 0-20 |
| 10061-02-6 | PSD | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 42.5 | 85 | 68-122 | 1 | 0-20 |
| 79-00-5 | PSD | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 45.4 | 91 | 73-121 | 2 | 0-20 |
| 142-28-9 | PSD | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 42.0 | 84 | 69-119 | 0 | 0-20 |
| 127-18-4 | PSD | Tetrachloroethylene | 50.0 | 0.00 | HUh | 48.5 | 97 | 64-123 | 0 | 0-20 |
| 124-48-1 | PSD | Dibromochloromethane | 50.0 | 0.00 | HUh | 50.8 | 102 | 66-122 | 4 | 0-20 |
| 106-93-4 | PSD | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 47.0 | 94 | 73-125 | 4 | 0-20 |
| 108-90-7 | PSD | Chlorobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 68-120 | 0 | 0-20 |
| 100-41-4 | PSD | Ethylbenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 63-122 | 2 | 0-20 |
| 95-47-6 | PSD | o-Xylene | 50.0 | 0.00 | HUh | 48.8 | 98 | 64-122 | 0 | 0-20 |
| 100-42-5 | PSD | Styrene | 50.0 | 0.00 | HUh | 47.7 | 95 | 70-126 | 1 | 0-20 |
| 75-25-2 | PSD | Bromoform | 50.0 | 0.00 | HUh | 47.4 | 95 | 54-131 | 3 | 0-20 |
| 98-82-8 | PSD | Isopropylbenzene | 50.0 | 0.00 | HUh | 45.8 | 92 | 64-132 | 5 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139142**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 10:34**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PSD | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 47.8 | 96 | 68-132 | 1 | 0-20 |
| 96-18-4 | PSD | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 43.5 | 87 | 66-131 | 2 | 0-20 |
| 108-86-1 | PSD | Bromobenzene | 50.0 | 0.00 | HUh | 46.3 | 93 | 67-124 | 3 | 0-20 |
| 103-65-1 | PSD | n-Propylbenzene | 50.0 | 0.00 | HUh | 41.7 | 83 | 60-127 | 5 | 0-20 |
| 108-67-8 | PSD | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 44.3 | 89 | 62-129 | 5 | 0-20 |
| 95-49-8 | PSD | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 45.5 | 91 | 63-125 | 4 | 0-20 |
| 106-43-4 | PSD | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 41.9 | 84 | 63-124 | 4 | 0-20 |
| 98-06-6 | PSD | tert-Butylbenzene | 50.0 | 0.00 | HUh | 46.9 | 94 | 64-131 | 4 | 0-20 |
| 95-63-6 | PSD | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 42.6 | 85 | 63-126 | 5 | 0-20 |
| 135-98-8 | PSD | sec-Butylbenzene | 50.0 | 0.00 | HUh | 44.2 | 88 | 59-133 | 5 | 0-20 |
| 99-87-6 | PSD | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 44.2 | 88 | 58-130 | 4 | 0-20 |
| 541-73-1 | PSD | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 45.6 | 91 | 62-125 | 1 | 0-20 |
| 106-46-7 | PSD | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 44.1 | 88 | 62-122 | 0 | 0-20 |
| 104-51-8 | PSD | n-Butylbenzene | 50.0 | 0.00 | HUh | 39.3 | 79 | 55-133 | 4 | 0-20 |
| 96-12-8 | PSD | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 46.7 | 93 | 54-133 | 6 | 0-20 |
| 630-20-6 | PSD | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 49.7 | 99 | 72-126 | 3 | 0-20 |
| 95-50-1 | PSD | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 46.2 | 92 | 63-123 | 0 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Sample Type:** | **Post Spike** |
| **Client ID:** | **RE57-14-84187PS** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203139141** | **%Moisture:** | **6.3** |
| **Instrument:** | **VOA9.I** | **Analysis Date:** | **08/05/2014 11:03** |
| **Analyst:** | **RXY1** | **Prep Batch ID:** | **1407977** |
| **Purge Vol:** | **5 mL** | **Batch ID:** | **1407979** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PS | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 240 | 96 | 68-146 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187PSD**
**Lab Sample ID** **1203139143**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **08/05/2014 11:31**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PSD | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 215 | 86 | 68-146 | 11 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 92.7 | 93 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 220 | 88 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 229 | 92 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 229 | 92 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 219 | 88 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 220 | 88 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 229 | 92 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 36.0 | 72 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 51.2 | 102 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 51.4 | 103 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 43.8 | 88 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 44.7 | 89 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 41.0 | 82 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 42.0 | 84 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 41.7 | 83 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 43.7 | 87 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 43.3 | 87 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 43.9 | 88 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 43.2 | 86 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 46.9 | 94 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 41.9 | 84 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 42.8 | 86 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 39.7 | 79 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 44.8 | 90 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 37.9 | 76 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 44.9 | 90 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 44.0 | 88 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 43.7 | 87 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 43.5 | 87 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 43.5 | 87 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 44.1 | 88 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 42.8 | 86 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 40.9 | 82 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 41.3 | 83 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 38.9 | 78 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 43.8 | 88 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 49.9 | 100 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 43.4 | 87 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 43.1 | 86 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 42.7 | 85 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 45.1 | 90 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 45.5 | 91 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 47.7 | 95 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 43.6 | 87 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139144**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 08:29**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 43.3 | 87 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 39.9 | 80 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 44.1 | 88 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 40.6 | 81 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 43.2 | 86 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 43.1 | 86 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 41.3 | 83 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 44.9 | 90 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 42.1 | 84 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 44.0 | 88 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 43.3 | 87 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 45.1 | 90 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 43.7 | 87 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 40.2 | 80 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 45.5 | 91 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 46.1 | 92 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 44.9 | 90 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139145**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/31/2014 09:25**
**Dilution: 1**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 191 | 76 | 76-130 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 101 | 101 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 232 | 93 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 257 | 103 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 254 | 102 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 231 | 92 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 230 | 92 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 239 | 96 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 37.8 | 76 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 57.6 | 115 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 60.0 | 120 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 49.2 | 98 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 50.9 | 102 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 44.1 | 88 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 46.8 | 94 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 46.1 | 92 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 48.8 | 98 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 48.3 | 97 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 49.1 | 98 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 45.9 | 92 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 52.8 | 106 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 45.0 | 90 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 46.3 | 93 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 43.9 | 88 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 47.5 | 95 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 40.3 | 81 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 49.3 | 99 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 47.0 | 94 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 48.8 | 98 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 45.7 | 91 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 45.2 | 90 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 48.2 | 96 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 45.9 | 92 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 43.3 | 87 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 43.7 | 87 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 41.9 | 84 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 47.8 | 96 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 50.4 | 101 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 46.4 | 93 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 48.0 | 96 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 45.9 | 92 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 49.9 | 100 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 50.4 | 101 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 45.7 | 91 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 45.1 | 90 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139146**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 08:13**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 44.5 | 89 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 38.8 | 78 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 46.7 | 93 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 42.4 | 85 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 44.0 | 88 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 46.4 | 93 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 43.1 | 86 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 46.1 | 92 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 43.2 | 86 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 45.6 | 91 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 45.4 | 91 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 47.9 | 96 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 46.2 | 92 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 42.2 | 84 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 41.9 | 84 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 49.1 | 98 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 47.1 | 94 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1407977**
**Lab Sample ID** **1203139147**
**Instrument:** **VOA9.I**
**Analyst:** **RXY1**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **08/05/2014 09:10**
**Dilution: 1**
**Prep Batch ID:** **1407977**
**Batch ID:** **1407979**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 207 | 83 | 76-130 |

## Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1407977** | **Instrument ID:** | **VOA9.I** | **Data File:** | **073114V9\9X406B.D** |
| **Lab Sample ID:** | **1203139138** | **Prep Date:** | **07/31/2014 07:02** | **Analyzed:** | **07/31/14 09:54** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1407977 | 1203139144 | 073114V9\9X403L.D | 07/31/14 | 0829 |
| 02 | LCS for batch 1407977 | 1203139145 | 073114V9\9X405L.D | 07/31/14 | 0925 |
| 03 | RE57-14-84129 | 352460008 | 073114V9\9X408.D | 07/31/14 | 1051 |
| 04 | RE57-14-84119 | 352460001 | 073114V9\9X411.D | 07/31/14 | 1216 |
| 05 | RE57-14-84134 | 352460002 | 073114V9\9X412.D | 07/31/14 | 1244 |
| 06 | RE57-14-84145 | 352460003 | 073114V9\9X413.D | 07/31/14 | 1312 |
| 07 | RE57-14-84156 | 352460004 | 073114V9\9X414.D | 07/31/14 | 1340 |
| 08 | RE57-14-84146 | 352460006 | 073114V9\9X416.D | 07/31/14 | 1437 |
| 09 | RE57-14-84136 | 352460009 | 073114V9\9X417.D | 07/31/14 | 1504 |
| 10 | RE57-14-84147 | 352460010 | 073114V9\9X418.D | 07/31/14 | 1532 |
| 11 | RE57-14-84158 | 352460011 | 073114V9\9X419.D | 07/31/14 | 1601 |
| 12 | RE57-14-84137 | 352460012 | 073114V9\9X420.D | 07/31/14 | 1629 |
| 13 | RE57-14-84148 | 352460013 | 073114V9\9X421.D | 07/31/14 | 1657 |

## Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1407977** | **Instrument ID:** | **VOA9.I** | **Data File:** | **080514V9\9Y206B.D** |
| **Lab Sample ID:** | **1203139139** | **Prep Date:** | **08/05/2014 07:02** | **Analyzed:** | **08/05/14 09:38** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 15 | LCS for batch 1407977 | 1203139146 | 080514V9\9Y203L.D | 08/05/14 | 0813 |
| 16 | LCS for batch 1407977 | 1203139147 | 080514V9\9Y205L.D | 08/05/14 | 0910 |
| 17 | RE57-14-84187PS | 1203139140 | 080514V9\9Y207.D | 08/05/14 | 1006 |
| 18 | RE57-14-84187PSD | 1203139142 | 080514V9\9Y208.D | 08/05/14 | 1034 |
| 19 | RE57-14-84187PS | 1203139141 | 080514V9\9Y209.D | 08/05/14 | 1103 |
| 20 | RE57-14-84187PSD | 1203139143 | 080514V9\9Y210.D | 08/05/14 | 1131 |
| 21 | RE57-14-84135 | 352460005 | 080514V9\9Y212.D | 08/05/14 | 1227 |

# Quality Control Data

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139138** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:54** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X406B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139138** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:54** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X406B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 5.77 | ug/kg | 0 | J |
| | unknown | 4.951 | 11.6 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139139** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:38** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y206B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | J | 1.88 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139139** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:38** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y206B.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 4.286 | 6.4 | ug/kg | 0 | J |
| | unknown | 5.26 | 8.51 | ug/kg | 0 | J |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139140** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:06** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y207.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 51.3 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 51.5 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 47.5 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 49.9 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 45.8 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 45.5 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 47.9 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 46.8 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 48.1 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 41.7 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 51.3 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 49.6 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 44.9 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | Hh | 244 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | Hh | 50.8 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | Hh | 264 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | Hh | 46.6 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 49.2 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 259 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | BHh | 235 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | Hh | 51.9 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | Hh | 51.0 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | Hh | 49.1 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | Hh | 51.9 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | Hh | 260 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | Hh | 47.6 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | Hh | 49.4 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | Hh | 55.7 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | Hh | 45.3 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | Hh | 62.8 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139140** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:06** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y207.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 52.1 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | Hh | 48.5 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 41.3 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | Hh | 48.4 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | Hh | 259 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | Hh | 51.4 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | Hh | 47.4 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | Hh | 50.3 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | Hh | 51.8 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | Hh | 48.9 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | Hh | 47.8 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | Hh | 66.3 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 49.8 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 48.5 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | Hh | 105 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | Hh | 43.7 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | Hh | 46.8 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | Hh | 52.0 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | Hh | 52.3 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 49.9 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 45.0 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139141** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:03** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y209.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139141** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:03** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y209.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 256 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139142** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:34** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y208.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 53.0 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 47.0 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 51.0 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 48.4 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 50.5 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 49.6 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 45.1 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 46.4 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 45.5 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 49.8 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 50.1 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 43.6 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 47.2 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 44.8 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 47.1 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 46.3 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | Hh | 271 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | Hh | 48.6 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | Hh | 279 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | Hh | 44.7 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 47.1 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 270 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | BHh | 264 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | Hh | 51.2 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | Hh | 49.4 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | Hh | 54.6 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | Hh | 50.6 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | Hh | 48.7 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | Hh | 262 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | Hh | 52.2 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | Hh | 46.8 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | Hh | 58.4 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139142** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 10:34** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y208.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 54.2 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | Hh | 50.0 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 39.0 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | Hh | 47.3 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | Hh | 266 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | Hh | 48.8 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | Hh | 50.2 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | Hh | 50.8 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | Hh | 51.7 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | Hh | 49.3 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | Hh | 49.5 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | Hh | 45.4 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | Hh | 61.3 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 50.7 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 48.3 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | Hh | 103 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | Hh | 41.9 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | Hh | 44.5 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | Hh | 52.1 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | Hh | 47.2 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | Hh | 50.0 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 50.9 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 45.4 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139143** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:31** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y210.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.533 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 67-64-1 | Acetone | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203139143** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 11:31** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 08:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y210.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.33 | ug/kg | 1.78 | 5.33 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 229 | ug/kg | 1.78 | 5.33 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139144** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 08:29** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X403L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 46.1 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 42.8 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 43.3 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 41.3 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 43.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 42.0 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 39.7 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 39.9 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 42.1 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 45.5 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 43.4 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 37.9 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 43.7 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 43.2 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 38.9 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 43.7 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 43.2 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 219 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 229 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 41.3 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 43.3 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 220 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | | 220 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 44.1 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 46.9 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 43.5 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 47.7 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 43.8 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 229 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 44.8 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 44.7 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 41.9 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 51.2 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139144** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 08:29** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X403L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 49.9 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 43.5 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 36.0 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 42.7 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 229 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 43.6 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 41.7 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 45.5 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 43.8 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 42.8 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 41.0 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 51.4 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 43.9 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 44.1 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 92.7 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 40.2 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 40.6 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 43.7 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 40.9 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139145** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:25** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X405L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139145** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **07/31/2014 09:25** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/31/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073114V9\9X405L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 191 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139146** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 08:13** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y203L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 49.1 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 46.3 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 44.5 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 43.7 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 48.3 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 46.8 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 43.9 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 38.8 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 43.2 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 41.9 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 46.4 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 47.1 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 40.3 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 48.8 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 44.0 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 47.9 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 41.9 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 46.2 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 45.9 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 231 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 46.4 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 239 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 43.1 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 45.4 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 230 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | B | 232 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 49.3 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 46.7 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 52.8 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 45.2 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 45.7 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 49.2 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 254 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 47.5 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 48.0 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 50.9 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 45.0 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 57.6 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139146** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 08:13** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y203L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 50.4 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 45.7 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 37.8 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 45.9 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 257 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 46.1 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 50.4 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 47.8 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 45.9 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 47.0 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 44.1 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 60.0 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 49.1 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 48.2 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 101 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 42.2 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 42.4 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 49.9 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 45.6 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 46.1 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 48.8 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 43.3 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139147** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:10** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y205L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203139147** | | | | |
| **Client Sample:** | **QC for batch 1407977** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407977** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407979** | **Inst:** | **VOA9.I** | **Dilution:** | **1** |
| **Run Date:** | **08/05/2014 09:10** | **Analyst:** | **RXY1** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **08/05/2014 07:01** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **080514V9\9Y205L.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 207 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 05-AUG-14 | Federal | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| VOA GC/MS | SW846 8260B | Solid | LANL 352207, 352465 |
| **Batch ID:** | **Sample Numbers:** | | |
| 1407979 | See Below | | |

**Potentially affected work order(s)(SDG): 352207(2014-3685),352460(2014-3718),352465(2014-3719),353064(2014-3910)**

**Application Issues:**

Failed Recovery for Surrogate or Tracer

Sample Analyzed out of Holding

Other

Sample Prepped out of Holding

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. The following samples were prepped and analyzed out of holding:<br><br>352207-001<br>352465-001, 002, 004<br>MS 1203139140, 1203139141<br>MSD 1203139142, 1203139143<br>352460-001,002,003,004,005,006,008,009,010,011,012,013<br>353064-001,002,003,004<br><br>2. The following samples did not meet the acceptable recovery criteria for the internal standards.<br><br>352460-006, 009, 010, 013<br>353064-001, 003<br><br>3. Sample 353064003 did not meet the acceptable recovery criteria for the surrogate recoveries. | 1. The samples were prepped, analyzed, and reported within 2x the holding time. This was acceptable per the client.<br><br>2-3. Sample analysis confirmed the results. It is believed possible matrix interference has been demonstrated. |

**Originator's Name:**

Ramona Yarbrough 05-AUG-14

**Data Validator/Group Leader:**

Erin Haubert 07-AUG-14

# Semi-Volatile Analysis

# Case Narrative

**Semi-Volatile Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3718**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry** |
| Analytical Method: | SW846 3541/8270D |
| Prep Method: | SW846 3541 |
| Analytical Batch Number: | 1403912 |
| Prep Batch Number: | 1403911 |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3541/8270D:

| Sample ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |
| 1203128639 | MB for batch 1403911 |
| 1203128640 | Laboratory Control Sample (LCS) |
| 1203128641 | 352465001(RE57-14-84187) Matrix Spike (MS) |
| 1203128642 | 352465001(RE57-14-84187) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 32.

Raw data reports are processed and reviewed by the analyst using the data analysis software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP).

**Calibration Information**

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Methodologies referenced N-Nitroso-diphenylamine. However, as stated in EPA Methodology, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, showed that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

**Initial Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG) in this batch. A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

**CCV Requirements**
All Calibration Verification Standards (CCV) did not meet the acceptance criteria as outlined in Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. This SDG satisfied the 8270D outlier acceptance criteria. Detected concentrations of these analytes should be considered as estimated.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG in this batch met the acceptance criteria.

**Surrogate Recoveries**
All the surrogate recoveries were within the established acceptance criteria for this SDG in this batch.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Sample 352465001 (RE57-14-84187) was selected for analysis as the matrix spike and matrix spike duplicate.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
Multiple RPD values between the MS and MSD, 1203128641 (RE57-14-84187) and 1203128642 (RE57-14-84187), were not within the 0-30% limits. Please see the QC Summary/Spike Recovery Report for the specific analytes and RPD values. These RPD failures are attributed to the large difference in the recovery values between analyte pairs in the MS and MSD. The MS and MSD passed recoveries for all the analytes. The LCS passed recoveries for all the analytes. The data are reported.

**Internal Standard (ISTD) Acceptance**

Sample 352460006 (RE57-14-84146) failed ISTD acceptance criteria. The sample was re-analyzed and confirmed the failure. The re-analysis data are reported. The initial analysis raw data have been placed in the Miscellaneous Section of the data package. Sample 352460013 (RE57-14-84148) failed ISTD acceptance criteria. The sample was re-analyzed and passed ISTD acceptance criteria. The re-analysis data are reported.

**Technical Information:**

**Holding Time Specifications**
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. All reported compound mass spectra met the detection specifications in the method.

**Sample Dilutions**
The samples in this SDG in this batch did not require dilutions.

**Sample Re-extraction/Re-analysis**
Samples 352460006 (RE57-14-84146) and 352460013 (RE57-14-84148) were re-analyzed due to ISTD failure.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception report (1315873 was generated for the samples in this batch for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Manual integrations, if any, are included with the raw data.

**TIC Comment**
Tentatively identified compounds (TIC) may be requested for samples 1203128639 (MB), 352460001 (RE57-14-84119), 352460002 (RE57-14-84134), 352460003 (RE57-14-84145), 352460004 (RE57-14-84156), 352460005 (RE57-14-84135), 352460006 (RE57-14-84146), 352460009 (RE57-14-84136), 352460010 (RE57-14-84147), 352460011 (RE57-14-84158), 352460012 (RE57-14-84137) and 352460013 (RE57-14-84148) in this delivery group/work order. Please note that non-requested calibrated analytes detected in a client sample may be reported on the Form 1/Certificate of Analysis as TICs. TIC data, if requested, are included on the Sample Data Summary (Form 1) and are also included with the sample raw data.

**Additional Comments**
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to rounding differences in the calculation, the data reported in the Surrogate Recovery Report may differ slightly from the raw data. Due to software issue, the raw data may not correctly display the updated SPC limits. Please see Sample Data Summary Report and Surrogate Recovery Report for the correct surrogate acceptance limits.

**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the reviewer name associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**System Configuration**

The Semi-Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description |
|---|---|---|---|---|
| MSD8.I | Agilent 6890/5973 GC/MS w/ 7683 Autosampler | HP6890/HP5973 | DB-5MS | 25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane) |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3718  GEL Work Order: 352460

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Barbara Bailey  **Name: Barbara Bailey**

**Date: 07 AUG 2014**  **Title: Data Validator**

# Sample Data Summary

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84119** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 10:36** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1807.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 122-66-7 | Azobenzene | U | 346 | ug/kg | 104 | 346 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 120-83-2 | 2,4-Dichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 105-67-9 | 2,4-Dimethylphenol | U | 346 | ug/kg | 104 | 346 |
| 51-28-5 | 2,4-Dinitrophenol | U | 692 | ug/kg | 104 | 692 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 346 | ug/kg | 104 | 346 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 346 | ug/kg | 104 | 346 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 95-57-8 | 2-Chlorophenol | U | 346 | ug/kg | 104 | 346 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 346 | ug/kg | 104 | 346 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 88-75-5 | 2-Nitrophenol | U | 346 | ug/kg | 104 | 346 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 346 | ug/kg | 104 | 346 |
| 101-55-3 | 4-Bromophenylphenylether | U | 346 | ug/kg | 104 | 346 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 346 | ug/kg | 138 | 346 |
| 106-47-8 | 4-Chloroaniline | U | 346 | ug/kg | 104 | 346 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 346 | ug/kg | 104 | 346 |
| 100-02-7 | 4-Nitrophenol | U | 346 | ug/kg | 104 | 346 |
| 83-32-9 | Acenaphthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 208-96-8 | Acenaphthylene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 62-53-3 | Aniline | U | 346 | ug/kg | 104 | 346 |
| 120-12-7 | Anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 56-55-3 | Benzo(a)anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 50-32-8 | Benzo(a)pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 65-85-0 | Benzoic acid | U | 692 | ug/kg | 173 | 692 |
| 100-51-6 | Benzyl alcohol | U | 346 | ug/kg | 104 | 346 |
| 85-68-7 | Butylbenzylphthalate | U | 346 | ug/kg | 104 | 346 |
| 218-01-9 | Chrysene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 84-74-2 | Di-n-butylphthalate | U | 346 | ug/kg | 104 | 346 |
| 117-84-0 | Di-n-octylphthalate | U | 346 | ug/kg | 104 | 346 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84119** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 10:36** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1807.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 132-64-9 | Dibenzofuran | U | 346 | ug/kg | 104 | 346 |
| 84-66-2 | Diethylphthalate | U | 346 | ug/kg | 104 | 346 |
| 131-11-3 | Dimethylphthalate | U | 346 | ug/kg | 104 | 346 |
| 122-39-4 | Diphenylamine | U | 346 | ug/kg | 104 | 346 |
| 206-44-0 | Fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 86-73-7 | Fluorene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 118-74-1 | Hexachlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 87-68-3 | Hexachlorobutadiene | U | 346 | ug/kg | 104 | 346 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 346 | ug/kg | 104 | 346 |
| 67-72-1 | Hexachloroethane | U | 346 | ug/kg | 104 | 346 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 78-59-1 | Isophorone | U | 346 | ug/kg | 104 | 346 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 346 | ug/kg | 104 | 346 |
| 621-64-7 | N-Nitrosodipropylamine | U | 346 | ug/kg | 104 | 346 |
| 91-20-3 | Naphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 98-95-3 | Nitrobenzene | U | 346 | ug/kg | 104 | 346 |
| 87-86-5 | Pentachlorophenol | U | 346 | ug/kg | 104 | 346 |
| 85-01-8 | Phenanthrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 108-95-2 | Phenol | U | 346 | ug/kg | 104 | 346 |
| 129-00-0 | Pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 110-86-1 | Pyridine | U | 346 | ug/kg | 104 | 346 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 346 | ug/kg | 104 | 346 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 346 | ug/kg | 104 | 346 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 346 | ug/kg | 104 | 346 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 346 | ug/kg | 104 | 346 |
| 65794-96-9 | m,p-Cresols | U | 346 | ug/kg | 104 | 346 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 346 | ug/kg | 104 | 346 |
| 95-48-7 | o-Cresol | U | 346 | ug/kg | 104 | 346 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 346 | ug/kg | 114 | 346 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 346 | ug/kg | 104 | 346 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.224 | 256 | ug/kg | 96 | NJ |
| | Unknown Aldol Condensate | 4.165 | 6390 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460001** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84119** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 10:36** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1807.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 6.454 | 250 | ug/kg | 0 | J |
| 000629-78-7 | Heptadecane | 11.359 | 192 | ug/kg | 97 | NJ |
| 001921-70-6 | Pentadecane, 2,6,10,14-tetramethyl | 11.381 | 178 | ug/kg | 93 | NJ |
| 000629-92-5 | Nonadecane | 12.45 | 197 | ug/kg | 95 | NJ |
| 000112-95-8 | Eicosane | 12.958 | 166 | ug/kg | 98 | NJ |
| 018435-45-5 | 1-Nonadecene | 15.681 | 446 | ug/kg | 91 | NJ |
| 000593-49-7 | Heptacosane | 17.146 | 222 | ug/kg | 93 | NJ |
| | unknown | 18.109 | 170 | ug/kg | 0 | J |
| 067860-04-2 | Oxirane, heptadecyl- | 18.548 | 248 | ug/kg | 94 | NJ |
| 000638-67-5 | Tricosane | 19.211 | 320 | ug/kg | 95 | NJ |
| 000629-99-2 | Pentacosane | 20.462 | 182 | ug/kg | 87 | NJ |
| 000544-76-3 | Hexadecane | 21.773 | 361 | ug/kg | 90 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 07:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84134** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 11:08** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1808.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 122-66-7 | Azobenzene | U | 358 | ug/kg | 107 | 358 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 358 | ug/kg | 107 | 358 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 358 | ug/kg | 107 | 358 |
| 120-83-2 | 2,4-Dichlorophenol | U | 358 | ug/kg | 107 | 358 |
| 105-67-9 | 2,4-Dimethylphenol | U | 358 | ug/kg | 107 | 358 |
| 51-28-5 | 2,4-Dinitrophenol | U | 716 | ug/kg | 107 | 716 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 358 | ug/kg | 107 | 358 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 358 | ug/kg | 107 | 358 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 95-57-8 | 2-Chlorophenol | U | 358 | ug/kg | 107 | 358 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 358 | ug/kg | 107 | 358 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 88-75-5 | 2-Nitrophenol | U | 358 | ug/kg | 107 | 358 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 358 | ug/kg | 107 | 358 |
| 101-55-3 | 4-Bromophenylphenylether | U | 358 | ug/kg | 107 | 358 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 358 | ug/kg | 143 | 358 |
| 106-47-8 | 4-Chloroaniline | U | 358 | ug/kg | 107 | 358 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 358 | ug/kg | 107 | 358 |
| 100-02-7 | 4-Nitrophenol | U | 358 | ug/kg | 107 | 358 |
| 83-32-9 | Acenaphthene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 208-96-8 | Acenaphthylene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 62-53-3 | Aniline | U | 358 | ug/kg | 107 | 358 |
| 120-12-7 | Anthracene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 56-55-3 | Benzo(a)anthracene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 50-32-8 | Benzo(a)pyrene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 65-85-0 | Benzoic acid | U | 716 | ug/kg | 179 | 716 |
| 100-51-6 | Benzyl alcohol | U | 358 | ug/kg | 107 | 358 |
| 85-68-7 | Butylbenzylphthalate | U | 358 | ug/kg | 107 | 358 |
| 218-01-9 | Chrysene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 84-74-2 | Di-n-butylphthalate | U | 358 | ug/kg | 107 | 358 |
| 117-84-0 | Di-n-octylphthalate | U | 358 | ug/kg | 107 | 358 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 07:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84134** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 11:08** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1808.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 132-64-9 | Dibenzofuran | U | 358 | ug/kg | 107 | 358 |
| 84-66-2 | Diethylphthalate | U | 358 | ug/kg | 107 | 358 |
| 131-11-3 | Dimethylphthalate | U | 358 | ug/kg | 107 | 358 |
| 122-39-4 | Diphenylamine | U | 358 | ug/kg | 107 | 358 |
| 206-44-0 | Fluoranthene | J | 13.2 | ug/kg | 10.7 | 35.8 |
| 86-73-7 | Fluorene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 118-74-1 | Hexachlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 87-68-3 | Hexachlorobutadiene | U | 358 | ug/kg | 107 | 358 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 358 | ug/kg | 107 | 358 |
| 67-72-1 | Hexachloroethane | U | 358 | ug/kg | 107 | 358 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 78-59-1 | Isophorone | U | 358 | ug/kg | 107 | 358 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 358 | ug/kg | 107 | 358 |
| 621-64-7 | N-Nitrosodipropylamine | U | 358 | ug/kg | 107 | 358 |
| 91-20-3 | Naphthalene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 98-95-3 | Nitrobenzene | U | 358 | ug/kg | 107 | 358 |
| 87-86-5 | Pentachlorophenol | U | 358 | ug/kg | 107 | 358 |
| 85-01-8 | Phenanthrene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 108-95-2 | Phenol | U | 358 | ug/kg | 107 | 358 |
| 129-00-0 | Pyrene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 110-86-1 | Pyridine | U | 358 | ug/kg | 107 | 358 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 358 | ug/kg | 107 | 358 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 358 | ug/kg | 107 | 358 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 358 | ug/kg | 107 | 358 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 358 | ug/kg | 107 | 358 |
| 65794-96-9 | m,p-Cresols | U | 358 | ug/kg | 107 | 358 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 358 | ug/kg | 107 | 358 |
| 95-48-7 | o-Cresol | U | 358 | ug/kg | 107 | 358 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 358 | ug/kg | 118 | 358 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 358 | ug/kg | 107 | 358 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.234 | 223 | ug/kg | 96 | NJ |
| | Unknown Aldol Condensate | 4.165 | 5470 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 07:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460002** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84134** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 11:08** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1808.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000297-03-0 | Cyclotetracosane | 15.611 | 1190 | ug/kg | 95 | NJ |
| 000112-95-8 | Eicosane | 17.146 | 236 | ug/kg | 92 | NJ |
| 000544-76-3 | Hexadecane | 18.109 | 156 | ug/kg | 94 | NJ |
| 022513-81-1 | 1,22-Docosanediol | 18.553 | 797 | ug/kg | 94 | NJ |
| 013287-24-6 | Nonadecane, 9-methyl- | 19.216 | 453 | ug/kg | 91 | NJ |
| 001599-67-3 | 1-Docosene | 19.361 | 1930 | ug/kg | 97 | NJ |
| 000630-02-4 | Octacosane | 21.773 | 415 | ug/kg | 90 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460003** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84145** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 11:40** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1809.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 345 | ug/kg | 103 | 345 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 345 | ug/kg | 103 | 345 |
| 122-66-7 | Azobenzene | U | 345 | ug/kg | 103 | 345 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 345 | ug/kg | 103 | 345 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 345 | ug/kg | 103 | 345 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 345 | ug/kg | 103 | 345 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 345 | ug/kg | 103 | 345 |
| 120-83-2 | 2,4-Dichlorophenol | U | 345 | ug/kg | 103 | 345 |
| 105-67-9 | 2,4-Dimethylphenol | U | 345 | ug/kg | 103 | 345 |
| 51-28-5 | 2,4-Dinitrophenol | U | 689 | ug/kg | 103 | 689 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 345 | ug/kg | 103 | 345 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 345 | ug/kg | 103 | 345 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 95-57-8 | 2-Chlorophenol | U | 345 | ug/kg | 103 | 345 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 345 | ug/kg | 103 | 345 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 88-75-5 | 2-Nitrophenol | U | 345 | ug/kg | 103 | 345 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 345 | ug/kg | 103 | 345 |
| 101-55-3 | 4-Bromophenylphenylether | U | 345 | ug/kg | 103 | 345 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 345 | ug/kg | 138 | 345 |
| 106-47-8 | 4-Chloroaniline | U | 345 | ug/kg | 103 | 345 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 345 | ug/kg | 103 | 345 |
| 100-02-7 | 4-Nitrophenol | U | 345 | ug/kg | 103 | 345 |
| 83-32-9 | Acenaphthene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 208-96-8 | Acenaphthylene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 62-53-3 | Aniline | U | 345 | ug/kg | 103 | 345 |
| 120-12-7 | Anthracene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 56-55-3 | Benzo(a)anthracene | J | 14.1 | ug/kg | 10.3 | 34.5 |
| 50-32-8 | Benzo(a)pyrene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 205-99-2 | Benzo(b)fluoranthene | J | 14.1 | ug/kg | 10.3 | 34.5 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 65-85-0 | Benzoic acid | U | 689 | ug/kg | 172 | 689 |
| 100-51-6 | Benzyl alcohol | U | 345 | ug/kg | 103 | 345 |
| 85-68-7 | Butylbenzylphthalate | U | 345 | ug/kg | 103 | 345 |
| 218-01-9 | Chrysene | J | 16.9 | ug/kg | 10.3 | 34.5 |
| 84-74-2 | Di-n-butylphthalate | U | 345 | ug/kg | 103 | 345 |
| 117-84-0 | Di-n-octylphthalate | U | 345 | ug/kg | 103 | 345 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460003** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84145** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 11:40** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1809.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 132-64-9 | Dibenzofuran | U | 345 | ug/kg | 103 | 345 |
| 84-66-2 | Diethylphthalate | U | 345 | ug/kg | 103 | 345 |
| 131-11-3 | Dimethylphthalate | U | 345 | ug/kg | 103 | 345 |
| 122-39-4 | Diphenylamine | U | 345 | ug/kg | 103 | 345 |
| 206-44-0 | Fluoranthene | J | 28.9 | ug/kg | 10.3 | 34.5 |
| 86-73-7 | Fluorene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 118-74-1 | Hexachlorobenzene | U | 345 | ug/kg | 103 | 345 |
| 87-68-3 | Hexachlorobutadiene | U | 345 | ug/kg | 103 | 345 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 345 | ug/kg | 103 | 345 |
| 67-72-1 | Hexachloroethane | U | 345 | ug/kg | 103 | 345 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 78-59-1 | Isophorone | U | 345 | ug/kg | 103 | 345 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 345 | ug/kg | 103 | 345 |
| 621-64-7 | N-Nitrosodipropylamine | U | 345 | ug/kg | 103 | 345 |
| 91-20-3 | Naphthalene | U | 34.5 | ug/kg | 10.3 | 34.5 |
| 98-95-3 | Nitrobenzene | U | 345 | ug/kg | 103 | 345 |
| 87-86-5 | Pentachlorophenol | U | 345 | ug/kg | 103 | 345 |
| 85-01-8 | Phenanthrene | J | 13.8 | ug/kg | 10.3 | 34.5 |
| 108-95-2 | Phenol | U | 345 | ug/kg | 103 | 345 |
| 129-00-0 | Pyrene | J | 21.7 | ug/kg | 10.3 | 34.5 |
| 110-86-1 | Pyridine | U | 345 | ug/kg | 103 | 345 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 345 | ug/kg | 103 | 345 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 345 | ug/kg | 103 | 345 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 345 | ug/kg | 103 | 345 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 345 | ug/kg | 103 | 345 |
| 65794-96-9 | m,p-Cresols | U | 345 | ug/kg | 103 | 345 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 345 | ug/kg | 103 | 345 |
| 95-48-7 | o-Cresol | U | 345 | ug/kg | 103 | 345 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 345 | ug/kg | 114 | 345 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 345 | ug/kg | 103 | 345 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.224 | 246 | ug/kg | 94 | NJ |
| | unknown | 2.379 | 146 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460003** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84145** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 11:40** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1809.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 4.171 | 6980 | ug/kg | | AJ |
| | unknown | 6.455 | 217 | ug/kg | 0 | J |
| 000544-76-3 | Hexadecane | 10.765 | 152 | ug/kg | 95 | NJ |
| 003892-00-0 | Pentadecane, 2,6,10-trimethyl- | 11.044 | 174 | ug/kg | 91 | NJ |
| 075163-97-2 | Octadecane, 2,6-dimethyl- | 11.381 | 471 | ug/kg | 90 | NJ |
| 000629-92-5 | Nonadecane | 12.45 | 225 | ug/kg | 96 | NJ |
| 000112-95-8 | Eicosane | 12.959 | 192 | ug/kg | 98 | NJ |
| 000629-94-7 | Heneicosane | 13.44 | 141 | ug/kg | 95 | NJ |
| 074685-30-6 | 5-Eicosene, (E)- | 15.628 | 531 | ug/kg | 96 | NJ |
| 013287-24-6 | Nonadecane, 9-methyl- | 17.147 | 228 | ug/kg | 93 | NJ |
| 013287-23-5 | Heptadecane, 8-methyl- | 18.109 | 162 | ug/kg | 89 | NJ |
| 000630-02-4 | Octacosane | 19.211 | 258 | ug/kg | 90 | NJ |
| 000629-96-9 | 1-Eicosanol | 19.387 | 390 | ug/kg | 86 | NJ |
| 000638-67-5 | Tricosane | 21.773 | 140 | ug/kg | 90 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460004** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84156** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:12** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1810.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 122-66-7 | Azobenzene | U | 351 | ug/kg | 105 | 351 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 120-83-2 | 2,4-Dichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 105-67-9 | 2,4-Dimethylphenol | U | 351 | ug/kg | 105 | 351 |
| 51-28-5 | 2,4-Dinitrophenol | U | 702 | ug/kg | 105 | 702 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 351 | ug/kg | 105 | 351 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 351 | ug/kg | 105 | 351 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 95-57-8 | 2-Chlorophenol | U | 351 | ug/kg | 105 | 351 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 351 | ug/kg | 105 | 351 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 88-75-5 | 2-Nitrophenol | U | 351 | ug/kg | 105 | 351 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 351 | ug/kg | 105 | 351 |
| 101-55-3 | 4-Bromophenylphenylether | U | 351 | ug/kg | 105 | 351 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 351 | ug/kg | 140 | 351 |
| 106-47-8 | 4-Chloroaniline | U | 351 | ug/kg | 105 | 351 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 351 | ug/kg | 105 | 351 |
| 100-02-7 | 4-Nitrophenol | U | 351 | ug/kg | 105 | 351 |
| 83-32-9 | Acenaphthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 208-96-8 | Acenaphthylene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 62-53-3 | Aniline | U | 351 | ug/kg | 105 | 351 |
| 120-12-7 | Anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 56-55-3 | Benzo(a)anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 50-32-8 | Benzo(a)pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 65-85-0 | Benzoic acid | U | 702 | ug/kg | 176 | 702 |
| 100-51-6 | Benzyl alcohol | U | 351 | ug/kg | 105 | 351 |
| 85-68-7 | Butylbenzylphthalate | U | 351 | ug/kg | 105 | 351 |
| 218-01-9 | Chrysene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 84-74-2 | Di-n-butylphthalate | U | 351 | ug/kg | 105 | 351 |
| 117-84-0 | Di-n-octylphthalate | U | 351 | ug/kg | 105 | 351 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460004** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84156** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:12** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1810.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 132-64-9 | Dibenzofuran | U | 351 | ug/kg | 105 | 351 |
| 84-66-2 | Diethylphthalate | U | 351 | ug/kg | 105 | 351 |
| 131-11-3 | Dimethylphthalate | U | 351 | ug/kg | 105 | 351 |
| 122-39-4 | Diphenylamine | U | 351 | ug/kg | 105 | 351 |
| 206-44-0 | Fluoranthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 86-73-7 | Fluorene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 118-74-1 | Hexachlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 87-68-3 | Hexachlorobutadiene | U | 351 | ug/kg | 105 | 351 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 351 | ug/kg | 105 | 351 |
| 67-72-1 | Hexachloroethane | U | 351 | ug/kg | 105 | 351 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 78-59-1 | Isophorone | U | 351 | ug/kg | 105 | 351 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 351 | ug/kg | 105 | 351 |
| 621-64-7 | N-Nitrosodipropylamine | U | 351 | ug/kg | 105 | 351 |
| 91-20-3 | Naphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 98-95-3 | Nitrobenzene | U | 351 | ug/kg | 105 | 351 |
| 87-86-5 | Pentachlorophenol | U | 351 | ug/kg | 105 | 351 |
| 85-01-8 | Phenanthrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 108-95-2 | Phenol | U | 351 | ug/kg | 105 | 351 |
| 129-00-0 | Pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 110-86-1 | Pyridine | U | 351 | ug/kg | 105 | 351 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 351 | ug/kg | 105 | 351 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 351 | ug/kg | 105 | 351 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 351 | ug/kg | 105 | 351 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 351 | ug/kg | 105 | 351 |
| 65794-96-9 | m,p-Cresols | U | 351 | ug/kg | 105 | 351 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 351 | ug/kg | 105 | 351 |
| 95-48-7 | o-Cresol | U | 351 | ug/kg | 105 | 351 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 351 | ug/kg | 116 | 351 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 351 | ug/kg | 105 | 351 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.245 | 277 | ug/kg | 95 | NJ |
| | unknown | 2.4 | 143 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 08:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460004** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84156** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:12** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1810.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 4.165 | 4800 | ug/kg | | AJ |
| 001599-67-3 | 1-Docosene | 15.617 | 1070 | ug/kg | 95 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 10:47** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460005** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **10.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84135** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:44** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1811.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 122-66-7 | Azobenzene | U | 371 | ug/kg | 111 | 371 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 371 | ug/kg | 111 | 371 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 371 | ug/kg | 111 | 371 |
| 120-83-2 | 2,4-Dichlorophenol | U | 371 | ug/kg | 111 | 371 |
| 105-67-9 | 2,4-Dimethylphenol | U | 371 | ug/kg | 111 | 371 |
| 51-28-5 | 2,4-Dinitrophenol | U | 742 | ug/kg | 111 | 742 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 371 | ug/kg | 111 | 371 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 371 | ug/kg | 111 | 371 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 95-57-8 | 2-Chlorophenol | U | 371 | ug/kg | 111 | 371 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 371 | ug/kg | 111 | 371 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 88-75-5 | 2-Nitrophenol | U | 371 | ug/kg | 111 | 371 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 371 | ug/kg | 111 | 371 |
| 101-55-3 | 4-Bromophenylphenylether | U | 371 | ug/kg | 111 | 371 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 371 | ug/kg | 148 | 371 |
| 106-47-8 | 4-Chloroaniline | U | 371 | ug/kg | 111 | 371 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 371 | ug/kg | 111 | 371 |
| 100-02-7 | 4-Nitrophenol | U | 371 | ug/kg | 111 | 371 |
| 83-32-9 | Acenaphthene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 208-96-8 | Acenaphthylene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 62-53-3 | Aniline | U | 371 | ug/kg | 111 | 371 |
| 120-12-7 | Anthracene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 56-55-3 | Benzo(a)anthracene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 50-32-8 | Benzo(a)pyrene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 65-85-0 | Benzoic acid | U | 742 | ug/kg | 185 | 742 |
| 100-51-6 | Benzyl alcohol | U | 371 | ug/kg | 111 | 371 |
| 85-68-7 | Butylbenzylphthalate | U | 371 | ug/kg | 111 | 371 |
| 218-01-9 | Chrysene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 84-74-2 | Di-n-butylphthalate | U | 371 | ug/kg | 111 | 371 |
| 117-84-0 | Di-n-octylphthalate | U | 371 | ug/kg | 111 | 371 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 10:47** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460005** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **10.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84135** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:44** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1811.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 132-64-9 | Dibenzofuran | U | 371 | ug/kg | 111 | 371 |
| 84-66-2 | Diethylphthalate | U | 371 | ug/kg | 111 | 371 |
| 131-11-3 | Dimethylphthalate | U | 371 | ug/kg | 111 | 371 |
| 122-39-4 | Diphenylamine | U | 371 | ug/kg | 111 | 371 |
| 206-44-0 | Fluoranthene | J | 14.5 | ug/kg | 11.1 | 37.1 |
| 86-73-7 | Fluorene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 118-74-1 | Hexachlorobenzene | U | 371 | ug/kg | 111 | 371 |
| 87-68-3 | Hexachlorobutadiene | U | 371 | ug/kg | 111 | 371 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 371 | ug/kg | 111 | 371 |
| 67-72-1 | Hexachloroethane | U | 371 | ug/kg | 111 | 371 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 78-59-1 | Isophorone | U | 371 | ug/kg | 111 | 371 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 371 | ug/kg | 111 | 371 |
| 621-64-7 | N-Nitrosodipropylamine | U | 371 | ug/kg | 111 | 371 |
| 91-20-3 | Naphthalene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 98-95-3 | Nitrobenzene | U | 371 | ug/kg | 111 | 371 |
| 87-86-5 | Pentachlorophenol | U | 371 | ug/kg | 111 | 371 |
| 85-01-8 | Phenanthrene | J | 13.4 | ug/kg | 11.1 | 37.1 |
| 108-95-2 | Phenol | U | 371 | ug/kg | 111 | 371 |
| 129-00-0 | Pyrene | U | 37.1 | ug/kg | 11.1 | 37.1 |
| 110-86-1 | Pyridine | U | 371 | ug/kg | 111 | 371 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 371 | ug/kg | 111 | 371 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 371 | ug/kg | 111 | 371 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 371 | ug/kg | 111 | 371 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 371 | ug/kg | 111 | 371 |
| 65794-96-9 | m,p-Cresols | U | 371 | ug/kg | 111 | 371 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 371 | ug/kg | 111 | 371 |
| 95-48-7 | o-Cresol | U | 371 | ug/kg | 111 | 371 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 371 | ug/kg | 122 | 371 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 371 | ug/kg | 111 | 371 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.213 | 301 | ug/kg | 95 | NJ |
| | unknown | 2.368 | 531 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 10:47** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460005** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **10.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84135** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 12:44** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.07 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1811.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 4.165 | 6460 | ug/kg | | AJ |
| | unknown | 6.455 | 227 | ug/kg | 0 | J |
| | unknown | 14.413 | 342 | ug/kg | 0 | J |
| 013287-24-6 | Nonadecane, 9-methyl- | 15.595 | 285 | ug/kg | 93 | NJ |
| 000593-49-7 | Heptacosane | 17.147 | 456 | ug/kg | 92 | NJ |
| 053057-53-7 | 1,21-Docosadiene | 18.548 | 268 | ug/kg | 97 | NJ |
| 000112-95-8 | Eicosane | 19.206 | 353 | ug/kg | 93 | NJ |
| 014811-95-1 | 1,19-Eicosadiene | 21.062 | 357 | ug/kg | 97 | NJ |
| 000646-31-1 | Tetracosane | 21.768 | 328 | ug/kg | 91 | NJ |
| | unknown | 22.008 | 252 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:15** | **Matrix:** | **SED** |
| **Lab Sample ID:** | **352460006** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **4.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84146** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 18:35** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1822.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 122-66-7 | Azobenzene | U | 349 | ug/kg | 105 | 349 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 349 | ug/kg | 105 | 349 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 349 | ug/kg | 105 | 349 |
| 120-83-2 | 2,4-Dichlorophenol | U | 349 | ug/kg | 105 | 349 |
| 105-67-9 | 2,4-Dimethylphenol | U | 349 | ug/kg | 105 | 349 |
| 51-28-5 | 2,4-Dinitrophenol | U | 699 | ug/kg | 105 | 699 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 349 | ug/kg | 105 | 349 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 349 | ug/kg | 105 | 349 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 95-57-8 | 2-Chlorophenol | U | 349 | ug/kg | 105 | 349 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 349 | ug/kg | 105 | 349 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 88-75-5 | 2-Nitrophenol | U | 349 | ug/kg | 105 | 349 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 349 | ug/kg | 105 | 349 |
| 101-55-3 | 4-Bromophenylphenylether | U | 349 | ug/kg | 105 | 349 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 349 | ug/kg | 140 | 349 |
| 106-47-8 | 4-Chloroaniline | U | 349 | ug/kg | 105 | 349 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 349 | ug/kg | 105 | 349 |
| 100-02-7 | 4-Nitrophenol | U | 349 | ug/kg | 105 | 349 |
| 83-32-9 | Acenaphthene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 208-96-8 | Acenaphthylene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 62-53-3 | Aniline | U | 349 | ug/kg | 105 | 349 |
| 120-12-7 | Anthracene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 56-55-3 | Benzo(a)anthracene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 50-32-8 | Benzo(a)pyrene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 65-85-0 | Benzoic acid | | 1620 | ug/kg | 175 | 699 |
| 100-51-6 | Benzyl alcohol | U | 349 | ug/kg | 105 | 349 |
| 85-68-7 | Butylbenzylphthalate | U | 349 | ug/kg | 105 | 349 |
| 218-01-9 | Chrysene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 84-74-2 | Di-n-butylphthalate | U | 349 | ug/kg | 105 | 349 |
| 117-84-0 | Di-n-octylphthalate | U | 349 | ug/kg | 105 | 349 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:15** | **Matrix:** | **SED** |
| **Lab Sample ID:** | **352460006** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **4.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84146** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 18:35** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1822.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 132-64-9 | Dibenzofuran | U | 349 | ug/kg | 105 | 349 |
| 84-66-2 | Diethylphthalate | U | 349 | ug/kg | 105 | 349 |
| 131-11-3 | Dimethylphthalate | U | 349 | ug/kg | 105 | 349 |
| 122-39-4 | Diphenylamine | U | 349 | ug/kg | 105 | 349 |
| 206-44-0 | Fluoranthene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 86-73-7 | Fluorene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 118-74-1 | Hexachlorobenzene | U | 349 | ug/kg | 105 | 349 |
| 87-68-3 | Hexachlorobutadiene | U | 349 | ug/kg | 105 | 349 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 349 | ug/kg | 105 | 349 |
| 67-72-1 | Hexachloroethane | U | 349 | ug/kg | 105 | 349 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 78-59-1 | Isophorone | U | 349 | ug/kg | 105 | 349 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 349 | ug/kg | 105 | 349 |
| 621-64-7 | N-Nitrosodipropylamine | U | 349 | ug/kg | 105 | 349 |
| 91-20-3 | Naphthalene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 98-95-3 | Nitrobenzene | U | 349 | ug/kg | 105 | 349 |
| 87-86-5 | Pentachlorophenol | U | 349 | ug/kg | 105 | 349 |
| 85-01-8 | Phenanthrene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 108-95-2 | Phenol | U | 349 | ug/kg | 105 | 349 |
| 129-00-0 | Pyrene | U | 34.9 | ug/kg | 10.5 | 34.9 |
| 110-86-1 | Pyridine | U | 349 | ug/kg | 105 | 349 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 349 | ug/kg | 105 | 349 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 349 | ug/kg | 105 | 349 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 349 | ug/kg | 105 | 349 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 349 | ug/kg | 105 | 349 |
| 65794-96-9 | m,p-Cresols | U | 349 | ug/kg | 105 | 349 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 349 | ug/kg | 105 | 349 |
| 95-48-7 | o-Cresol | U | 349 | ug/kg | 105 | 349 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 349 | ug/kg | 115 | 349 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 349 | ug/kg | 105 | 349 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.224 | 280 | ug/kg | 95 | NJ |
| | unknown | 2.379 | 346 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:15** | **Matrix:** | **SED** |
| **Lab Sample ID:** | **352460006** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **4.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84146** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 18:35** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1822.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 4.165 | 5910 | ug/kg | | AJ |
| | unknown | 6.465 | 225 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.755 | 515 | ug/kg | 98 | NJ |
| 000060-33-3 | 9,12-Octadecadienoic acid (Z,Z)- | 13.622 | 904 | ug/kg | 98 | NJ |
| | unknown | 14.034 | 146 | ug/kg | 0 | J |
| 000483-65-8 | Phenanthrene, 1-methyl-7-(1-methyl | 14.301 | 147 | ug/kg | 99 | NJ |
| 1000155-85-3 | Cyclohexadecane, 1,2-diethyl- | 14.408 | 331 | ug/kg | 93 | NJ |
| 065899-10-7 | trans-1,2-Bis(methyldichlorosilyl) | 14.863 | 161 | ug/kg | 90 | NJ |
| 001599-67-3 | 1-Docosene | 15.606 | 888 | ug/kg | 98 | NJ |
| 000593-49-7 | Heptacosane | 17.146 | 270 | ug/kg | 93 | NJ |
| 000297-03-0 | Cyclotetracosane | 17.211 | 141 | ug/kg | 97 | NJ |
| 000520-29-6 | 4',5-Dihydroxy-7-methoxyflavanone | 18.147 | 2010 | ug/kg | 94 | NJ |
| 000544-76-3 | Hexadecane | 19.211 | 302 | ug/kg | 94 | NJ |
| 000630-02-4 | Octacosane | 21.773 | 344 | ug/kg | 99 | NJ |
| 1000282-97-3 | Heptafluorobutanoic acid, heptadec | 21.923 | 408 | ug/kg | 87 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460009** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **7.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84136** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:47** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1813.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 122-66-7 | Azobenzene | U | 359 | ug/kg | 108 | 359 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 359 | ug/kg | 108 | 359 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 359 | ug/kg | 108 | 359 |
| 120-83-2 | 2,4-Dichlorophenol | U | 359 | ug/kg | 108 | 359 |
| 105-67-9 | 2,4-Dimethylphenol | U | 359 | ug/kg | 108 | 359 |
| 51-28-5 | 2,4-Dinitrophenol | U | 718 | ug/kg | 108 | 718 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 359 | ug/kg | 108 | 359 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 359 | ug/kg | 108 | 359 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 95-57-8 | 2-Chlorophenol | U | 359 | ug/kg | 108 | 359 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 359 | ug/kg | 108 | 359 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 88-75-5 | 2-Nitrophenol | U | 359 | ug/kg | 108 | 359 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 359 | ug/kg | 108 | 359 |
| 101-55-3 | 4-Bromophenylphenylether | U | 359 | ug/kg | 108 | 359 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 359 | ug/kg | 144 | 359 |
| 106-47-8 | 4-Chloroaniline | U | 359 | ug/kg | 108 | 359 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 359 | ug/kg | 108 | 359 |
| 100-02-7 | 4-Nitrophenol | U | 359 | ug/kg | 108 | 359 |
| 83-32-9 | Acenaphthene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 208-96-8 | Acenaphthylene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 62-53-3 | Aniline | U | 359 | ug/kg | 108 | 359 |
| 120-12-7 | Anthracene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 56-55-3 | Benzo(a)anthracene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 50-32-8 | Benzo(a)pyrene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 65-85-0 | Benzoic acid | U | 718 | ug/kg | 180 | 718 |
| 100-51-6 | Benzyl alcohol | U | 359 | ug/kg | 108 | 359 |
| 85-68-7 | Butylbenzylphthalate | U | 359 | ug/kg | 108 | 359 |
| 218-01-9 | Chrysene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 84-74-2 | Di-n-butylphthalate | U | 359 | ug/kg | 108 | 359 |
| 117-84-0 | Di-n-octylphthalate | U | 359 | ug/kg | 108 | 359 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460009** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **7.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84136** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:47** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1813.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 132-64-9 | Dibenzofuran | U | 359 | ug/kg | 108 | 359 |
| 84-66-2 | Diethylphthalate | U | 359 | ug/kg | 108 | 359 |
| 131-11-3 | Dimethylphthalate | U | 359 | ug/kg | 108 | 359 |
| 122-39-4 | Diphenylamine | U | 359 | ug/kg | 108 | 359 |
| 206-44-0 | Fluoranthene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 86-73-7 | Fluorene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 118-74-1 | Hexachlorobenzene | U | 359 | ug/kg | 108 | 359 |
| 87-68-3 | Hexachlorobutadiene | U | 359 | ug/kg | 108 | 359 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 359 | ug/kg | 108 | 359 |
| 67-72-1 | Hexachloroethane | U | 359 | ug/kg | 108 | 359 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 78-59-1 | Isophorone | U | 359 | ug/kg | 108 | 359 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 359 | ug/kg | 108 | 359 |
| 621-64-7 | N-Nitrosodipropylamine | U | 359 | ug/kg | 108 | 359 |
| 91-20-3 | Naphthalene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 98-95-3 | Nitrobenzene | U | 359 | ug/kg | 108 | 359 |
| 87-86-5 | Pentachlorophenol | U | 359 | ug/kg | 108 | 359 |
| 85-01-8 | Phenanthrene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 108-95-2 | Phenol | U | 359 | ug/kg | 108 | 359 |
| 129-00-0 | Pyrene | U | 35.9 | ug/kg | 10.8 | 35.9 |
| 110-86-1 | Pyridine | U | 359 | ug/kg | 108 | 359 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 359 | ug/kg | 108 | 359 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 359 | ug/kg | 108 | 359 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 359 | ug/kg | 108 | 359 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 359 | ug/kg | 108 | 359 |
| 65794-96-9 | m,p-Cresols | U | 359 | ug/kg | 108 | 359 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 359 | ug/kg | 108 | 359 |
| 95-48-7 | o-Cresol | U | 359 | ug/kg | 108 | 359 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 359 | ug/kg | 119 | 359 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 359 | ug/kg | 108 | 359 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.235 | 233 | ug/kg | 97 | NJ |
| | unknown | 2.39 | 161 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:10** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460009** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **7.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84136** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 13:47** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.1 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1813.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 4.171 | 6600 | ug/kg | | AJ |
| 001599-67-3 | 1-Docosene | 15.601 | 1030 | ug/kg | 97 | NJ |
| 000630-02-4 | Octacosane | 19.211 | 303 | ug/kg | 90 | NJ |
| 000638-67-5 | Tricosane | 21.768 | 195 | ug/kg | 94 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460010** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84147** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 14:19** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1814.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 122-66-7 | Azobenzene | U | 351 | ug/kg | 105 | 351 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 120-83-2 | 2,4-Dichlorophenol | U | 351 | ug/kg | 105 | 351 |
| 105-67-9 | 2,4-Dimethylphenol | U | 351 | ug/kg | 105 | 351 |
| 51-28-5 | 2,4-Dinitrophenol | U | 701 | ug/kg | 105 | 701 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 351 | ug/kg | 105 | 351 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 351 | ug/kg | 105 | 351 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 95-57-8 | 2-Chlorophenol | U | 351 | ug/kg | 105 | 351 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 351 | ug/kg | 105 | 351 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 88-75-5 | 2-Nitrophenol | U | 351 | ug/kg | 105 | 351 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 351 | ug/kg | 105 | 351 |
| 101-55-3 | 4-Bromophenylphenylether | U | 351 | ug/kg | 105 | 351 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 351 | ug/kg | 140 | 351 |
| 106-47-8 | 4-Chloroaniline | U | 351 | ug/kg | 105 | 351 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 351 | ug/kg | 105 | 351 |
| 100-02-7 | 4-Nitrophenol | U | 351 | ug/kg | 105 | 351 |
| 83-32-9 | Acenaphthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 208-96-8 | Acenaphthylene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 62-53-3 | Aniline | U | 351 | ug/kg | 105 | 351 |
| 120-12-7 | Anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 56-55-3 | Benzo(a)anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 50-32-8 | Benzo(a)pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 65-85-0 | Benzoic acid | U | 701 | ug/kg | 175 | 701 |
| 100-51-6 | Benzyl alcohol | U | 351 | ug/kg | 105 | 351 |
| 85-68-7 | Butylbenzylphthalate | U | 351 | ug/kg | 105 | 351 |
| 218-01-9 | Chrysene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 84-74-2 | Di-n-butylphthalate | U | 351 | ug/kg | 105 | 351 |
| 117-84-0 | Di-n-octylphthalate | U | 351 | ug/kg | 105 | 351 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460010** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84147** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 14:19** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1814.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 132-64-9 | Dibenzofuran | U | 351 | ug/kg | 105 | 351 |
| 84-66-2 | Diethylphthalate | U | 351 | ug/kg | 105 | 351 |
| 131-11-3 | Dimethylphthalate | U | 351 | ug/kg | 105 | 351 |
| 122-39-4 | Diphenylamine | U | 351 | ug/kg | 105 | 351 |
| 206-44-0 | Fluoranthene | J | 13.0 | ug/kg | 10.5 | 35.1 |
| 86-73-7 | Fluorene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 118-74-1 | Hexachlorobenzene | U | 351 | ug/kg | 105 | 351 |
| 87-68-3 | Hexachlorobutadiene | U | 351 | ug/kg | 105 | 351 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 351 | ug/kg | 105 | 351 |
| 67-72-1 | Hexachloroethane | U | 351 | ug/kg | 105 | 351 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 78-59-1 | Isophorone | U | 351 | ug/kg | 105 | 351 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 351 | ug/kg | 105 | 351 |
| 621-64-7 | N-Nitrosodipropylamine | U | 351 | ug/kg | 105 | 351 |
| 91-20-3 | Naphthalene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 98-95-3 | Nitrobenzene | U | 351 | ug/kg | 105 | 351 |
| 87-86-5 | Pentachlorophenol | U | 351 | ug/kg | 105 | 351 |
| 85-01-8 | Phenanthrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 108-95-2 | Phenol | U | 351 | ug/kg | 105 | 351 |
| 129-00-0 | Pyrene | U | 35.1 | ug/kg | 10.5 | 35.1 |
| 110-86-1 | Pyridine | U | 351 | ug/kg | 105 | 351 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 351 | ug/kg | 105 | 351 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 351 | ug/kg | 105 | 351 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 351 | ug/kg | 105 | 351 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 351 | ug/kg | 105 | 351 |
| 65794-96-9 | m,p-Cresols | U | 351 | ug/kg | 105 | 351 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 351 | ug/kg | 105 | 351 |
| 95-48-7 | o-Cresol | U | 351 | ug/kg | 105 | 351 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 351 | ug/kg | 116 | 351 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 351 | ug/kg | 105 | 351 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000064-19-7 | Acetic acid | 2.005 | 143 | ug/kg | 90 | NJ |
| 000067-66-3 | Trichloromethane | 2.235 | 228 | ug/kg | 94 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460010** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **5.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84147** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 14:19** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.11 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1814.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.39 | 337 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 4.171 | 6110 | ug/kg | | AJ |
| | unknown | 6.46 | 207 | ug/kg | 0 | J |
| 001599-67-3 | 1-Docosene | 15.601 | 1000 | ug/kg | 95 | NJ |
| 000593-49-7 | Heptacosane | 17.147 | 231 | ug/kg | 91 | NJ |
| 000638-36-8 | Hexadecane, 2,6,10,14-tetramethyl- | 19.211 | 155 | ug/kg | 93 | NJ |
| 000544-76-3 | Hexadecane | 21.773 | 150 | ug/kg | 95 | NJ |
| | unknown | 21.939 | 299 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460011** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84158** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 14:51** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1815.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 122-66-7 | Azobenzene | U | 358 | ug/kg | 107 | 358 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 358 | ug/kg | 107 | 358 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 358 | ug/kg | 107 | 358 |
| 120-83-2 | 2,4-Dichlorophenol | U | 358 | ug/kg | 107 | 358 |
| 105-67-9 | 2,4-Dimethylphenol | U | 358 | ug/kg | 107 | 358 |
| 51-28-5 | 2,4-Dinitrophenol | U | 715 | ug/kg | 107 | 715 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 358 | ug/kg | 107 | 358 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 358 | ug/kg | 107 | 358 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 95-57-8 | 2-Chlorophenol | U | 358 | ug/kg | 107 | 358 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 358 | ug/kg | 107 | 358 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 88-75-5 | 2-Nitrophenol | U | 358 | ug/kg | 107 | 358 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 358 | ug/kg | 107 | 358 |
| 101-55-3 | 4-Bromophenylphenylether | U | 358 | ug/kg | 107 | 358 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 358 | ug/kg | 143 | 358 |
| 106-47-8 | 4-Chloroaniline | U | 358 | ug/kg | 107 | 358 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 358 | ug/kg | 107 | 358 |
| 100-02-7 | 4-Nitrophenol | U | 358 | ug/kg | 107 | 358 |
| 83-32-9 | Acenaphthene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 208-96-8 | Acenaphthylene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 62-53-3 | Aniline | U | 358 | ug/kg | 107 | 358 |
| 120-12-7 | Anthracene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 56-55-3 | Benzo(a)anthracene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 50-32-8 | Benzo(a)pyrene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 65-85-0 | Benzoic acid | U | 715 | ug/kg | 179 | 715 |
| 100-51-6 | Benzyl alcohol | U | 358 | ug/kg | 107 | 358 |
| 85-68-7 | Butylbenzylphthalate | U | 358 | ug/kg | 107 | 358 |
| 218-01-9 | Chrysene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 84-74-2 | Di-n-butylphthalate | U | 358 | ug/kg | 107 | 358 |
| 117-84-0 | Di-n-octylphthalate | U | 358 | ug/kg | 107 | 358 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460011** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84158** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 14:51** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1815.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 132-64-9 | Dibenzofuran | U | 358 | ug/kg | 107 | 358 |
| 84-66-2 | Diethylphthalate | U | 358 | ug/kg | 107 | 358 |
| 131-11-3 | Dimethylphthalate | U | 358 | ug/kg | 107 | 358 |
| 122-39-4 | Diphenylamine | U | 358 | ug/kg | 107 | 358 |
| 206-44-0 | Fluoranthene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 86-73-7 | Fluorene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 118-74-1 | Hexachlorobenzene | U | 358 | ug/kg | 107 | 358 |
| 87-68-3 | Hexachlorobutadiene | U | 358 | ug/kg | 107 | 358 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 358 | ug/kg | 107 | 358 |
| 67-72-1 | Hexachloroethane | U | 358 | ug/kg | 107 | 358 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 78-59-1 | Isophorone | U | 358 | ug/kg | 107 | 358 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 358 | ug/kg | 107 | 358 |
| 621-64-7 | N-Nitrosodipropylamine | U | 358 | ug/kg | 107 | 358 |
| 91-20-3 | Naphthalene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 98-95-3 | Nitrobenzene | U | 358 | ug/kg | 107 | 358 |
| 87-86-5 | Pentachlorophenol | U | 358 | ug/kg | 107 | 358 |
| 85-01-8 | Phenanthrene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 108-95-2 | Phenol | U | 358 | ug/kg | 107 | 358 |
| 129-00-0 | Pyrene | U | 35.8 | ug/kg | 10.7 | 35.8 |
| 110-86-1 | Pyridine | U | 358 | ug/kg | 107 | 358 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 358 | ug/kg | 107 | 358 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 358 | ug/kg | 107 | 358 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 358 | ug/kg | 107 | 358 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 358 | ug/kg | 107 | 358 |
| 65794-96-9 | m,p-Cresols | U | 358 | ug/kg | 107 | 358 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 358 | ug/kg | 107 | 358 |
| 95-48-7 | o-Cresol | U | 358 | ug/kg | 107 | 358 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 358 | ug/kg | 118 | 358 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 358 | ug/kg | 107 | 358 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.01 | 196 | ug/kg | 0 | J |
| 000067-66-3 | Trichloromethane | 2.235 | 264 | ug/kg | 96 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 12:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460011** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84158** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 14:51** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1815.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.887 | 157 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 4.171 | 6570 | ug/kg | | AJ |
| 001599-67-3 | 1-Docosene | 15.606 | 757 | ug/kg | 99 | NJ |
| 000112-95-8 | Eicosane | 21.773 | 144 | ug/kg | 95 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 13:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460012** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84137** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 15:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1816.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 122-66-7 | Azobenzene | U | 346 | ug/kg | 104 | 346 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 120-83-2 | 2,4-Dichlorophenol | U | 346 | ug/kg | 104 | 346 |
| 105-67-9 | 2,4-Dimethylphenol | U | 346 | ug/kg | 104 | 346 |
| 51-28-5 | 2,4-Dinitrophenol | U | 693 | ug/kg | 104 | 693 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 346 | ug/kg | 104 | 346 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 346 | ug/kg | 104 | 346 |
| 91-58-7 | 2-Chloronaphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 95-57-8 | 2-Chlorophenol | U | 346 | ug/kg | 104 | 346 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 346 | ug/kg | 104 | 346 |
| 91-57-6 | 2-Methylnaphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 88-75-5 | 2-Nitrophenol | U | 346 | ug/kg | 104 | 346 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 346 | ug/kg | 104 | 346 |
| 101-55-3 | 4-Bromophenylphenylether | U | 346 | ug/kg | 104 | 346 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 346 | ug/kg | 139 | 346 |
| 106-47-8 | 4-Chloroaniline | U | 346 | ug/kg | 104 | 346 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 346 | ug/kg | 104 | 346 |
| 100-02-7 | 4-Nitrophenol | U | 346 | ug/kg | 104 | 346 |
| 83-32-9 | Acenaphthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 208-96-8 | Acenaphthylene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 62-53-3 | Aniline | U | 346 | ug/kg | 104 | 346 |
| 120-12-7 | Anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 56-55-3 | Benzo(a)anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 50-32-8 | Benzo(a)pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 205-99-2 | Benzo(b)fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 191-24-2 | Benzo(ghi)perylene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 207-08-9 | Benzo(k)fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 65-85-0 | Benzoic acid | U | 693 | ug/kg | 173 | 693 |
| 100-51-6 | Benzyl alcohol | U | 346 | ug/kg | 104 | 346 |
| 85-68-7 | Butylbenzylphthalate | U | 346 | ug/kg | 104 | 346 |
| 218-01-9 | Chrysene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 84-74-2 | Di-n-butylphthalate | U | 346 | ug/kg | 104 | 346 |
| 117-84-0 | Di-n-octylphthalate | U | 346 | ug/kg | 104 | 346 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 13:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460012** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84137** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 15:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1816.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 132-64-9 | Dibenzofuran | U | 346 | ug/kg | 104 | 346 |
| 84-66-2 | Diethylphthalate | U | 346 | ug/kg | 104 | 346 |
| 131-11-3 | Dimethylphthalate | U | 346 | ug/kg | 104 | 346 |
| 122-39-4 | Diphenylamine | U | 346 | ug/kg | 104 | 346 |
| 206-44-0 | Fluoranthene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 86-73-7 | Fluorene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 118-74-1 | Hexachlorobenzene | U | 346 | ug/kg | 104 | 346 |
| 87-68-3 | Hexachlorobutadiene | U | 346 | ug/kg | 104 | 346 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 346 | ug/kg | 104 | 346 |
| 67-72-1 | Hexachloroethane | U | 346 | ug/kg | 104 | 346 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 78-59-1 | Isophorone | U | 346 | ug/kg | 104 | 346 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 346 | ug/kg | 104 | 346 |
| 621-64-7 | N-Nitrosodipropylamine | U | 346 | ug/kg | 104 | 346 |
| 91-20-3 | Naphthalene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 98-95-3 | Nitrobenzene | U | 346 | ug/kg | 104 | 346 |
| 87-86-5 | Pentachlorophenol | U | 346 | ug/kg | 104 | 346 |
| 85-01-8 | Phenanthrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 108-95-2 | Phenol | U | 346 | ug/kg | 104 | 346 |
| 129-00-0 | Pyrene | U | 34.6 | ug/kg | 10.4 | 34.6 |
| 110-86-1 | Pyridine | U | 346 | ug/kg | 104 | 346 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 346 | ug/kg | 104 | 346 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 346 | ug/kg | 104 | 346 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 346 | ug/kg | 104 | 346 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 346 | ug/kg | 104 | 346 |
| 65794-96-9 | m,p-Cresols | U | 346 | ug/kg | 104 | 346 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 346 | ug/kg | 104 | 346 |
| 95-48-7 | o-Cresol | U | 346 | ug/kg | 104 | 346 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 346 | ug/kg | 114 | 346 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 346 | ug/kg | 104 | 346 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.999 | 192 | ug/kg | 0 | J |
| 000067-66-3 | Trichloromethane | 2.229 | 208 | ug/kg | 94 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 13:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460012** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **3.8** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84137** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 15:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1816.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.384 | 230 | ug/kg | 0 | J |
| | unknown | 3.887 | 160 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 4.165 | 6800 | ug/kg | | AJ |
| | unknown | 6.46 | 293 | ug/kg | 0 | J |
| 025276-70-4 | 1-Pentadecanethiol | 14.408 | 208 | ug/kg | 91 | NJ |
| 1000309-38-3 | Oxalic acid, isobutyl octadecyl es | 15.595 | 855 | ug/kg | 91 | NJ |
| 000593-49-7 | Heptacosane | 17.146 | 228 | ug/kg | 93 | NJ |
| 014811-95-1 | 1,19-Eicosadiene | 18.548 | 396 | ug/kg | 93 | NJ |
| 000638-36-8 | Hexadecane, 2,6,10,14-tetramethyl- | 19.211 | 180 | ug/kg | 91 | NJ |
| 000506-51-4 | 1-Tetracosanol | 19.345 | 164 | ug/kg | 90 | NJ |
| 007390-81-0 | Oxirane, hexadecyl- | 21.062 | 400 | ug/kg | 91 | NJ |
| 000638-67-5 | Tricosane | 21.773 | 155 | ug/kg | 95 | NJ |
| | unknown | 21.944 | 360 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460013** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84148** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:28** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.28 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.B\s8G2105.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 122-66-7 | Azobenzene | U | 354 | ug/kg | 106 | 354 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 354 | ug/kg | 106 | 354 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 354 | ug/kg | 106 | 354 |
| 120-83-2 | 2,4-Dichlorophenol | U | 354 | ug/kg | 106 | 354 |
| 105-67-9 | 2,4-Dimethylphenol | U | 354 | ug/kg | 106 | 354 |
| 51-28-5 | 2,4-Dinitrophenol | U | 708 | ug/kg | 106 | 708 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 354 | ug/kg | 106 | 354 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 354 | ug/kg | 106 | 354 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 95-57-8 | 2-Chlorophenol | U | 354 | ug/kg | 106 | 354 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 354 | ug/kg | 106 | 354 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 88-75-5 | 2-Nitrophenol | U | 354 | ug/kg | 106 | 354 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 354 | ug/kg | 106 | 354 |
| 101-55-3 | 4-Bromophenylphenylether | U | 354 | ug/kg | 106 | 354 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 354 | ug/kg | 142 | 354 |
| 106-47-8 | 4-Chloroaniline | U | 354 | ug/kg | 106 | 354 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 354 | ug/kg | 106 | 354 |
| 100-02-7 | 4-Nitrophenol | U | 354 | ug/kg | 106 | 354 |
| 83-32-9 | Acenaphthene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 208-96-8 | Acenaphthylene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 62-53-3 | Aniline | U | 354 | ug/kg | 106 | 354 |
| 120-12-7 | Anthracene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 56-55-3 | Benzo(a)anthracene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 50-32-8 | Benzo(a)pyrene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 65-85-0 | Benzoic acid | U | 708 | ug/kg | 177 | 708 |
| 100-51-6 | Benzyl alcohol | U | 354 | ug/kg | 106 | 354 |
| 85-68-7 | Butylbenzylphthalate | U | 354 | ug/kg | 106 | 354 |
| 218-01-9 | Chrysene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 84-74-2 | Di-n-butylphthalate | U | 354 | ug/kg | 106 | 354 |
| 117-84-0 | Di-n-octylphthalate | U | 354 | ug/kg | 106 | 354 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460013** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84148** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:28** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.28 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.B\s8G2105.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 132-64-9 | Dibenzofuran | U | 354 | ug/kg | 106 | 354 |
| 84-66-2 | Diethylphthalate | U | 354 | ug/kg | 106 | 354 |
| 131-11-3 | Dimethylphthalate | U | 354 | ug/kg | 106 | 354 |
| 122-39-4 | Diphenylamine | U | 354 | ug/kg | 106 | 354 |
| 206-44-0 | Fluoranthene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 86-73-7 | Fluorene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 118-74-1 | Hexachlorobenzene | U | 354 | ug/kg | 106 | 354 |
| 87-68-3 | Hexachlorobutadiene | U | 354 | ug/kg | 106 | 354 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 354 | ug/kg | 106 | 354 |
| 67-72-1 | Hexachloroethane | U | 354 | ug/kg | 106 | 354 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 78-59-1 | Isophorone | U | 354 | ug/kg | 106 | 354 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 354 | ug/kg | 106 | 354 |
| 621-64-7 | N-Nitrosodipropylamine | U | 354 | ug/kg | 106 | 354 |
| 91-20-3 | Naphthalene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 98-95-3 | Nitrobenzene | U | 354 | ug/kg | 106 | 354 |
| 87-86-5 | Pentachlorophenol | U | 354 | ug/kg | 106 | 354 |
| 85-01-8 | Phenanthrene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 108-95-2 | Phenol | U | 354 | ug/kg | 106 | 354 |
| 129-00-0 | Pyrene | U | 35.4 | ug/kg | 10.6 | 35.4 |
| 110-86-1 | Pyridine | U | 354 | ug/kg | 106 | 354 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 354 | ug/kg | 106 | 354 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 354 | ug/kg | 106 | 354 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 354 | ug/kg | 106 | 354 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 354 | ug/kg | 106 | 354 |
| 65794-96-9 | m,p-Cresols | U | 354 | ug/kg | 106 | 354 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 354 | ug/kg | 106 | 354 |
| 95-48-7 | o-Cresol | U | 354 | ug/kg | 106 | 354 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 354 | ug/kg | 117 | 354 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 354 | ug/kg | 106 | 354 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.229 | 189 | ug/kg | 95 | NJ |
| | unknown | 2.384 | 169 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 11:50** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352460013** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84148** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/21/2014 12:28** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.28 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s072114.B\s8G2105.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 4.155 | 3910 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.745 | 169 | ug/kg | 97 | NJ |
| 000295-65-8 | Cyclohexadecane | 14.585 | 380 | ug/kg | 94 | NJ |
| 000629-99-2 | Pentacosane | 15.59 | 331 | ug/kg | 95 | NJ |
| 074685-30-6 | 5-Eicosene, (E)- | 15.799 | 181 | ug/kg | 95 | NJ |
| 000593-49-7 | Heptacosane | 17.147 | 531 | ug/kg | 94 | NJ |
| 014811-95-1 | 1,19-Eicosadiene | 18.548 | 518 | ug/kg | 98 | NJ |
| 000630-03-5 | Nonacosane | 19.211 | 380 | ug/kg | 98 | NJ |
| 007390-81-0 | Oxirane, hexadecyl- | 21.062 | 527 | ug/kg | 91 | NJ |
| 000630-02-4 | Octacosane | 21.773 | 266 | ug/kg | 95 | NJ |

# Quality Control Summary

**Semi-Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3718**

**Matrix Type: SOLID**

| Sample ID | Client ID | 2FP %REC | PHL %REC | NBZ %REC | FBP %REC | TBP %REC | TPH %REC |
|---|---|---|---|---|---|---|---|
| 1203128639 | MB for batch 1403911 | 72 | 74 | 74 | 70 | 94 | 71 |
| 1203128640 | LCS for batch 1403911 | 77 | 77 | 78 | 72 | 101 | 67 |
| 352460001 | RE57-14-84119 | 66 | 67 | 63 | 63 | 96 | 68 |
| 352460002 | RE57-14-84134 | 71 | 74 | 70 | 68 | 99 | 75 |
| 352460003 | RE57-14-84145 | 63 | 65 | 62 | 63 | 92 | 67 |
| 352460004 | RE57-14-84156 | 62 | 62 | 64 | 60 | 83 | 76 |
| 352460005 | RE57-14-84135 | 54 | 57 | 54 | 54 | 76 | 60 |
| 352460009 | RE57-14-84136 | 52 | 53 | 51 | 50 | 72 | 63 |
| 352460010 | RE57-14-84147 | 53 | 57 | 54 | 54 | 81 | 66 |
| 352460011 | RE57-14-84158 | 65 | 60 | 61 | 58 | 79 | 61 |
| 352460012 | RE57-14-84137 | 73 | 76 | 62 | 61 | 99 | 80 |
| 1203128641 | RE57-14-84187MS | 51 | 51 | 45 | 47 | 83 | 73 |
| 1203128642 | RE57-14-84187MSD | 65 | 67 | 65 | 59 | 90 | 70 |
| 352460006 | RE57-14-84146 | 68 | 67 | 60 | 62 | 92 | 77 |
| 352460013 | RE57-14-84148 | 42 | 45 | 41 | 43 | 76 | 72 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| 2FP | = 2-Fluorophenol | (23%-107%) |
| PHL | = Phenol-d5 | (25%-108%) |
| NBZ | = Nitrobenzene-d5 | (21%-103%) |
| FBP | = 2-Fluorobiphenyl | (25%-100%) |
| TBP | = 2,4,6-Tribromophenol | (20%-122%) |
| TPH | = p-Terphenyl-d14 | (31%-124%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1403911**
**Lab Sample ID** **1203128640**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 09:32**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 62-75-9 | LCS | N-Methyl-N-nitrosomethylam | 1670 | 0.0 | 1200 | 72 | 31-84 |
| 110-86-1 | LCS | Pyridine | 1670 | 0.0 | 933 | 56 | 29-85 |
| 62-53-3 | LCS | Aniline | 1670 | 0.0 | 1280 | 77 | 34-101 |
| 108-95-2 | LCS | Phenol | 1670 | 0.0 | 1270 | 77 | 38-98 |
| 111-44-4 | LCS | bis(2-Chloroethyl) ether | 1670 | 0.0 | 1200 | 72 | 35-96 |
| 95-57-8 | LCS | 2-Chlorophenol | 1670 | 0.0 | 1290 | 77 | 38-100 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 1670 | 0.0 | 1100 | 66 | 39-110 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 1670 | 0.0 | 1140 | 68 | 40-110 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 1670 | 0.0 | 1190 | 71 | 39-93 |
| 108-60-1 | LCS | bis(2-Chloro-1-methylethyl)et | 1670 | 0.0 | 1240 | 75 | 27-109 |
| 100-51-6 | LCS | Benzyl alcohol | 1670 | 0.0 | 1240 | 74 | 35-95 |
| 95-48-7 | LCS | o-Cresol | 1670 | 0.0 | 1310 | 79 | 37-97 |
| 65794-96-9 | LCS | m,p-Cresols | 1670 | 0.0 | 1460 | 88 | 39-115 |
| 621-64-7 | LCS | N-Nitrosodipropylamine | 1670 | 0.0 | 1300 | 78 | 34-106 |
| 67-72-1 | LCS | Hexachloroethane | 1670 | 0.0 | 1130 | 68 | 34-98 |
| 98-95-3 | LCS | Nitrobenzene | 1670 | 0.0 | 1300 | 78 | 35-99 |
| 78-59-1 | LCS | Isophorone | 1670 | 0.0 | 1370 | 82 | 36-98 |
| 88-75-5 | LCS | 2-Nitrophenol | 1670 | 0.0 | 1310 | 79 | 35-106 |
| 105-67-9 | LCS | 2,4-Dimethylphenol | 1670 | 0.0 | 1240 | 74 | 35-102 |
| 111-91-1 | LCS | bis(2-Chloroethoxy)methane | 1670 | 0.0 | 1270 | 77 | 37-98 |
| 120-83-2 | LCS | 2,4-Dichlorophenol | 1670 | 0.0 | 1300 | 78 | 35-110 |
| 65-85-0 | LCS | Benzoic acid | 3330 | 0.0 | 2180 | 65 | 27-99 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1403911**
**Lab Sample ID** **1203128640**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 09:32**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 106-47-8 | LCS | 4-Chloroaniline | 1670 | 0.0 | 1080 | 65 | 32-106 |
| 87-68-3 | LCS | Hexachlorobutadiene | 1670 | 0.0 | 1230 | 74 | 32-104 |
| 59-50-7 | LCS | 4-Chloro-3-methylphenol | 1670 | 0.0 | 1340 | 80 | 35-104 |
| 91-57-6 | LCS | 2-Methylnaphthalene | 1670 | 0.0 | 1200 | 72 | 36-107 |
| 91-20-3 | LCS | Naphthalene | 1670 | 0.0 | 1240 | 74 | 38-106 |
| 77-47-4 | LCS | Hexachlorocyclopentadiene | 1670 | 0.0 | 705 | 42 | 24-84 |
| 88-06-2 | LCS | 2,4,6-Trichlorophenol | 1670 | 0.0 | 1160 | 70 | 36-98 |
| 95-95-4 | LCS | 2,4,5-Trichlorophenol | 1670 | 0.0 | 1190 | 72 | 41-103 |
| 91-58-7 | LCS | 2-Chloronaphthalene | 1670 | 0.0 | 1220 | 73 | 39-101 |
| 88-74-4 | LCS | 2-Nitroaniline<br>*o-Nitroaniline* | 1670 | 0.0 | 1240 | 74 | 34-116 |
| 99-09-2 | LCS | 3-Nitroaniline<br>*m-Nitroaniline* | 1670 | 0.0 | 1190 | 72 | 32-113 |
| 131-11-3 | LCS | Dimethylphthalate | 1670 | 0.0 | 1260 | 75 | 41-105 |
| 606-20-2 | LCS | 2,6-Dinitrotoluene | 1670 | 0.0 | 1250 | 75 | 41-103 |
| 121-14-2 | LCS | 2,4-Dinitrotoluene | 1670 | 0.0 | 1270 | 77 | 43-109 |
| 208-96-8 | LCS | Acenaphthylene | 1670 | 0.0 | 1230 | 74 | 38-103 |
| 83-32-9 | LCS | Acenaphthene | 1670 | 0.0 | 1180 | 71 | 36-105 |
| 51-28-5 | LCS | 2,4-Dinitrophenol | 1670 | 0.0 | 666 | 40 | 22-83 |
| 132-64-9 | LCS | Dibenzofuran | 1670 | 0.0 | 1190 | 71 | 38-104 |
| 84-66-2 | LCS | Diethylphthalate | 1670 | 0.0 | 1250 | 75 | 42-109 |
| 100-02-7 | LCS | 4-Nitrophenol | 1670 | 0.0 | 1200 | 72 | 23-114 |
| 86-73-7 | LCS | Fluorene | 1670 | 0.0 | 1200 | 72 | 39-102 |
| 7005-72-3 | LCS | 4-Chlorophenylphenylether | 1670 | 0.0 | 1160 | 70 | 41-104 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1403911**
**Lab Sample ID** **1203128640**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 09:32**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 100-01-6 | LCS | 4-Nitroaniline<br>*p-Nitroaniline* | 1670 | 0.0 | 1500 | 90 | 35-150 |
| 534-52-1 | LCS | 2-Methyl-4,6-dinitrophenol | 1670 | 0.0 | 1170 | 71 | 33-103 |
| 122-39-4 | LCS | Diphenylamine | 1670 | 0.0 | 1210 | 73 | 40-101 |
| 122-66-7 | LCS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1670 | 0.0 | 1320 | 79 | 33-102 |
| 101-55-3 | LCS | 4-Bromophenylphenylether | 1670 | 0.0 | 1280 | 77 | 42-110 |
| 118-74-1 | LCS | Hexachlorobenzene | 1670 | 0.0 | 1480 | 89 | 41-108 |
| 87-86-5 | LCS | Pentachlorophenol | 1670 | 0.0 | 1170 | 70 | 31-93 |
| 85-01-8 | LCS | Phenanthrene | 1670 | 0.0 | 1200 | 72 | 43-105 |
| 120-12-7 | LCS | Anthracene | 1670 | 0.0 | 1230 | 74 | 43-104 |
| 84-74-2 | LCS | Di-n-butylphthalate | 1670 | 0.0 | 1330 | 80 | 46-112 |
| 206-44-0 | LCS | Fluoranthene | 1670 | 0.0 | 1350 | 81 | 44-106 |
| 129-00-0 | LCS | Pyrene | 1670 | 0.0 | 1020 | 61 | 33-99 |
| 85-68-7 | LCS | Butylbenzylphthalate | 1670 | 0.0 | 1190 | 72 | 37-107 |
| 117-81-7 | LCS | bis(2-Ethylhexyl)phthalate | 1670 | 0.0 | 1180 | 71 | 41-104 |
| 56-55-3 | LCS | Benzo(a)anthracene | 1670 | 0.0 | 1340 | 81 | 46-108 |
| 218-01-9 | LCS | Chrysene | 1670 | 0.0 | 1400 | 84 | 47-107 |
| 117-84-0 | LCS | Di-n-octylphthalate | 1670 | 0.0 | 1410 | 85 | 41-110 |
| 205-99-2 | LCS | Benzo(b)fluoranthene | 1670 | 0.0 | 1270 | 76 | 42-111 |
| 207-08-9 | LCS | Benzo(k)fluoranthene | 1670 | 0.0 | 1290 | 78 | 43-103 |
| 50-32-8 | LCS | Benzo(a)pyrene | 1670 | 0.0 | 1350 | 81 | 45-109 |
| 193-39-5 | LCS | Indeno(1,2,3-cd)pyrene | 1670 | 0.0 | 1410 | 85 | 45-115 |
| 53-70-3 | LCS | Dibenzo(a,h)anthracene | 1670 | 0.0 | 1640 | 99 | 39-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **LCS for batch 1403911**
**Lab Sample ID** **1203128640**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/18/2014 09:32**
**Dilution: 1**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 191-24-2 | LCS | Benzo(ghi)perylene | 1670 | 0.0 | 1390 | 84 | 43-115 |
| 91-94-1 | LCS | 3,3'-Dichlorobenzidine | 1670 | 0.0 | 1280 | 77 | 32-111 |
| 120-82-1 | LCS | 1,2,4-Trichlorobenzene | 1670 | 0.0 | 1260 | 75 | 37-98 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187MS**
**Lab Sample ID** **1203128641**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 16:59**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MS | N-Methyl-N-nitrosomethylam | 1780 | 0.00 | U | 786 | 44 | 24-86 |
| 110-86-1 | MS | Pyridine | 1780 | 0.00 | U | 632 | 36 | 24-87 |
| 62-53-3 | MS | Aniline | 1780 | 0.00 | U | 915 | 52 | 28-91 |
| 108-95-2 | MS | Phenol | 1780 | 0.00 | U | 943 | 53 | 28-108 |
| 111-44-4 | MS | bis(2-Chloroethyl) ether | 1780 | 0.00 | U | 810 | 46 | 25-102 |
| 95-57-8 | MS | 2-Chlorophenol | 1780 | 0.00 | U | 886 | 50 | 28-108 |
| 541-73-1 | MS | 1,3-Dichlorobenzene | 1780 | 0.00 | U | 688 | 39 | 24-96 |
| 106-46-7 | MS | 1,4-Dichlorobenzene | 1780 | 0.00 | U | 707 | 40 | 24-97 |
| 95-50-1 | MS | 1,2-Dichlorobenzene | 1780 | 0.00 | U | 746 | 42 | 25-99 |
| 108-60-1 | MS | bis(2-Chloro-1-methylethyl)et | 1780 | 0.00 | U | 701 | 40 | 25-105 |
| 100-51-6 | MS | Benzyl alcohol | 1780 | 0.00 | U | 818 | 46 | 21-109 |
| 95-48-7 | MS | o-Cresol | 1780 | 0.00 | U | 927 | 52 | 27-105 |
| 65794-96-9 | MS | m,p-Cresols | 1780 | 0.00 | U | 1050 | 59 | 32-123 |
| 621-64-7 | MS | N-Nitrosodipropylamine | 1780 | 0.00 | U | 835 | 47 | 23-117 |
| 67-72-1 | MS | Hexachloroethane | 1780 | 0.00 | U | 671 | 38 | 24-102 |
| 98-95-3 | MS | Nitrobenzene | 1780 | 0.00 | U | 823 | 46 | 25-104 |
| 78-59-1 | MS | Isophorone | 1780 | 0.00 | U | 886 | 50 | 24-108 |
| 88-75-5 | MS | 2-Nitrophenol | 1780 | 0.00 | U | 880 | 50 | 24-106 |
| 105-67-9 | MS | 2,4-Dimethylphenol | 1780 | 0.00 | U | 880 | 50 | 30-109 |
| 111-91-1 | MS | bis(2-Chloroethoxy)methane | 1780 | 0.00 | U | 850 | 48 | 27-104 |
| 120-83-2 | MS | 2,4-Dichlorophenol | 1780 | 0.00 | U | 958 | 54 | 31-103 |
| 65-85-0 | MS | Benzoic acid | 3550 | 0.00 | U | 1700 | 48 | 15-115 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187MS**
**Lab Sample ID** **1203128641**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 16:59**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MS | 4-Chloroaniline | 1780 | 0.00 | U | 851 | 48 | 27-100 |
| 87-68-3 | MS | Hexachlorobutadiene | 1780 | 0.00 | U | 774 | 44 | 24-105 |
| 59-50-7 | MS | 4-Chloro-3-methylphenol | 1780 | 0.00 | U | 1050 | 59 | 32-112 |
| 91-57-6 | MS | 2-Methylnaphthalene | 1780 | 0.00 | U | 807 | 45 | 23-107 |
| 91-20-3 | MS | Naphthalene | 1780 | 0.00 | U | 802 | 45 | 21-107 |
| 77-47-4 | MS | Hexachlorocyclopentadiene | 1780 | 0.00 | U | 436 | 25 | 12-106 |
| 88-06-2 | MS | 2,4,6-Trichlorophenol | 1780 | 0.00 | U | 936 | 53 | 32-103 |
| 95-95-4 | MS | 2,4,5-Trichlorophenol | 1780 | 0.00 | U | 1030 | 58 | 38-109 |
| 91-58-7 | MS | 2-Chloronaphthalene | 1780 | 0.00 | U | 873 | 49 | 27-109 |
| 88-74-4 | MS | 2-Nitroaniline<br>*o-Nitroaniline* | 1780 | 0.00 | U | 973 | 55 | 37-114 |
| 99-09-2 | MS | 3-Nitroaniline<br>*m-Nitroaniline* | 1780 | 0.00 | U | 1130 | 64 | 31-110 |
| 131-11-3 | MS | Dimethylphthalate | 1780 | 0.00 | U | 1040 | 58 | 38-110 |
| 606-20-2 | MS | 2,6-Dinitrotoluene | 1780 | 0.00 | U | 1030 | 58 | 36-107 |
| 121-14-2 | MS | 2,4-Dinitrotoluene | 1780 | 0.00 | U | 1140 | 64 | 36-115 |
| 208-96-8 | MS | Acenaphthylene | 1780 | 0.00 | U | 909 | 51 | 32-103 |
| 83-32-9 | MS | Acenaphthene | 1780 | 0.00 | U | 856 | 48 | 28-102 |
| 51-28-5 | MS | 2,4-Dinitrophenol | 1780 | 0.00 | U | 599 | 34 | 19-101 |
| 132-64-9 | MS | Dibenzofuran | 1780 | 0.00 | U | 902 | 51 | 28-117 |
| 84-66-2 | MS | Diethylphthalate | 1780 | 0.00 | U | 1110 | 63 | 40-113 |
| 100-02-7 | MS | 4-Nitrophenol | 1780 | 0.00 | U | 1180 | 66 | 12-128 |
| 86-73-7 | MS | Fluorene | 1780 | 0.00 | U | 939 | 53 | 30-115 |
| 7005-72-3 | MS | 4-Chlorophenylphenylether | 1780 | 0.00 | U | 933 | 53 | 37-110 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187MS**
**Lab Sample ID** **1203128641**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 16:59**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MS | 4-Nitroaniline<br>*p-Nitroaniline* | 1780 | 0.00 | U | 1420 | 80 | 36-141 |
| 534-52-1 | MS | 2-Methyl-4,6-dinitrophenol | 1780 | 0.00 | U | 988 | 56 | 14-116 |
| 122-39-4 | MS | Diphenylamine | 1780 | 0.00 | U | 1130 | 64 | 34-111 |
| 122-66-7 | MS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1780 | 0.00 | U | 1080 | 61 | 35-105 |
| 101-55-3 | MS | 4-Bromophenylphenylether | 1780 | 0.00 | U | 1160 | 66 | 37-112 |
| 118-74-1 | MS | Hexachlorobenzene | 1780 | 0.00 | U | 1340 | 76 | 34-111 |
| 87-86-5 | MS | Pentachlorophenol | 1780 | 0.00 | U | 1080 | 61 | 22-108 |
| 85-01-8 | MS | Phenanthrene | 1780 | 0.00 | U | 1120 | 63 | 28-119 |
| 120-12-7 | MS | Anthracene | 1780 | 0.00 | U | 1150 | 65 | 36-104 |
| 84-74-2 | MS | Di-n-butylphthalate | 1780 | 0.00 | U | 1250 | 70 | 42-119 |
| 206-44-0 | MS | Fluoranthene | 1780 | 0.00 | U | 1150 | 65 | 32-115 |
| 129-00-0 | MS | Pyrene | 1780 | 0.00 | U | 1220 | 69 | 25-119 |
| 85-68-7 | MS | Butylbenzylphthalate | 1780 | 0.00 | U | 1360 | 77 | 33-121 |
| 117-81-7 | MS | bis(2-Ethylhexyl)phthalate | 1780 | 0.00 | U | 1350 | 76 | 33-124 |
| 56-55-3 | MS | Benzo(a)anthracene | 1780 | 0.00 | U | 1330 | 75 | 27-120 |
| 218-01-9 | MS | Chrysene | 1780 | 0.00 | U | 1360 | 77 | 33-114 |
| 117-84-0 | MS | Di-n-octylphthalate | 1780 | 0.00 | U | 1400 | 79 | 36-115 |
| 205-99-2 | MS | Benzo(b)fluoranthene | 1780 | 0.00 | U | 1390 | 78 | 30-119 |
| 207-08-9 | MS | Benzo(k)fluoranthene | 1780 | 0.00 | U | 1440 | 81 | 31-125 |
| 50-32-8 | MS | Benzo(a)pyrene | 1780 | 0.00 | U | 1370 | 77 | 31-116 |
| 193-39-5 | MS | Indeno(1,2,3-cd)pyrene | 1780 | 0.00 | U | 1100 | 62 | 29-117 |
| 53-70-3 | MS | Dibenzo(a,h)anthracene | 1780 | 0.00 | U | 1300 | 73 | 26-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187MS**
**Lab Sample ID** **1203128641**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 16:59**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MS | Benzo(ghi)perylene | 1780 | 0.00 | U | 1020 | 58 | 30-109 |
| 91-94-1 | MS | 3,3'-Dichlorobenzidine | 1780 | 0.00 | U | 1180 | 67 | 28-105 |
| 120-82-1 | MS | 1,2,4-Trichlorobenzene | 1780 | 0.00 | U | 845 | 48 | 25-102 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187MSD**
**Lab Sample ID** **1203128642**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 17:31**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MSD | N-Methyl-N-nitrosomethylam | 1780 | 0.00 | U | 1020 | 58 | 24-86 | 26 | 0-30 |
| 110-86-1 | MSD | Pyridine | 1780 | 0.00 | U | 856 | 48 | 24-87 | 30 | 0-30 |
| 62-53-3 | MSD | Aniline | 1780 | 0.00 | U | 1090 | 61 | 28-91 | 17 | 0-30 |
| 108-95-2 | MSD | Phenol | 1780 | 0.00 | U | 1210 | 68 | 28-108 | 25 | 0-30 |
| 111-44-4 | MSD | bis(2-Chloroethyl) ether | 1780 | 0.00 | U | 1080 | 61 | 25-102 | 28 | 0-30 |
| 95-57-8 | MSD | 2-Chlorophenol | 1780 | 0.00 | U | 1180 | 67 | 28-108 | 29 | 0-30 |
| 541-73-1 | MSD | 1,3-Dichlorobenzene | 1780 | 0.00 | U | 979 | 55 | 24-96 | 35 * | 0-30 |
| 106-46-7 | MSD | 1,4-Dichlorobenzene | 1780 | 0.00 | U | 1000 | 57 | 24-97 | 35 * | 0-30 |
| 95-50-1 | MSD | 1,2-Dichlorobenzene | 1780 | 0.00 | U | 1040 | 59 | 25-99 | 33 * | 0-30 |
| 108-60-1 | MSD | bis(2-Chloro-1-methylethyl)et | 1780 | 0.00 | U | 1060 | 60 | 25-105 | 41 * | 0-30 |
| 100-51-6 | MSD | Benzyl alcohol | 1780 | 0.00 | U | 1110 | 63 | 21-109 | 31 * | 0-30 |
| 95-48-7 | MSD | o-Cresol | 1780 | 0.00 | U | 1240 | 70 | 27-105 | 29 | 0-30 |
| 65794-96-9 | MSD | m,p-Cresols | 1780 | 0.00 | U | 1430 | 81 | 32-123 | 31 * | 0-30 |
| 621-64-7 | MSD | N-Nitrosodipropylamine | 1780 | 0.00 | U | 1170 | 66 | 23-117 | 34 * | 0-30 |
| 67-72-1 | MSD | Hexachloroethane | 1780 | 0.00 | U | 962 | 54 | 24-102 | 36 * | 0-30 |
| 98-95-3 | MSD | Nitrobenzene | 1780 | 0.00 | U | 1200 | 68 | 25-104 | 37 * | 0-30 |
| 78-59-1 | MSD | Isophorone | 1780 | 0.00 | U | 1260 | 71 | 24-108 | 35 * | 0-30 |
| 88-75-5 | MSD | 2-Nitrophenol | 1780 | 0.00 | U | 1220 | 69 | 24-106 | 33 * | 0-30 |
| 105-67-9 | MSD | 2,4-Dimethylphenol | 1780 | 0.00 | U | 1180 | 67 | 30-109 | 29 | 0-30 |
| 111-91-1 | MSD | bis(2-Chloroethoxy)methane | 1780 | 0.00 | U | 1120 | 63 | 27-104 | 27 | 0-30 |
| 120-83-2 | MSD | 2,4-Dichlorophenol | 1780 | 0.00 | U | 1250 | 70 | 31-103 | 27 | 0-30 |
| 65-85-0 | MSD | Benzoic acid | 3550 | 0.00 | U | 2130 | 60 | 15-115 | 23 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187MSD**
**Lab Sample ID** **1203128642**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 17:31**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MSD 4-Chloroaniline | 1780 | 0.00 U | 915 | 52 | 27-100 | 7 | 0-30 |
| 87-68-3 | MSD Hexachlorobutadiene | 1780 | 0.00 U | 1050 | 59 | 24-105 | 30 | 0-30 |
| 59-50-7 | MSD 4-Chloro-3-methylphenol | 1780 | 0.00 U | 1300 | 74 | 32-112 | 21 | 0-30 |
| 91-57-6 | MSD 2-Methylnaphthalene | 1780 | 0.00 U | 1080 | 61 | 23-107 | 29 | 0-30 |
| 91-20-3 | MSD Naphthalene | 1780 | 0.00 U | 1070 | 60 | 21-107 | 28 | 0-30 |
| 77-47-4 | MSD Hexachlorocyclopentadiene | 1780 | 0.00 U | 473 | 27 | 12-106 | 8 | 0-30 |
| 88-06-2 | MSD 2,4,6-Trichlorophenol | 1780 | 0.00 U | 1140 | 64 | 32-103 | 20 | 0-30 |
| 95-95-4 | MSD 2,4,5-Trichlorophenol | 1780 | 0.00 U | 1180 | 66 | 38-109 | 13 | 0-30 |
| 91-58-7 | MSD 2-Chloronaphthalene | 1780 | 0.00 U | 1110 | 63 | 27-109 | 24 | 0-30 |
| 88-74-4 | MSD 2-Nitroaniline *o-Nitroaniline* | 1780 | 0.00 U | 1160 | 65 | 37-114 | 18 | 0-30 |
| 99-09-2 | MSD 3-Nitroaniline *m-Nitroaniline* | 1780 | 0.00 U | 1130 | 64 | 31-110 | 0 | 0-30 |
| 131-11-3 | MSD Dimethylphthalate | 1780 | 0.00 U | 1190 | 67 | 38-110 | 14 | 0-30 |
| 606-20-2 | MSD 2,6-Dinitrotoluene | 1780 | 0.00 U | 1200 | 68 | 36-107 | 15 | 0-30 |
| 121-14-2 | MSD 2,4-Dinitrotoluene | 1780 | 0.00 U | 1220 | 69 | 36-115 | 7 | 0-30 |
| 208-96-8 | MSD Acenaphthylene | 1780 | 0.00 U | 1150 | 65 | 32-103 | 23 | 0-30 |
| 83-32-9 | MSD Acenaphthene | 1780 | 0.00 U | 1080 | 61 | 28-102 | 23 | 0-30 |
| 51-28-5 | MSD 2,4-Dinitrophenol | 1780 | 0.00 U | 642 | 36 | 19-101 | 7 | 0-30 |
| 132-64-9 | MSD Dibenzofuran | 1780 | 0.00 U | 1120 | 63 | 28-117 | 21 | 0-30 |
| 84-66-2 | MSD Diethylphthalate | 1780 | 0.00 U | 1170 | 66 | 40-113 | 5 | 0-30 |
| 100-02-7 | MSD 4-Nitrophenol | 1780 | 0.00 U | 1260 | 71 | 12-128 | 7 | 0-30 |
| 86-73-7 | MSD Fluorene | 1780 | 0.00 U | 1140 | 64 | 30-115 | 19 | 0-30 |
| 7005-72-3 | MSD 4-Chlorophenylphenylether | 1780 | 0.00 U | 1130 | 64 | 37-110 | 19 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187MSD**
**Lab Sample ID** **1203128642**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 17:31**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MSD | 4-Nitroaniline<br>*p-Nitroaniline* | 1780 | 0.00 | U | 1430 | 81 | 36-141 | 1 | 0-30 |
| 534-52-1 | MSD | 2-Methyl-4,6-dinitrophenol | 1780 | 0.00 | U | 988 | 56 | 14-116 | 0 | 0-30 |
| 122-39-4 | MSD | Diphenylamine | 1780 | 0.00 | U | 1230 | 69 | 34-111 | 8 | 0-30 |
| 122-66-7 | MSD | Azobenzene<br>*1,2-Diphenylhydrazine* | 1780 | 0.00 | U | 1260 | 71 | 35-105 | 15 | 0-30 |
| 101-55-3 | MSD | 4-Bromophenylphenylether | 1780 | 0.00 | U | 1320 | 74 | 37-112 | 13 | 0-30 |
| 118-74-1 | MSD | Hexachlorobenzene | 1780 | 0.00 | U | 1450 | 82 | 34-111 | 8 | 0-30 |
| 87-86-5 | MSD | Pentachlorophenol | 1780 | 0.00 | U | 1110 | 62 | 22-108 | 2 | 0-30 |
| 85-01-8 | MSD | Phenanthrene | 1780 | 0.00 | U | 1150 | 65 | 28-119 | 2 | 0-30 |
| 120-12-7 | MSD | Anthracene | 1780 | 0.00 | U | 1190 | 67 | 36-104 | 3 | 0-30 |
| 84-74-2 | MSD | Di-n-butylphthalate | 1780 | 0.00 | U | 1220 | 69 | 42-119 | 3 | 0-30 |
| 206-44-0 | MSD | Fluoranthene | 1780 | 0.00 | U | 1130 | 64 | 32-115 | 1 | 0-30 |
| 129-00-0 | MSD | Pyrene | 1780 | 0.00 | U | 1150 | 65 | 25-119 | 6 | 0-30 |
| 85-68-7 | MSD | Butylbenzylphthalate | 1780 | 0.00 | U | 1240 | 70 | 33-121 | 9 | 0-30 |
| 117-81-7 | MSD | bis(2-Ethylhexyl)phthalate | 1780 | 0.00 | U | 1240 | 70 | 33-124 | 9 | 0-30 |
| 56-55-3 | MSD | Benzo(a)anthracene | 1780 | 0.00 | U | 1260 | 71 | 27-120 | 5 | 0-30 |
| 218-01-9 | MSD | Chrysene | 1780 | 0.00 | U | 1310 | 74 | 33-114 | 4 | 0-30 |
| 117-84-0 | MSD | Di-n-octylphthalate | 1780 | 0.00 | U | 1360 | 76 | 36-115 | 3 | 0-30 |
| 205-99-2 | MSD | Benzo(b)fluoranthene | 1780 | 0.00 | U | 1310 | 74 | 30-119 | 6 | 0-30 |
| 207-08-9 | MSD | Benzo(k)fluoranthene | 1780 | 0.00 | U | 1380 | 78 | 31-125 | 4 | 0-30 |
| 50-32-8 | MSD | Benzo(a)pyrene | 1780 | 0.00 | U | 1300 | 73 | 31-116 | 6 | 0-30 |
| 193-39-5 | MSD | Indeno(1,2,3-cd)pyrene | 1780 | 0.00 | U | 1010 | 57 | 29-117 | 8 | 0-30 |
| 53-70-3 | MSD | Dibenzo(a,h)anthracene | 1780 | 0.00 | U | 1200 | 68 | 26-128 | 8 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3718**
**Client ID:** **RE57-14-84187MSD**
**Lab Sample ID** **1203128642**
**Instrument:** **MSD8.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **6.3**
**Analysis Date:** **07/18/2014 17:31**
**Prep Batch ID:** **1403911**
**Batch ID:** **1403912**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MSD | Benzo(ghi)perylene | 1780 | 0.00 | U | 947 | 53 | 30-109 | 8 | 0-30 |
| 91-94-1 | MSD | 3,3'-Dichlorobenzidine | 1780 | 0.00 | U | 1090 | 61 | 28-105 | 8 | 0-30 |
| 120-82-1 | MSD | 1,2,4-Trichlorobenzene | 1780 | 0.00 | U | 1100 | 62 | 25-102 | 26 | 0-30 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1403911** | **Instrument ID:** | **MSD8.I** | **Data File:** | **s071814.B\s8G1804.D** |
| **Lab Sample ID:** | **1203128639** | **Prep Date:** | **07/17/2014 10:55** | **Analyzed:** | **07/18/14 09:00** |
| **Column:** | **DB-5ms** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1403911 | 1203128640 | s071814.B\s8G1805.D | 07/18/14 | 0932 |
| 02 | RE57-14-84119 | 352460001 | s071814.B\s8G1807.D | 07/18/14 | 1036 |
| 03 | RE57-14-84134 | 352460002 | s071814.B\s8G1808.D | 07/18/14 | 1108 |
| 04 | RE57-14-84145 | 352460003 | s071814.B\s8G1809.D | 07/18/14 | 1140 |
| 05 | RE57-14-84156 | 352460004 | s071814.B\s8G1810.D | 07/18/14 | 1212 |
| 06 | RE57-14-84135 | 352460005 | s071814.B\s8G1811.D | 07/18/14 | 1244 |
| 07 | RE57-14-84136 | 352460009 | s071814.B\s8G1813.D | 07/18/14 | 1347 |
| 08 | RE57-14-84147 | 352460010 | s071814.B\s8G1814.D | 07/18/14 | 1419 |
| 09 | RE57-14-84158 | 352460011 | s071814.B\s8G1815.D | 07/18/14 | 1451 |
| 10 | RE57-14-84137 | 352460012 | s071814.B\s8G1816.D | 07/18/14 | 1524 |
| 11 | RE57-14-84187MS | 1203128641 | s071814.B\s8G1819.D | 07/18/14 | 1659 |
| 12 | RE57-14-84187MSD | 1203128642 | s071814.B\s8G1820.D | 07/18/14 | 1731 |
| 13 | RE57-14-84146 | 352460006 | s071814.B\s8G1822.D | 07/18/14 | 1835 |
| 14 | RE57-14-84148 | 352460013 | s072114.B\s8G2105.D | 07/21/14 | 1228 |

# Quality Control Data

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128639** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:00** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1804.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 122-66-7 | Azobenzene | U | 333 | ug/kg | 100 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 333 | ug/kg | 100 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 333 | ug/kg | 100 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | U | 333 | ug/kg | 100 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | U | 333 | ug/kg | 100 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | U | 666 | ug/kg | 100 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 333 | ug/kg | 100 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 333 | ug/kg | 100 | 333 |
| 91-58-7 | 2-Chloronaphthalene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 95-57-8 | 2-Chlorophenol | U | 333 | ug/kg | 100 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 333 | ug/kg | 100 | 333 |
| 91-57-6 | 2-Methylnaphthalene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 88-75-5 | 2-Nitrophenol | U | 333 | ug/kg | 100 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 333 | ug/kg | 100 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | U | 333 | ug/kg | 100 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 333 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | U | 333 | ug/kg | 100 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 333 | ug/kg | 100 | 333 |
| 100-02-7 | 4-Nitrophenol | U | 333 | ug/kg | 100 | 333 |
| 83-32-9 | Acenaphthene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 208-96-8 | Acenaphthylene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 62-53-3 | Aniline | U | 333 | ug/kg | 100 | 333 |
| 120-12-7 | Anthracene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 65-85-0 | Benzoic acid | U | 666 | ug/kg | 167 | 666 |
| 100-51-6 | Benzyl alcohol | U | 333 | ug/kg | 100 | 333 |
| 85-68-7 | Butylbenzylphthalate | U | 333 | ug/kg | 100 | 333 |
| 218-01-9 | Chrysene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | U | 333 | ug/kg | 100 | 333 |
| 117-84-0 | Di-n-octylphthalate | U | 333 | ug/kg | 100 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128639** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:00** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1804.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 132-64-9 | Dibenzofuran | U | 333 | ug/kg | 100 | 333 |
| 84-66-2 | Diethylphthalate | U | 333 | ug/kg | 100 | 333 |
| 131-11-3 | Dimethylphthalate | U | 333 | ug/kg | 100 | 333 |
| 122-39-4 | Diphenylamine | U | 333 | ug/kg | 100 | 333 |
| 206-44-0 | Fluoranthene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 86-73-7 | Fluorene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 118-74-1 | Hexachlorobenzene | U | 333 | ug/kg | 100 | 333 |
| 87-68-3 | Hexachlorobutadiene | U | 333 | ug/kg | 100 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 333 | ug/kg | 100 | 333 |
| 67-72-1 | Hexachloroethane | U | 333 | ug/kg | 100 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 78-59-1 | Isophorone | U | 333 | ug/kg | 100 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 333 | ug/kg | 100 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | U | 333 | ug/kg | 100 | 333 |
| 91-20-3 | Naphthalene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 98-95-3 | Nitrobenzene | U | 333 | ug/kg | 100 | 333 |
| 87-86-5 | Pentachlorophenol | U | 333 | ug/kg | 100 | 333 |
| 85-01-8 | Phenanthrene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 108-95-2 | Phenol | U | 333 | ug/kg | 100 | 333 |
| 129-00-0 | Pyrene | U | 33.3 | ug/kg | 10.0 | 33.3 |
| 110-86-1 | Pyridine | U | 333 | ug/kg | 100 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 333 | ug/kg | 100 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 333 | ug/kg | 100 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 333 | ug/kg | 100 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 333 | ug/kg | 100 | 333 |
| 65794-96-9 | m,p-Cresols | U | 333 | ug/kg | 100 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 333 | ug/kg | 100 | 333 |
| 95-48-7 | o-Cresol | U | 333 | ug/kg | 100 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 333 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 333 | ug/kg | 100 | 333 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000067-66-3 | Trichloromethane | 2.224 | 275 | ug/kg | 94 | NJ |
| | Unknown Aldol Condensate | 4.155 | 4090 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128639** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:00** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1804.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 6.454 | 156 | ug/kg | 0 | J |
| 000296-56-0 | Cycloeicosane | 15.676 | 272 | ug/kg | 98 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128640** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1805.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1260 | ug/kg | 99.9 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1190 | ug/kg | 99.9 | 333 |
| 122-66-7 | Azobenzene | | 1320 | ug/kg | 99.9 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 1100 | ug/kg | 99.9 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1140 | ug/kg | 99.9 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1190 | ug/kg | 99.9 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1160 | ug/kg | 99.9 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | | 1300 | ug/kg | 99.9 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | | 1240 | ug/kg | 99.9 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | J | 666 | ug/kg | 99.9 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1270 | ug/kg | 99.9 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1250 | ug/kg | 99.9 | 333 |
| 91-58-7 | 2-Chloronaphthalene | | 1220 | ug/kg | 9.99 | 33.3 |
| 95-57-8 | 2-Chlorophenol | | 1290 | ug/kg | 99.9 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 1170 | ug/kg | 99.9 | 333 |
| 91-57-6 | 2-Methylnaphthalene | | 1200 | ug/kg | 9.99 | 33.3 |
| 88-75-5 | 2-Nitrophenol | | 1310 | ug/kg | 99.9 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1280 | ug/kg | 99.9 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | | 1280 | ug/kg | 99.9 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1340 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | | 1080 | ug/kg | 99.9 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1160 | ug/kg | 99.9 | 333 |
| 100-02-7 | 4-Nitrophenol | | 1200 | ug/kg | 99.9 | 333 |
| 83-32-9 | Acenaphthene | | 1180 | ug/kg | 9.99 | 33.3 |
| 208-96-8 | Acenaphthylene | | 1230 | ug/kg | 9.99 | 33.3 |
| 62-53-3 | Aniline | | 1280 | ug/kg | 99.9 | 333 |
| 120-12-7 | Anthracene | | 1230 | ug/kg | 9.99 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | | 1340 | ug/kg | 9.99 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | | 1350 | ug/kg | 9.99 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | | 1270 | ug/kg | 9.99 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | | 1390 | ug/kg | 9.99 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | | 1290 | ug/kg | 9.99 | 33.3 |
| 65-85-0 | Benzoic acid | | 2180 | ug/kg | 167 | 666 |
| 100-51-6 | Benzyl alcohol | | 1240 | ug/kg | 99.9 | 333 |
| 85-68-7 | Butylbenzylphthalate | | 1190 | ug/kg | 99.9 | 333 |
| 218-01-9 | Chrysene | | 1400 | ug/kg | 9.99 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | | 1330 | ug/kg | 99.9 | 333 |
| 117-84-0 | Di-n-octylphthalate | | 1410 | ug/kg | 99.9 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203128640** | | | | |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1403911** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 09:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1805.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1640 | ug/kg | 9.99 | 33.3 |
| 132-64-9 | Dibenzofuran | | 1190 | ug/kg | 99.9 | 333 |
| 84-66-2 | Diethylphthalate | | 1250 | ug/kg | 99.9 | 333 |
| 131-11-3 | Dimethylphthalate | | 1260 | ug/kg | 99.9 | 333 |
| 122-39-4 | Diphenylamine | | 1210 | ug/kg | 99.9 | 333 |
| 206-44-0 | Fluoranthene | | 1350 | ug/kg | 9.99 | 33.3 |
| 86-73-7 | Fluorene | | 1200 | ug/kg | 9.99 | 33.3 |
| 118-74-1 | Hexachlorobenzene | | 1480 | ug/kg | 99.9 | 333 |
| 87-68-3 | Hexachlorobutadiene | | 1230 | ug/kg | 99.9 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | | 705 | ug/kg | 99.9 | 333 |
| 67-72-1 | Hexachloroethane | | 1130 | ug/kg | 99.9 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1410 | ug/kg | 9.99 | 33.3 |
| 78-59-1 | Isophorone | | 1370 | ug/kg | 99.9 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1200 | ug/kg | 99.9 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | | 1300 | ug/kg | 99.9 | 333 |
| 91-20-3 | Naphthalene | | 1240 | ug/kg | 9.99 | 33.3 |
| 98-95-3 | Nitrobenzene | | 1300 | ug/kg | 99.9 | 333 |
| 87-86-5 | Pentachlorophenol | | 1170 | ug/kg | 99.9 | 333 |
| 85-01-8 | Phenanthrene | | 1200 | ug/kg | 9.99 | 33.3 |
| 108-95-2 | Phenol | | 1270 | ug/kg | 99.9 | 333 |
| 129-00-0 | Pyrene | | 1020 | ug/kg | 9.99 | 33.3 |
| 110-86-1 | Pyridine | | 933 | ug/kg | 99.9 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 1240 | ug/kg | 99.9 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1270 | ug/kg | 99.9 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1200 | ug/kg | 99.9 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1180 | ug/kg | 99.9 | 333 |
| 65794-96-9 | m,p-Cresols | | 1460 | ug/kg | 99.9 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1190 | ug/kg | 99.9 | 333 |
| 95-48-7 | o-Cresol | | 1310 | ug/kg | 99.9 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1240 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1500 | ug/kg | 99.9 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203128641** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 16:59** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1819.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 845 | ug/kg | 107 | 355 |
| 95-50-1 | 1,2-Dichlorobenzene | | 746 | ug/kg | 107 | 355 |
| 122-66-7 | Azobenzene | | 1080 | ug/kg | 107 | 355 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 688 | ug/kg | 107 | 355 |
| 106-46-7 | 1,4-Dichlorobenzene | | 707 | ug/kg | 107 | 355 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1030 | ug/kg | 107 | 355 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 936 | ug/kg | 107 | 355 |
| 120-83-2 | 2,4-Dichlorophenol | | 958 | ug/kg | 107 | 355 |
| 105-67-9 | 2,4-Dimethylphenol | | 880 | ug/kg | 107 | 355 |
| 51-28-5 | 2,4-Dinitrophenol | J | 599 | ug/kg | 107 | 710 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1140 | ug/kg | 107 | 355 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1030 | ug/kg | 107 | 355 |
| 91-58-7 | 2-Chloronaphthalene | | 873 | ug/kg | 10.7 | 35.5 |
| 95-57-8 | 2-Chlorophenol | | 886 | ug/kg | 107 | 355 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 988 | ug/kg | 107 | 355 |
| 91-57-6 | 2-Methylnaphthalene | | 807 | ug/kg | 10.7 | 35.5 |
| 88-75-5 | 2-Nitrophenol | | 880 | ug/kg | 107 | 355 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1180 | ug/kg | 107 | 355 |
| 101-55-3 | 4-Bromophenylphenylether | | 1160 | ug/kg | 107 | 355 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1050 | ug/kg | 142 | 355 |
| 106-47-8 | 4-Chloroaniline | | 851 | ug/kg | 107 | 355 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 933 | ug/kg | 107 | 355 |
| 100-02-7 | 4-Nitrophenol | | 1180 | ug/kg | 107 | 355 |
| 83-32-9 | Acenaphthene | | 856 | ug/kg | 10.7 | 35.5 |
| 208-96-8 | Acenaphthylene | | 909 | ug/kg | 10.7 | 35.5 |
| 62-53-3 | Aniline | | 915 | ug/kg | 107 | 355 |
| 120-12-7 | Anthracene | | 1150 | ug/kg | 10.7 | 35.5 |
| 56-55-3 | Benzo(a)anthracene | | 1330 | ug/kg | 10.7 | 35.5 |
| 50-32-8 | Benzo(a)pyrene | | 1370 | ug/kg | 10.7 | 35.5 |
| 205-99-2 | Benzo(b)fluoranthene | | 1390 | ug/kg | 10.7 | 35.5 |
| 191-24-2 | Benzo(ghi)perylene | | 1020 | ug/kg | 10.7 | 35.5 |
| 207-08-9 | Benzo(k)fluoranthene | | 1440 | ug/kg | 10.7 | 35.5 |
| 65-85-0 | Benzoic acid | | 1700 | ug/kg | 178 | 710 |
| 100-51-6 | Benzyl alcohol | | 818 | ug/kg | 107 | 355 |
| 85-68-7 | Butylbenzylphthalate | | 1360 | ug/kg | 107 | 355 |
| 218-01-9 | Chrysene | | 1360 | ug/kg | 10.7 | 35.5 |
| 84-74-2 | Di-n-butylphthalate | | 1250 | ug/kg | 107 | 355 |
| 117-84-0 | Di-n-octylphthalate | | 1400 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203128641** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 16:59** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1819.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1300 | ug/kg | 10.7 | 35.5 |
| 132-64-9 | Dibenzofuran | | 902 | ug/kg | 107 | 355 |
| 84-66-2 | Diethylphthalate | | 1110 | ug/kg | 107 | 355 |
| 131-11-3 | Dimethylphthalate | | 1040 | ug/kg | 107 | 355 |
| 122-39-4 | Diphenylamine | | 1130 | ug/kg | 107 | 355 |
| 206-44-0 | Fluoranthene | | 1150 | ug/kg | 10.7 | 35.5 |
| 86-73-7 | Fluorene | | 939 | ug/kg | 10.7 | 35.5 |
| 118-74-1 | Hexachlorobenzene | | 1340 | ug/kg | 107 | 355 |
| 87-68-3 | Hexachlorobutadiene | | 774 | ug/kg | 107 | 355 |
| 77-47-4 | Hexachlorocyclopentadiene | | 436 | ug/kg | 107 | 355 |
| 67-72-1 | Hexachloroethane | | 671 | ug/kg | 107 | 355 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1100 | ug/kg | 10.7 | 35.5 |
| 78-59-1 | Isophorone | | 886 | ug/kg | 107 | 355 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 786 | ug/kg | 107 | 355 |
| 621-64-7 | N-Nitrosodipropylamine | | 835 | ug/kg | 107 | 355 |
| 91-20-3 | Naphthalene | | 802 | ug/kg | 10.7 | 35.5 |
| 98-95-3 | Nitrobenzene | | 823 | ug/kg | 107 | 355 |
| 87-86-5 | Pentachlorophenol | | 1080 | ug/kg | 107 | 355 |
| 85-01-8 | Phenanthrene | | 1120 | ug/kg | 10.7 | 35.5 |
| 108-95-2 | Phenol | | 943 | ug/kg | 107 | 355 |
| 129-00-0 | Pyrene | | 1220 | ug/kg | 10.7 | 35.5 |
| 110-86-1 | Pyridine | | 632 | ug/kg | 107 | 355 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 701 | ug/kg | 107 | 355 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 850 | ug/kg | 107 | 355 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 810 | ug/kg | 107 | 355 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1350 | ug/kg | 107 | 355 |
| 65794-96-9 | m,p-Cresols | | 1050 | ug/kg | 107 | 355 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1130 | ug/kg | 107 | 355 |
| 95-48-7 | o-Cresol | | 927 | ug/kg | 107 | 355 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 973 | ug/kg | 117 | 355 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1420 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203128642** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 17:31** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1820.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1100 | ug/kg | 107 | 355 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1040 | ug/kg | 107 | 355 |
| 122-66-7 | Azobenzene | | 1260 | ug/kg | 107 | 355 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 979 | ug/kg | 107 | 355 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1000 | ug/kg | 107 | 355 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1180 | ug/kg | 107 | 355 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1140 | ug/kg | 107 | 355 |
| 120-83-2 | 2,4-Dichlorophenol | | 1250 | ug/kg | 107 | 355 |
| 105-67-9 | 2,4-Dimethylphenol | | 1180 | ug/kg | 107 | 355 |
| 51-28-5 | 2,4-Dinitrophenol | J | 642 | ug/kg | 107 | 710 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1220 | ug/kg | 107 | 355 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1200 | ug/kg | 107 | 355 |
| 91-58-7 | 2-Chloronaphthalene | | 1110 | ug/kg | 10.7 | 35.5 |
| 95-57-8 | 2-Chlorophenol | | 1180 | ug/kg | 107 | 355 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 988 | ug/kg | 107 | 355 |
| 91-57-6 | 2-Methylnaphthalene | | 1080 | ug/kg | 10.7 | 35.5 |
| 88-75-5 | 2-Nitrophenol | | 1220 | ug/kg | 107 | 355 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1090 | ug/kg | 107 | 355 |
| 101-55-3 | 4-Bromophenylphenylether | | 1320 | ug/kg | 107 | 355 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1300 | ug/kg | 142 | 355 |
| 106-47-8 | 4-Chloroaniline | | 915 | ug/kg | 107 | 355 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1130 | ug/kg | 107 | 355 |
| 100-02-7 | 4-Nitrophenol | | 1260 | ug/kg | 107 | 355 |
| 83-32-9 | Acenaphthene | | 1080 | ug/kg | 10.7 | 35.5 |
| 208-96-8 | Acenaphthylene | | 1150 | ug/kg | 10.7 | 35.5 |
| 62-53-3 | Aniline | | 1090 | ug/kg | 107 | 355 |
| 120-12-7 | Anthracene | | 1190 | ug/kg | 10.7 | 35.5 |
| 56-55-3 | Benzo(a)anthracene | | 1260 | ug/kg | 10.7 | 35.5 |
| 50-32-8 | Benzo(a)pyrene | | 1300 | ug/kg | 10.7 | 35.5 |
| 205-99-2 | Benzo(b)fluoranthene | | 1310 | ug/kg | 10.7 | 35.5 |
| 191-24-2 | Benzo(ghi)perylene | | 947 | ug/kg | 10.7 | 35.5 |
| 207-08-9 | Benzo(k)fluoranthene | | 1380 | ug/kg | 10.7 | 35.5 |
| 65-85-0 | Benzoic acid | | 2130 | ug/kg | 178 | 710 |
| 100-51-6 | Benzyl alcohol | | 1110 | ug/kg | 107 | 355 |
| 85-68-7 | Butylbenzylphthalate | | 1240 | ug/kg | 107 | 355 |
| 218-01-9 | Chrysene | | 1310 | ug/kg | 10.7 | 35.5 |
| 84-74-2 | Di-n-butylphthalate | | 1220 | ug/kg | 107 | 355 |
| 117-84-0 | Di-n-octylphthalate | | 1360 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3718** | **Date Collected:** | **07/09/2014 09:04** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203128642** | **Date Received:** | **07/11/2014 09:00** | **%Moisture:** | **6.3** |
| **Client Sample:** | **QC for batch 1403911** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84187MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1403912** | **Inst:** | **MSD8.I** | **Dilution:** | **1** |
| **Run Date:** | **07/18/2014 17:31** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/17/2014 10:55** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071814.B\s8G1820.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1200 | ug/kg | 10.7 | 35.5 |
| 132-64-9 | Dibenzofuran | | 1120 | ug/kg | 107 | 355 |
| 84-66-2 | Diethylphthalate | | 1170 | ug/kg | 107 | 355 |
| 131-11-3 | Dimethylphthalate | | 1190 | ug/kg | 107 | 355 |
| 122-39-4 | Diphenylamine | | 1230 | ug/kg | 107 | 355 |
| 206-44-0 | Fluoranthene | | 1130 | ug/kg | 10.7 | 35.5 |
| 86-73-7 | Fluorene | | 1140 | ug/kg | 10.7 | 35.5 |
| 118-74-1 | Hexachlorobenzene | | 1450 | ug/kg | 107 | 355 |
| 87-68-3 | Hexachlorobutadiene | | 1050 | ug/kg | 107 | 355 |
| 77-47-4 | Hexachlorocyclopentadiene | | 473 | ug/kg | 107 | 355 |
| 67-72-1 | Hexachloroethane | | 962 | ug/kg | 107 | 355 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1010 | ug/kg | 10.7 | 35.5 |
| 78-59-1 | Isophorone | | 1260 | ug/kg | 107 | 355 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1020 | ug/kg | 107 | 355 |
| 621-64-7 | N-Nitrosodipropylamine | | 1170 | ug/kg | 107 | 355 |
| 91-20-3 | Naphthalene | | 1070 | ug/kg | 10.7 | 35.5 |
| 98-95-3 | Nitrobenzene | | 1200 | ug/kg | 107 | 355 |
| 87-86-5 | Pentachlorophenol | | 1110 | ug/kg | 107 | 355 |
| 85-01-8 | Phenanthrene | | 1150 | ug/kg | 10.7 | 35.5 |
| 108-95-2 | Phenol | | 1210 | ug/kg | 107 | 355 |
| 129-00-0 | Pyrene | | 1150 | ug/kg | 10.7 | 35.5 |
| 110-86-1 | Pyridine | | 856 | ug/kg | 107 | 355 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 1060 | ug/kg | 107 | 355 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1120 | ug/kg | 107 | 355 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1080 | ug/kg | 107 | 355 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1240 | ug/kg | 107 | 355 |
| 65794-96-9 | m,p-Cresols | | 1430 | ug/kg | 107 | 355 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 1130 | ug/kg | 107 | 355 |
| 95-48-7 | o-Cresol | | 1240 | ug/kg | 107 | 355 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1160 | ug/kg | 117 | 355 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1430 | ug/kg | 107 | 355 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 22-JUL-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| SEMIVOA GC/MS | SW846 3541/8270D | Solid | ARSL (LANL) |
| **Batch ID:** | **Sample Numbers:** | | |
| 1403912 | See Below | | |

**Potentially affected work order(s)(SDG): 352460(2014-3718),352465(2014-3719)**

**Application Issues:**

Failed RPD for MS/MSD, or PS/PSD

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Multiple RPD values between the 1203128641MS and 1203128642MSD were not within the 0-30% limits. Please see the QC Summary/Spike Recovery Report for the specific analytes and associated RPD values. | 1. These RPD failures are attributed to the large difference in the recovery values between analyte pairs in the MS and MSD. The MS and MSD passed recoveries for all the analytes. The LCS passed recoveries for all the analytes. The data are reported. |

**Originator's Name:**

Richard Bomar 23-JUL-14

**Data Validator/Group Leader:**

Herbert Maier 23-JUL-14

# Perchlorates by LCMSMS Analysis

# Case Narrative

**Perchlorate by LC-MS/MS**
**ARS International, LLC (ARSL)**
**SDG 2014-3718**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography-Mass Spectrometry/Mass Spectrometry (LC-MS/MS) by EPA Method 6850 Modified (6850M)** |
| Analytical Method: | SW846 6850 Modified |
| Prep Method: | SW846 6850 Modified |
| Analytical Batch Number: | 1402719 |
| Prep Batch Number: | 1402718 |

## Sample Analysis

| Sample ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |
| 1203125790 | Interference Check Sample (ICS) |
| 1203125786 | Method Blank (MB) |
| 1203125787 | Laboratory Control Sample (LCS) |
| 1203125788 | 352460002(RE57-14-84134) Matrix Spike (MS) |
| 1203125789 | 352460002(RE57-14-84134) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP).

The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 11.

## Calibration Information

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

**ICV Requirements**
The initial calibration verification standard (ICV) met the acceptance criteria.

**CCB Requirements**
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

**CCV Requirements**
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

**Low Level Standard (CRI) Requirements**
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

## Quality Control (QC) Information

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Interference Check Sample (ICS)**
The ICS spike recoveries met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Client sample 352460002 (RE57-14-84134) was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
The RPDs between the MS and MSD met the acceptance limits.

**Retention Time Standard Area Acceptance**
The retention time standard areas were within the required acceptance criteria for all samples and QC.

**Retention Time**
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard.

The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used.

In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

## Technical Information

**Holding Time Specifications**
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-extractions or re-analyses were not required in this SDG.

## Miscellaneous Information

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents.

A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

**Method Comments**
The samples in this SDG were not originally analyzed using EPA Method 314.0.

**Additional Comments**
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred.

Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

**Perchlorate Isotope Ratio**
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples.

Please see the isotope ratio criteria in the Miscellaneous Section.

## System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for Perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1 and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for Perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package.

Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

## Chromatographic Columns

Chromatographic separation of Perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

## Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3718  GEL Work Order: 352460

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Michael A. Penny Jr.  **Name: Michael Penny**

**Date: 17 JUL 2014**  **Title: Group Leader**

# Sample Data Summary

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84119

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460001

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 96.3

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .519 | 2.08 | 5.39 | ug/kg | | 1 | 14-JUL-14 18:30 | per0714042a |
| | Perchlorate Isotope Ratio | | | 3.06 | | | 1 | 14-JUL-14 18:30 | per0714042a |
| 14797-73-0 | Perchlorate-101 | .519 | 2.08 | 5.55 | ug/kg | | 1 | 14-JUL-14 18:30 | per0714042a |
| | Perchlorate-O(18) | | | 4.95 | ug/kg | | 1 | 14-JUL-14 18:30 | per0714042a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84134

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460002

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .535 | 2.14 | 5.16 | ug/kg | | 1 | 14-JUL-14 18:39 | per0714043a |
| | Perchlorate Isotope Ratio | | | 3.11 | | | 1 | 14-JUL-14 18:39 | per0714043a |
| 14797-73-0 | Perchlorate-101 | .535 | 2.14 | 5.22 | ug/kg | | 1 | 14-JUL-14 18:39 | per0714043a |
| | Perchlorate-O(18) | | | 5.13 | ug/kg | | 1 | 14-JUL-14 18:39 | per0714043a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84145

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460003

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 96.6

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .513 | 2.05 | 4.80 | ug/kg | | 1 | 14-JUL-14 19:33 | per0714049a |
| | Perchlorate Isotope Ratio | | | 3.11 | | | 1 | 14-JUL-14 19:33 | per0714049a |
| 14797-73-0 | Perchlorate-101 | .513 | 2.05 | 4.86 | ug/kg | | 1 | 14-JUL-14 19:33 | per0714049a |
| | Perchlorate-O(18) | | | 4.80 | ug/kg | | 1 | 14-JUL-14 19:33 | per0714049a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84156

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460004

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 94.9

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .524 | 2.1 | 1.07 | ug/kg | J | 1 | 14-JUL-14 19:42 | per0714050a |
| | Perchlorate Isotope Ratio | | | 3.2 | | | 1 | 14-JUL-14 19:42 | per0714050a |
| 14797-73-0 | Perchlorate-101 | .524 | 2.1 | 1.05 | ug/kg | J | 1 | 14-JUL-14 19:42 | per0714050a |
| | Perchlorate-O(18) | | | 4.85 | ug/kg | | 1 | 14-JUL-14 19:42 | per0714050a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84135

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460005

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 90

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .558 | 2.23 | 0.841 | ug/kg | J | 1 | 14-JUL-14 19:51 | per0714051a |
| | Perchlorate Isotope Ratio | | | 3.1 | | | 1 | 14-JUL-14 19:51 | per0714051a |
| 14797-73-0 | Perchlorate-101 | .558 | 2.23 | 0.854 | ug/kg | J | 1 | 14-JUL-14 19:51 | per0714051a |
| | Perchlorate-O(18) | | | 5.16 | ug/kg | | 1 | 14-JUL-14 19:51 | per0714051a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84146

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460006

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 95.3

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .522 | 2.09 | 2.09 | ug/kg | U | 1 | 14-JUL-14 20:00 | per0714052a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 20:00 | per0714052a |
| 14797-73-0 | Perchlorate-101 | .522 | 2.09 | 2.09 | ug/kg | U | 1 | 14-JUL-14 20:00 | per0714052a |
| | Perchlorate-O(18) | | | 4.92 | ug/kg | | 1 | 14-JUL-14 20:00 | per0714052a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84136

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460009

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92.5

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .538 | 2.15 | 0.786 | ug/kg | J | 1 | 14-JUL-14 20:09 | per0714053a |
| | Perchlorate Isotope Ratio | | | 2.99 | | | 1 | 14-JUL-14 20:09 | per0714053a |
| 14797-73-0 | Perchlorate-101 | .538 | 2.15 | 0.830 | ug/kg | J | 1 | 14-JUL-14 20:09 | per0714053a |
| | Perchlorate-O(18) | | | 5.05 | ug/kg | | 1 | 14-JUL-14 20:09 | per0714053a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84147

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460010

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 94.7

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .525 | 2.1 | 2.10 | ug/kg | U | 1 | 14-JUL-14 20:17 | per0714054a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 20:17 | per0714054a |
| 14797-73-0 | Perchlorate-101 | .525 | 2.1 | 2.10 | ug/kg | U | 1 | 14-JUL-14 20:17 | per0714054a |
| | Perchlorate-O(18) | | | 4.99 | ug/kg | | 1 | 14-JUL-14 20:17 | per0714054a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84158

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460011

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.2

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .534 | 2.13 | 2.13 | ug/kg | U | 1 | 14-JUL-14 20:26 | per0714055a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 20:26 | per0714055a |
| 14797-73-0 | Perchlorate-101 | .534 | 2.13 | 2.13 | ug/kg | U | 1 | 14-JUL-14 20:26 | per0714055a |
| | Perchlorate-O(18) | | | 5.02 | ug/kg | | 1 | 14-JUL-14 20:26 | per0714055a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84137

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460012

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 96.2

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .515 | 2.06 | 2.06 | ug/kg | U | 1 | 14-JUL-14 20:35 | per0714056a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 20:35 | per0714056a |
| 14797-73-0 | Perchlorate-101 | .515 | 2.06 | 2.06 | ug/kg | U | 1 | 14-JUL-14 20:35 | per0714056a |
| | Perchlorate-O(18) | | | 4.83 | ug/kg | | 1 | 14-JUL-14 20:35 | per0714056a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84148

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 352460013

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.3

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .536 | 2.14 | 2.14 | ug/kg | U | 1 | 14-JUL-14 20:44 | per0714057a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 20:44 | per0714057a |
| 14797-73-0 | Perchlorate-101 | .536 | 2.14 | 2.14 | ug/kg | U | 1 | 14-JUL-14 20:44 | per0714057a |
| | Perchlorate-O(18) | | | 5.00 | ug/kg | | 1 | 14-JUL-14 20:44 | per0714057a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Quality Control Summary

## Perchlorate Laboratory Control Sample

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No. (SDG):** 2014-3718

**Extract Batch Code:** 1402718

**Date Filtered:** 14-JUL-14

**Matrix:** SOIL

**Sample ID:** 1203125787

| Analyte^ | True | Found | Units | %Rec | Q | Control Limits |
|---|---|---|---|---|---|---|
| Perchlorate | 1.98 | 1.86 | ug/kg | 93.7 | | 70 - 130 |
| Perchlorate Isotope Ratio | | 3.14 | | | | - |
| Perchlorate-101 | 1.98 | 1.86 | ug/kg | 94.2 | | 70 - 130 |
| Perchlorate-O(18) | | 4.87 | ug/kg | | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

## Perchlorate Spike/Spike Duplicate Summary

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No (SDG):** 2014-3718

**Extract Batch Code:** 1402718

**Date Extracted:** 14-JUL-14

**GEL MS/PS ID:** 1203125788

**Client ID:** RE57-14-84134

**GEL MSD/PSD ID:** 1203125789

**QC Type:** MS

| Compound^ | Spike Added | Sample Conc | Units | MS Conc | MS Rec # | MSD Conc | MSD Rec # | RPD # | RPD Limit | Recovery Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 2.12 | 5.16 | ug/kg | 7.08 | 90.8 | 7.35 | 104 | 3.75 | 30 | 75 - 125 |
| Perchlorate Isotope Ratio | 0 | 3.11 | | 3.07 | | 3.15 | | 2.55 | | - |
| Perchlorate-101 | 2.12 | 5.22 | ug/kg | 7.27 | 96.7 | 7.35 | 101 | 1.19 | 30 | 75 - 125 |
| Perchlorate-O(18) | 0 | 5.13 | ug/kg | 5.07 | | 5.16 | | 1.74 | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

# Quality Control Data

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
MB

**Date Received:** 14-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 1203125786

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .493 | 1.97 | 1.97 | ug/kg | U | 1 | 14-JUL-14 18:03 | per0714039a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 18:03 | per0714039a |
| 14797-73-0 | Perchlorate-101 | .493 | 1.97 | 1.97 | ug/kg | U | 1 | 14-JUL-14 18:03 | per0714039a |
| | Perchlorate-O(18) | | | 4.79 | ug/kg | | 1 | 14-JUL-14 18:03 | per0714039a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
LCS

**Date Received:** 14-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 1203125787

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .495 | 1.98 | 1.86 | ug/kg | J | 1 | 14-JUL-14 18:12 | per0714040a |
| | Perchlorate Isotope Ratio | | | 3.14 | | | 1 | 14-JUL-14 18:12 | per0714040a |
| 14797-73-0 | Perchlorate-101 | .495 | 1.98 | 1.86 | ug/kg | J | 1 | 14-JUL-14 18:12 | per0714040a |
| | Perchlorate-O(18) | | | 4.87 | ug/kg | | 1 | 14-JUL-14 18:12 | per0714040a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
ICS

**Date Received:**

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 1203125790

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .5 | 2 | 1.85 | ug/kg | J | 1 | 14-JUL-14 18:21 | per0714041a |
| | Perchlorate Isotope Ratio | | | 3.13 | | | 1 | 14-JUL-14 18:21 | per0714041a |
| 14797-73-0 | Perchlorate-101 | .5 | 2 | 1.87 | ug/kg | J | 1 | 14-JUL-14 18:21 | per0714041a |
| | Perchlorate-O(18) | | | 4.83 | ug/kg | | 1 | 14-JUL-14 18:21 | per0714041a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84134MS

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 1203125788

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .529 | 2.12 | 7.08 | ug/kg | | 1 | 14-JUL-14 18:48 | per0714044a |
| | Perchlorate Isotope Ratio | | | 3.07 | | | 1 | 14-JUL-14 18:48 | per0714044a |
| 14797-73-0 | Perchlorate-101 | .529 | 2.12 | 7.27 | ug/kg | | 1 | 14-JUL-14 18:48 | per0714044a |
| | Perchlorate-O(18) | | | 5.07 | ug/kg | | 1 | 14-JUL-14 18:48 | per0714044a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402718

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84134MSD

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3718

**GEL Sample ID:** 1203125789

**Date Filtered:** 14-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.1

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .529 | 2.12 | 7.35 | ug/kg | | 1 | 14-JUL-14 18:57 | per0714045a |
| | Perchlorate Isotope Ratio | | | 3.15 | | | 1 | 14-JUL-14 18:57 | per0714045a |
| 14797-73-0 | Perchlorate-101 | .529 | 2.12 | 7.35 | ug/kg | | 1 | 14-JUL-14 18:57 | per0714045a |
| | Perchlorate-O(18) | | | 5.16 | ug/kg | | 1 | 14-JUL-14 18:57 | per0714045a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Metals Analysis

# Case Narrative

**Sample Analysis**

| Sample ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460007 | RE57-14-84124 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |
| 1203126083 | Method Blank (MB) **ICP** |
| 1203127124 | Method Blank (MB) **ICP** |
| 1203126084 | Laboratory Control Sample (LCS) |
| 1203127125 | Laboratory Control Sample (LCS) |
| 1203126081 | 352431006(CAMO-14-81584L) Serial Dilution (SD) |
| 1203127128 | 352465001(RE57-14-84187L) Serial Dilution (SD) |
| 1203126080 | 352431006(CAMO-14-81584D) Sample Duplicate (DUP) |
| 1203127126 | 352465001(RE57-14-84187D) Sample Duplicate (DUP) |
| 1203126082 | 352431006(CAMO-14-81584S) Matrix Spike (MS) |
| 1203127127 | 352465001(RE57-14-84187S) Matrix Spike (MS) |
| 1203143922 | 352465001(RE57-14-84187PS) Post Spike (PS) |
| 1203126094 | Method Blank (MB) **ICP-MS** |
| 1203126211 | Method Blank (MB) **ICP-MS** |
| 1203126095 | Laboratory Control Sample (LCS) |

| | |
|---|---|
| 1203126212 | Laboratory Control Sample (LCS) |
| 1203126098 | 352465001(RE57-14-84187L) Serial Dilution (SD) |
| 1203126215 | 352519002(CAMO-14-84010L) Serial Dilution (SD) |
| 1203126096 | 352465001(RE57-14-84187D) Sample Duplicate (DUP) |
| 1203126213 | 352519002(CAMO-14-84010D) Sample Duplicate (DUP) |
| 1203126097 | 352465001(RE57-14-84187S) Matrix Spike (MS) |
| 1203126214 | 352519002(CAMO-14-84010S) Matrix Spike (MS) |
| 1203129977 | Method Blank (MB) **CVAA** |
| 1203132299 | Method Blank (MB) **CVAA** |
| 1203129978 | Laboratory Control Sample (LCS) |
| 1203132300 | Laboratory Control Sample (LCS) |
| 1203132303 | 352465001(RE57-14-84187L) Serial Dilution (SD) |
| 1203129981 | 352465003(RE57-14-84197L) Serial Dilution (SD) |
| 1203132301 | 352465001(RE57-14-84187D) Sample Duplicate (DUP) |
| 1203129979 | 352465003(RE57-14-84197D) Sample Duplicate (DUP) |
| 1203132302 | 352465001(RE57-14-84187S) Matrix Spike (MS) |
| 1203129980 | 352465003(RE57-14-84197S) Matrix Spike (MS) |

Samples 352460 001, 002, 003, 004, 005, 006, 009, 010, 011, 012 and 013 in this SDG were analyzed on a "dry weight" basis. Samples 352460 007 in this SDG were analyzed on an "as received" basis.

**Method/Analysis Information**

| | |
|---|---|
| **Analytical Batch:** | 1402847, 1403245, 1402860, 1402900, 1404427 and 1405302 |
| **Prep Batch :** | 1402846, 1403244, 1402858, 1402898, 1404425 and 1405301 |
| **Standard Operating Procedures:** | GL-MA-E-013 REV# 22, GL-MA-E-006 REV# 11, GL-MA-E-009 REV# 24, GL-MA-E-014 REV# 25 and GL-MA-E-010 REV# 28 |
| **Analytical Method:** | SW846 3005A/6010C, SW846 3050B/6010C, SW846 3050B/6020A, SW846 3005A/6020A, EPA 245.1/245.2 and SW846 7471A |
| **Prep Method :** | SW846 3005A, SW846 3050B, EPA 245.1/245.2 Prep and SW846 7471A Prep |

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

## System Configuration

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with an ESI SC-FAST introduction, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 0.4L/min, argon gas flows of 13 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis-ICP was performed on a PE 7300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with an ESI SC-FAST introduction, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 0.4L/min, argon gas flows of 13 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

The Metals analysis - ICPMS was performed on a Perkin Elmer ELAN 9000 inductively coupled plasma mass spectrometer (ICP-MS). The instrument is equipped with a cross-flow nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1400W power and combined argon pressures of 360+/-7 kPa for the plasma and auxiliary gases, and 0.85 L/min carrier gas flow, and an initial lens voltage of 5.2.

The Metals analysis-Mercury was performed on a Perkin-Elmer Flow Injection Mercury System (FIMS-100) automated mercury analyzer. The instrument consists of a cold vapor atomic absorption spectrometer set to detect mercury at a wavelength of 253.7 nm. Sample introduction through the flow injection system is performed via a peristaltic pump at 9 mL/min and nitrogen carrier gas rate of 80 mL/min.

The Metals analysis - ICPMS was performed on a PerkinElmer NexION 300X ICPMS. The instrument is equipped with a ESI PFA-ST nebulizer, quadrupole mass spectrometer, and dual mode electron multiplier detector. Internal standards of scandium, germanium, indium, tantalum, and/or lutetium were utilized to cover the mass spectrum. Operating conditions are set at 1600W power, 16 L/m for the plasma, and 1.2 L/m auxiliary gases, and 1.12 L/min carrier gas flow.

## Calibration Information

**Instrument Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**CRDL/PQL Requirements**
The PQL standard recoveries for SW846 6010C met the control limits except for magnesium in file 072214A-3 at 14:40 and 15:58. Magnesium recovered high in the initial and closing PQL standards; however the analyte concentration in the associated client sample was greater than two times the PQL. Therefore, the data were not adversely affected. ICP. The PQL standard recoveries for SW846 6010C met the control limits except for lead and antimony in file 073114-1 at 11:29 and 16:51, respectively. Lead recovered high in the initial PQL standard and antimony recovered high in the closing PQL standard. The analyte concentrations in the associated client samples were less than the MDL for antimony and greater than two times the PQL for lead, therefore the data were not adversely affected. ICP.

**ICSA/ICSAB Statement**
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blanks (CCB) Requirements**
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

## Quality Control (QC) Information

**Method Blank (MB) Statement**
The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**
The following samples were selected as the quality control (QC) samples for this SDG: 352431006 (CAMO-14-81584)-ICP, 352465001 (RE57-14-84187)-ICP, ICP-MS and CVAA, 352519002 (CAMO-14-84010)-ICP-MS and 352465003 (RE57-14-84197)-CVAA.

**Matrix Spike (MS) Recovery Statement**
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. Not all the applicable analyte recoveries were within the acceptance criteria. Recoveries for chromium, potassium, and sodium were not within the acceptance limits in sample 1203127127 (RE57-14-84187)-ICP.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. Not all the applicable analyte RPD values met the acceptance criteria. The RPD value for calcium was not within the acceptance limits in sample 1203127126 (RE57-14-84187)-ICP.

**Serial Dilution % Difference Statement**
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the established acceptance percent difference criteria.

**Post Spike (PS) Recovery Statement**
The percent recoveries (%R) obtained from the PS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. Not all the applicable analyte recoveries in the PS met the recommended quality control acceptance criteria. Recoveries for potassium and sodium in sample 1203143922 (RE57-14-84187)-ICP were not within the acceptance limits and verifies the presence of matrix interferences.

## Technical Information

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Sample Dilutions**
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times. ICP-MS. Samples 1203132300 (LCS), 352460012 (RE57-14-84137) and 352460013 (RE57-14-84148)-CVAA were diluted to

ensure that the analyte concentrations were within the linear calibration range of the instrument.

**Preparation Information**
The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. Data exception reports were included behind the Case Narrative or in the Miscellaneous Data section of this data package. The following DER was generated for this SDG: 1321939. ICP.

**Additional Comments**
Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:** Pat Steele **Date:** 08/14/2014

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3718  GEL Work Order: 352460

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

J  Value is estimated

N  Metals--The Matrix spike sample recovery is not within specified control limits

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by Pat Steele 08/14/2014

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460001 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84119 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 96.3

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4520000 | ug/kg | | 6500 | 19100 | 19100 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 956 | ug/kg | U | 315 | 956 | 956 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 3210 | ug/kg | | 202 | 1010 | 1010 | 2 | MS | BAJ | 08/10/14 08:08 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 324000 | ug/kg | | 95.6 | 478 | 478 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 562 | ug/kg | | 20.2 | 101 | 101 | 2 | MS | BAJ | 08/10/14 08:08 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 97.6 | ug/kg | J | 95.6 | 478 | 478 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 2030000 | ug/kg | | 7650 | 23900 | 23900 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 3530 | ug/kg | | 143 | 478 | 478 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 1910 | ug/kg | | 143 | 478 | 478 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 5640 | ug/kg | | 287 | 956 | 956 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 8810000 | ug/kg | | 7650 | 23900 | 23900 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 17200 | ug/kg | | 315 | 956 | 956 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 667000 | ug/kg | | 8130 | 28700 | 28700 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 385000 | ug/kg | | 191 | 956 | 956 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 26 | ug/kg | | 4.12 | 12.3 | 12.3 | 1 | AV | MTM1 | 07/23/14 10:32 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 3520 | ug/kg | | 101 | 404 | 404 | 2 | MS | BAJ | 08/10/14 08:08 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 572000 | ug/kg | | 6120 | 23900 | 23900 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1010 | ug/kg | U | 333 | 1010 | 1010 | 2 | MS | BAJ | 08/10/14 08:08 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 164 | ug/kg | J | 95.6 | 478 | 478 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 137000 | ug/kg | | 6690 | 23900 | 23900 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 404 | ug/kg | U | 60.6 | 404 | 404 | 2 | MS | BAJ | 08/10/14 08:08 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 7850 | ug/kg | | 95.6 | 478 | 478 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 47200 | ug/kg | | 382 | 956 | 956 | 1 | P | HSC | 07/31/14 16:00 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.514 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.543 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.506 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460002 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84134 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.1

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3560000 | ug/kg | | 6630 | 19500 | 19500 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 518 | ug/kg | J | 322 | 975 | 975 | 1 | P | HSC | 08/07/14 14:02 | 080714−2 | 1403245 |
| 7440−38−2 | Arsenic | 13800 | ug/kg | | 209 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 08:12 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 1030000 | ug/kg | | 97.5 | 488 | 488 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 580 | ug/kg | | 20.9 | 105 | 105 | 2 | MS | BAJ | 08/10/14 08:12 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 186 | ug/kg | J | 97.5 | 488 | 488 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 5160000 | ug/kg | | 7800 | 24400 | 24400 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 4850 | ug/kg | | 146 | 488 | 488 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 2230 | ug/kg | | 146 | 488 | 488 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 11300 | ug/kg | | 293 | 975 | 975 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 9240000 | ug/kg | | 7800 | 24400 | 24400 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 30500 | ug/kg | | 322 | 975 | 975 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 907000 | ug/kg | | 8290 | 29300 | 29300 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 357000 | ug/kg | | 195 | 975 | 975 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 54 | ug/kg | | 4.02 | 12 | 12 | 1 | AV | MTM1 | 07/23/14 10:34 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 4510 | ug/kg | | 105 | 418 | 418 | 2 | MS | BAJ | 08/10/14 08:12 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 683000 | ug/kg | | 6240 | 24400 | 24400 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1050 | ug/kg | U | 345 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 08:12 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 162 | ug/kg | J | 97.5 | 488 | 488 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 128000 | ug/kg | | 6830 | 24400 | 24400 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 63.3 | ug/kg | J | 62.7 | 418 | 418 | 2 | MS | BAJ | 08/10/14 08:12 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 9860 | ug/kg | | 97.5 | 488 | 488 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 77500 | ug/kg | | 390 | 975 | 975 | 1 | P | HSC | 07/31/14 16:04 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.514 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.551 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.537 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460003 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84145 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 96.6

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4470000 | ug/kg | | 6370 | 18700 | 18700 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 524 | ug/kg | J | 309 | 936 | 936 | 1 | P | HSC | 08/07/14 14:06 | 080714−2 | 1403245 |
| 7440−38−2 | Arsenic | 3000 | ug/kg | | 205 | 1020 | 1020 | 2 | MS | BAJ | 08/10/14 08:16 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 325000 | ug/kg | | 93.6 | 468 | 468 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 504 | ug/kg | | 20.5 | 102 | 102 | 2 | MS | BAJ | 08/10/14 08:16 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 96.4 | ug/kg | J | 93.6 | 468 | 468 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 2030000 | ug/kg | | 7490 | 23400 | 23400 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 3800 | ug/kg | | 140 | 468 | 468 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 2930 | ug/kg | | 140 | 468 | 468 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 5320 | ug/kg | | 281 | 936 | 936 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 8880000 | ug/kg | | 7490 | 23400 | 23400 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 18100 | ug/kg | | 309 | 936 | 936 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 707000 | ug/kg | | 7960 | 28100 | 28100 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 483000 | ug/kg | | 187 | 936 | 936 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 17.1 | ug/kg | | 4.14 | 12.4 | 12.4 | 1 | AV | MTM1 | 07/23/14 10:35 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 3470 | ug/kg | | 102 | 409 | 409 | 2 | MS | BAJ | 08/10/14 08:16 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 567000 | ug/kg | | 5990 | 23400 | 23400 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1020 | ug/kg | U | 338 | 1020 | 1020 | 2 | MS | BAJ | 08/10/14 08:16 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 130 | ug/kg | J | 93.6 | 468 | 468 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 150000 | ug/kg | | 6550 | 23400 | 23400 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 409 | ug/kg | U | 61.4 | 409 | 409 | 2 | MS | BAJ | 08/10/14 08:16 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 8310 | ug/kg | | 93.6 | 468 | 468 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 47800 | ug/kg | | 375 | 936 | 936 | 1 | P | HSC | 07/31/14 16:07 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.506 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.553 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.503 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460004 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84156 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 94.9

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5190000 | ug/kg | | 6810 | 20000 | 20000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 1000 | ug/kg | U | 330 | 1000 | 1000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 2470 | ug/kg | | 209 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 08:21 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 147000 | ug/kg | | 100 | 501 | 501 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 589 | ug/kg | | 20.9 | 105 | 105 | 2 | MS | BAJ | 08/10/14 08:21 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 501 | ug/kg | U | 100 | 501 | 501 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 1500000 | ug/kg | | 8010 | 25000 | 25000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 2920 | ug/kg | | 150 | 501 | 501 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 1420 | ug/kg | | 150 | 501 | 501 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 4300 | ug/kg | | 300 | 1000 | 1000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 8670000 | ug/kg | | 8010 | 25000 | 25000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 14000 | ug/kg | | 330 | 1000 | 1000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 472000 | ug/kg | | 8510 | 30000 | 30000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 350000 | ug/kg | | 200 | 1000 | 1000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 18.5 | ug/kg | | 3.73 | 11.1 | 11.1 | 1 | AV | MTM1 | 07/23/14 10:37 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 3060 | ug/kg | | 105 | 419 | 419 | 2 | MS | BAJ | 08/10/14 08:21 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 534000 | ug/kg | | 6410 | 25000 | 25000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1050 | ug/kg | U | 346 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 08:21 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 501 | ug/kg | U | 100 | 501 | 501 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 174000 | ug/kg | | 7010 | 25000 | 25000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 419 | ug/kg | U | 62.8 | 419 | 419 | 2 | MS | BAJ | 08/10/14 08:21 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 6280 | ug/kg | | 100 | 501 | 501 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 52200 | ug/kg | | 401 | 1000 | 1000 | 1 | P | HSC | 07/31/14 16:11 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.503 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.526 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.568 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460005 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84135 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 90

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5960000 | ug/kg | | 7180 | 21100 | 21100 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 1060 | ug/kg | U | 349 | 1060 | 1060 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 2400 | ug/kg | | 222 | 1110 | 1110 | 2 | MS | BAJ | 08/10/14 08:25 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 152000 | ug/kg | | 106 | 528 | 528 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 797 | ug/kg | | 22.2 | 111 | 111 | 2 | MS | BAJ | 08/10/14 08:25 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 528 | ug/kg | U | 106 | 528 | 528 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 1510000 | ug/kg | | 8450 | 26400 | 26400 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 3910 | ug/kg | | 158 | 528 | 528 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 2460 | ug/kg | | 158 | 528 | 528 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 4220 | ug/kg | | 317 | 1060 | 1060 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 9920000 | ug/kg | | 8450 | 26400 | 26400 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 15700 | ug/kg | | 349 | 1060 | 1060 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 740000 | ug/kg | | 8980 | 31700 | 31700 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 578000 | ug/kg | | 211 | 1060 | 1060 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 17.3 | ug/kg | | 4.48 | 13.4 | 13.4 | 1 | AV | MTM1 | 07/23/14 10:42 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 4060 | ug/kg | | 111 | 444 | 444 | 2 | MS | BAJ | 08/10/14 08:25 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 843000 | ug/kg | | 6760 | 26400 | 26400 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1110 | ug/kg | U | 366 | 1110 | 1110 | 2 | MS | BAJ | 08/10/14 08:25 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 255 | ug/kg | J | 106 | 528 | 528 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 124000 | ug/kg | | 7390 | 26400 | 26400 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 444 | ug/kg | U | 66.5 | 444 | 444 | 2 | MS | BAJ | 08/10/14 08:25 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 8830 | ug/kg | | 106 | 528 | 528 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 52900 | ug/kg | | 423 | 1060 | 1060 | 1 | P | HSC | 07/31/14 16:20 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.503 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.528 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.5 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460006 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84146 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SED **%SOLIDS:** 95.3

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4480000 | ug/kg | | 6710 | 19700 | 19700 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 986 | ug/kg | U | 326 | 986 | 986 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 1320 | ug/kg | | 203 | 1020 | 1020 | 2 | MS | BAJ | 08/10/14 08:29 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 62300 | ug/kg | | 98.6 | 493 | 493 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 462 | ug/kg | | 20.3 | 102 | 102 | 2 | MS | BAJ | 08/10/14 08:29 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 493 | ug/kg | U | 98.6 | 493 | 493 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 1290000 | ug/kg | | 7890 | 24700 | 24700 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 3740 | ug/kg | | 148 | 493 | 493 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 1800 | ug/kg | | 148 | 493 | 493 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 2740 | ug/kg | | 296 | 986 | 986 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 9510000 | ug/kg | | 7890 | 24700 | 24700 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 8950 | ug/kg | | 326 | 986 | 986 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 516000 | ug/kg | | 8380 | 29600 | 29600 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 444000 | ug/kg | | 197 | 986 | 986 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 13.3 | ug/kg | | 3.62 | 10.8 | 10.8 | 1 | AV | MTM1 | 07/23/14 10:44 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 3110 | ug/kg | | 102 | 406 | 406 | 2 | MS | BAJ | 08/10/14 08:29 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 612000 | ug/kg | | 6310 | 24700 | 24700 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1020 | ug/kg | U | 335 | 1020 | 1020 | 2 | MS | BAJ | 08/10/14 08:29 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 206 | ug/kg | J | 98.6 | 493 | 493 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 132000 | ug/kg | | 6910 | 24700 | 24700 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 406 | ug/kg | U | 60.9 | 406 | 406 | 2 | MS | BAJ | 08/10/14 08:29 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 8330 | ug/kg | | 98.6 | 493 | 493 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 40700 | ug/kg | | 395 | 986 | 986 | 1 | P | HSC | 07/31/14 16:24 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.517 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.532 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.582 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** EPA

**SAMPLE ID:** 352460007 **BASIS:** As Received **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84124 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** W **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7439−97−6 | Mercury | 0.20 | ug/L | U | 0.067 | 0.2 | 0.2 | 1 | AV | MTM1 | 07/21/14 09:44 | 072114W1−10 | 1404427 |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460007 **BASIS:** As Received **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84124 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** W **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 246 | ug/L | | 68 | 200 | 200 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7440−36−0 | Antimony | 3 | ug/L | U | 1 | 3 | 3 | 1 | MS | BAJ | 08/11/14 16:30 | 140811−6 | 1402900 |
| 7440−38−2 | Arsenic | 1.9 | ug/L | J | 1.7 | 5 | 5 | 1 | MS | BAJ | 08/10/14 21:05 | 140810−8 | 1402900 |
| 7440−39−3 | Barium | 34.4 | ug/L | | 1 | 5 | 5 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7440−41−7 | Beryllium | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7440−43−9 | Cadmium | 1 | ug/L | U | 0.11 | 1 | 1 | 1 | MS | BAJ | 08/10/14 21:05 | 140810−8 | 1402900 |
| 7440−70−2 | Calcium | 11300 | ug/L | | 50 | 200 | 200 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7440−47−3 | Chromium | 6.23 | ug/L | J | 2 | 10 | 10 | 1 | MS | BAJ | 08/10/14 21:05 | 140810−8 | 1402900 |
| 7440−48−4 | Cobalt | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7440−50−8 | Copper | 49.4 | ug/L | | 3 | 10 | 10 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7439−89−6 | Iron | 166 | ug/L | | 30 | 100 | 100 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7439−92−1 | Lead | 2 | ug/L | U | 0.5 | 2 | 2 | 1 | MS | BAJ | 08/11/14 16:30 | 140811−6 | 1402900 |
| 7439−95−4 | Magnesium | 3520 | ug/L | | 110 | 300 | 300 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7439−96−5 | Manganese | 9.35 | ug/L | J | 2 | 10 | 10 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7440−02−0 | Nickel | 1.63 | ug/L | J | 0.5 | 2 | 2 | 1 | MS | BAJ | 08/10/14 21:05 | 140810−8 | 1402900 |
| 7440−09−7 | Potassium | 2150 | ug/L | | 50 | 150 | 150 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7782−49−2 | Selenium | 5 | ug/L | U | 1.5 | 5 | 5 | 1 | MS | BAJ | 08/10/14 21:05 | 140810−8 | 1402900 |
| 7440−22−4 | Silver | 1 | ug/L | U | 0.2 | 1 | 1 | 1 | MS | BAJ | 08/10/14 21:05 | 140810−8 | 1402900 |
| 7440−23−5 | Sodium | 12700 | ug/L | | 100 | 300 | 300 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7440−28−0 | Thallium | 2 | ug/L | U | 0.45 | 2 | 2 | 1 | MS | BAJ | 08/11/14 16:30 | 140811−6 | 1402900 |
| 7440−62−2 | Vanadium | 8.26 | ug/L | | 1 | 5 | 5 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |
| 7440−66−6 | Zinc | 10 | ug/L | U | 3.3 | 10 | 10 | 1 | P | HSC | 07/22/14 15:43 | 072214A−3 | 1402847 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402847 | 1402846 | SW846 3005A | 50 | mL | 50 | mL | 07/14/14 | JXO1 |
| 1402900 | 1402898 | SW846 3005A | 50 | mL | 50 | mL | 07/14/14 | JXO1 |
| 1404427 | 1404425 | EPA 245.1/245.2 Prep | 20 | mL | 20 | mL | 07/18/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **AV** | **EPA 245.1/245.2** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460009 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84136 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 92.5

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4490000 | ug/kg | | 6870 | 20200 | 20200 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 1010 | ug/kg | U | 333 | 1010 | 1010 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 2220 | ug/kg | | 210 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 08:33 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 151000 | ug/kg | | 101 | 505 | 505 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 478 | ug/kg | | 21 | 105 | 105 | 2 | MS | BAJ | 08/10/14 08:33 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 505 | ug/kg | U | 101 | 505 | 505 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 1270000 | ug/kg | | 8080 | 25300 | 25300 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 3590 | ug/kg | | 152 | 505 | 505 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 2040 | ug/kg | | 152 | 505 | 505 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 3350 | ug/kg | | 303 | 1010 | 1010 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 8650000 | ug/kg | | 8080 | 25300 | 25300 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 11100 | ug/kg | | 333 | 1010 | 1010 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 570000 | ug/kg | | 8590 | 30300 | 30300 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 437000 | ug/kg | | 202 | 1010 | 1010 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 13 | ug/kg | | 4.08 | 12.2 | 12.2 | 1 | AV | MTM1 | 07/23/14 10:46 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 3780 | ug/kg | | 105 | 419 | 419 | 2 | MS | BAJ | 08/10/14 08:33 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 695000 | ug/kg | | 6470 | 25300 | 25300 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1050 | ug/kg | U | 346 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 08:33 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 121 | ug/kg | J | 101 | 505 | 505 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 108000 | ug/kg | | 7070 | 25300 | 25300 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 419 | ug/kg | U | 62.9 | 419 | 419 | 2 | MS | BAJ | 08/10/14 08:33 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 7170 | ug/kg | | 101 | 505 | 505 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 41300 | ug/kg | | 404 | 1010 | 1010 | 1 | P | HSC | 07/31/14 16:27 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.516 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.535 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.532 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460010 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84147 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 94.7

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4800000 | ug/kg | | 6920 | 20300 | 20300 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 1020 | ug/kg | U | 336 | 1020 | 1020 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 1770 | ug/kg | | 188 | 938 | 938 | 2 | MS | BAJ | 08/10/14 08:37 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 101000 | ug/kg | | 102 | 509 | 509 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 511 | ug/kg | | 18.8 | 93.8 | 93.8 | 2 | MS | BAJ | 08/10/14 08:37 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 509 | ug/kg | U | 102 | 509 | 509 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 1430000 | ug/kg | | 8140 | 25400 | 25400 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 4980 | ug/kg | | 153 | 509 | 509 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 2130 | ug/kg | | 153 | 509 | 509 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 3020 | ug/kg | | 305 | 1020 | 1020 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 8620000 | ug/kg | | 8140 | 25400 | 25400 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 9170 | ug/kg | | 336 | 1020 | 1020 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 632000 | ug/kg | | 8650 | 30500 | 30500 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 536000 | ug/kg | | 203 | 1020 | 1020 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 12.4 | ug/kg | | 4.09 | 12.2 | 12.2 | 1 | AV | MTM1 | 07/23/14 10:47 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 3810 | ug/kg | | 93.8 | 375 | 375 | 2 | MS | BAJ | 08/10/14 08:37 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 672000 | ug/kg | | 6510 | 25400 | 25400 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 938 | ug/kg | U | 310 | 938 | 938 | 2 | MS | BAJ | 08/10/14 08:37 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 185 | ug/kg | J | 102 | 509 | 509 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 101000 | ug/kg | | 7120 | 25400 | 25400 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 375 | ug/kg | U | 56.3 | 375 | 375 | 2 | MS | BAJ | 08/10/14 08:37 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 8720 | ug/kg | | 102 | 509 | 509 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 39000 | ug/kg | | 407 | 1020 | 1020 | 1 | P | HSC | 07/31/14 16:31 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.563 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.519 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.519 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460011 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84158 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.2

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4150000 | ug/kg | | 6730 | 19800 | 19800 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 990 | ug/kg | U | 327 | 990 | 990 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 791 | ug/kg | J | 197 | 984 | 984 | 2 | MS | BAJ | 08/10/14 08:55 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 50400 | ug/kg | | 99 | 495 | 495 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 637 | ug/kg | | 19.7 | 98.4 | 98.4 | 2 | MS | BAJ | 08/10/14 08:55 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 495 | ug/kg | U | 99 | 495 | 495 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 305000 | ug/kg | | 7920 | 24700 | 24700 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 25900 | ug/kg | | 148 | 495 | 495 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 616 | ug/kg | | 148 | 495 | 495 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 2550 | ug/kg | | 297 | 990 | 990 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 8210000 | ug/kg | | 7920 | 24700 | 24700 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 8710 | ug/kg | | 327 | 990 | 990 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 156000 | ug/kg | | 8410 | 29700 | 29700 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 445000 | ug/kg | | 198 | 990 | 990 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 14.4 | ug/kg | | 3.91 | 11.7 | 11.7 | 1 | AV | MTM1 | 07/23/14 10:49 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 1320 | ug/kg | | 98.4 | 394 | 394 | 2 | MS | BAJ | 08/10/14 08:55 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 612000 | ug/kg | | 6330 | 24700 | 24700 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 984 | ug/kg | U | 325 | 984 | 984 | 2 | MS | BAJ | 08/10/14 08:55 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 495 | ug/kg | U | 99 | 495 | 495 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 304000 | ug/kg | | 6930 | 24700 | 24700 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 394 | ug/kg | U | 59 | 394 | 394 | 2 | MS | BAJ | 08/10/14 08:55 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 1650 | ug/kg | | 99 | 495 | 495 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 65200 | ug/kg | | 396 | 990 | 990 | 1 | P | HSC | 07/31/14 16:34 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.545 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.542 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.551 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460012 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84137 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 96.2

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3410000 | ug/kg | | 6750 | 19800 | 19800 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 992 | ug/kg | U | 327 | 992 | 992 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 760 | ug/kg | J | 194 | 970 | 970 | 2 | MS | BAJ | 08/10/14 08:59 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 51200 | ug/kg | | 99.2 | 496 | 496 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 543 | ug/kg | | 19.4 | 97 | 97 | 2 | MS | BAJ | 08/10/14 08:59 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 121 | ug/kg | J | 99.2 | 496 | 496 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 492000 | ug/kg | | 7940 | 24800 | 24800 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 8890 | ug/kg | | 149 | 496 | 496 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 561 | ug/kg | | 149 | 496 | 496 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 7490 | ug/kg | | 298 | 992 | 992 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 7100000 | ug/kg | | 7940 | 24800 | 24800 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 11600 | ug/kg | | 327 | 992 | 992 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 271000 | ug/kg | | 8440 | 29800 | 29800 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 156000 | ug/kg | | 198 | 992 | 992 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 919 | ug/kg | | 81.7 | 244 | 244 | 20 | AV | MTM1 | 07/23/14 11:34 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 790 | ug/kg | | 97 | 388 | 388 | 2 | MS | BAJ | 08/10/14 08:59 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 629000 | ug/kg | | 6350 | 24800 | 24800 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 970 | ug/kg | U | 320 | 970 | 970 | 2 | MS | BAJ | 08/10/14 08:59 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 647 | ug/kg | | 99.2 | 496 | 496 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 295000 | ug/kg | | 6950 | 24800 | 24800 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 388 | ug/kg | U | 58.2 | 388 | 388 | 2 | MS | BAJ | 08/10/14 08:59 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 3070 | ug/kg | | 99.2 | 496 | 496 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 73700 | ug/kg | | 397 | 992 | 992 | 1 | P | HSC | 07/31/14 16:37 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.536 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.524 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.512 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3718 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352460013 **BASIS:** Dry Weight **DATE COLLECTED** 09−JUL−14

**CLIENT ID:** RE57−14−84148 **LEVEL:** Low **DATE RECEIVED** 11−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.3

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4830000 | ug/kg | | 7050 | 20700 | 20700 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−36−0 | Antimony | 1040 | ug/kg | U | 342 | 1040 | 1040 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−38−2 | Arsenic | 1880 | ug/kg | | 211 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 09:03 | 140809−5 | 1402860 |
| 7440−39−3 | Barium | 122000 | ug/kg | | 104 | 518 | 518 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−41−7 | Beryllium | 550 | ug/kg | | 21.1 | 105 | 105 | 2 | MS | BAJ | 08/10/14 09:03 | 140809−5 | 1402860 |
| 7440−43−9 | Cadmium | 518 | ug/kg | U | 104 | 518 | 518 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−70−2 | Calcium | 2100000 | ug/kg | | 8290 | 25900 | 25900 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−47−3 | Chromium | 15500 | ug/kg | | 156 | 518 | 518 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−48−4 | Cobalt | 2470 | ug/kg | | 156 | 518 | 518 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−50−8 | Copper | 14100 | ug/kg | | 311 | 1040 | 1040 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7439−89−6 | Iron | 9170000 | ug/kg | | 8290 | 25900 | 25900 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7439−92−1 | Lead | 16300 | ug/kg | | 342 | 1040 | 1040 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7439−95−4 | Magnesium | 919000 | ug/kg | | 8810 | 31100 | 31100 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7439−96−5 | Manganese | 389000 | ug/kg | | 207 | 1040 | 1040 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7439−97−6 | Mercury | 4200 | ug/kg | | 210 | 627 | 627 | 50 | AV | MTM1 | 07/23/14 11:36 | 072314S1−9 | 1405302 |
| 7440−02−0 | Nickel | 5450 | ug/kg | | 105 | 421 | 421 | 2 | MS | BAJ | 08/10/14 09:03 | 140809−5 | 1402860 |
| 7440−09−7 | Potassium | 759000 | ug/kg | | 6640 | 25900 | 25900 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7782−49−2 | Selenium | 1050 | ug/kg | U | 348 | 1050 | 1050 | 2 | MS | BAJ | 08/10/14 09:03 | 140809−5 | 1402860 |
| 7440−22−4 | Silver | 2130 | ug/kg | | 104 | 518 | 518 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−23−5 | Sodium | 133000 | ug/kg | | 7260 | 25900 | 25900 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−28−0 | Thallium | 421 | ug/kg | U | 63.2 | 421 | 421 | 2 | MS | BAJ | 08/10/14 09:03 | 140809−5 | 1402860 |
| 7440−62−2 | Vanadium | 10600 | ug/kg | | 104 | 518 | 518 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |
| 7440−66−6 | Zinc | 59200 | ug/kg | | 415 | 1040 | 1040 | 1 | P | HSC | 07/31/14 16:40 | 073114−1 | 1403245 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1402860 | 1402858 | SW846 3050B | 0.509 | g | 50 | mL | 07/14/14 | JXO1 |
| 1403245 | 1403244 | SW846 3050B | 0.517 | g | 50 | mL | 07/15/14 | KXP3 |
| 1405302 | 1405301 | SW846 7471A Prep | 0.513 | g | 30 | mL | 07/22/14 | AXS5 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# Quality Control Summary

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3718

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| 1203126083 | | | | | | | | |
| | Aluminum | 68 | ug/L | +/−200 | U | P | 68 | 200 |
| | Barium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Beryllium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Calcium | 50 | ug/L | +/−200 | U | P | 50 | 200 |
| | Cobalt | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Copper | 3 | ug/L | +/−10 | U | P | 3 | 10 |
| | Iron | −30.8 | ug/L | +/−100 | J | P | 30 | 100 |
| | Magnesium | 110 | ug/L | +/−300 | U | P | 110 | 300 |
| | Manganese | 2 | ug/L | +/−10 | U | P | 2 | 10 |
| | Potassium | 50 | ug/L | +/−150 | U | P | 50 | 150 |
| | Sodium | 100 | ug/L | +/−300 | U | P | 100 | 300 |
| | Vanadium | −1.42 | ug/L | +/−5 | J | P | 1 | 5 |
| | Zinc | 3.3 | ug/L | +/−10 | U | P | 3.3 | 10 |
| 1203126094 | | | | | | | | |
| | Arsenic | 195 | ug/kg | +/−977 | U | MS | 195 | 977 |
| | Beryllium | 19.5 | ug/kg | +/−97.7 | U | MS | 19.5 | 97.7 |
| | Nickel | 97.7 | ug/kg | +/−391 | U | MS | 97.7 | 391 |
| | Selenium | 322 | ug/kg | +/−977 | U | MS | 322 | 977 |
| | Thallium | 58.6 | ug/kg | +/−391 | U | MS | 58.6 | 391 |
| 1203126211 | | | | | | | | |
| | Antimony | 1 | ug/L | +/−3 | U | MS | 1 | 3 |
| | Arsenic | 1.7 | ug/L | +/−5 | U | MS | 1.7 | 5 |
| | Cadmium | 0.11 | ug/L | +/−1 | U | MS | 0.11 | 1 |
| | Chromium | 2 | ug/L | +/−10 | U | MS | 2 | 10 |
| | Lead | 0.5 | ug/L | +/−2 | U | MS | 0.5 | 2 |
| | Nickel | 0.5 | ug/L | +/−2 | U | MS | 0.5 | 2 |
| | Selenium | 1.5 | ug/L | +/−5 | U | MS | 1.5 | 5 |
| | Silver | 0.2 | ug/L | +/−1 | U | MS | 0.2 | 1 |
| | Thallium | 0.45 | ug/L | +/−2 | U | MS | 0.45 | 2 |
| 1203127124 | | | | | | | | |
| | Aluminum | 6680 | ug/kg | +/−19600 | U | P | 6680 | 19600 |
| | Antimony | 324 | ug/kg | +/−982 | U | P | 324 | 982 |
| | Barium | 98.2 | ug/kg | +/−491 | U | P | 98.2 | 491 |
| | Cadmium | 98.2 | ug/kg | +/−491 | U | P | 98.2 | 491 |
| | Calcium | 7860 | ug/kg | +/−24600 | U | P | 7860 | 24600 |
| | Chromium | 147 | ug/kg | +/−491 | U | P | 147 | 491 |
| | Cobalt | 147 | ug/kg | +/−491 | U | P | 147 | 491 |

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3718

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| | Copper | 295 | ug/kg | +/−982 | U | P | 295 | 982 |
| | Iron | 7860 | ug/kg | +/−24600 | U | P | 7860 | 24600 |
| | Lead | 591 | ug/kg | +/−982 | J | P | 324 | 982 |
| | Magnesium | 8350 | ug/kg | +/−29500 | U | P | 8350 | 29500 |
| | Manganese | 196 | ug/kg | +/−982 | U | P | 196 | 982 |
| | Potassium | 6290 | ug/kg | +/−24600 | U | P | 6290 | 24600 |
| | Silver | 98.2 | ug/kg | +/−491 | U | P | 98.2 | 491 |
| | Sodium | −9120 | ug/kg | +/−24600 | J | P | 6880 | 24600 |
| | Vanadium | 98.2 | ug/kg | +/−491 | U | P | 98.2 | 491 |
| | Zinc | 393 | ug/kg | +/−982 | U | P | 393 | 982 |
| 1203129977 | | | | | | | | |
| | Mercury | 0.067 | ug/L | +/−0.2 | U | AV | 0.067 | 0.2 |
| 1203132299 | | | | | | | | |
| | Mercury | 4.02 | ug/kg | +/−12 | U | AV | 4.02 | 12 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |
| **AV** | **EPA 245.1/245.2** |

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3718 **Client ID** CAMO−14−81584S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352431006 **Spike ID:** 1203126082

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | 75−125 | 5050 | | 68 | U | 5000 | 99.8 | | P |
| Barium | ug/L | 75−125 | 558 | | 32 | | 500 | 105 | | P |
| Beryllium | ug/L | 75−125 | 512 | | 1 | U | 500 | 102 | | P |
| Calcium | ug/L | 75−125 | 16000 | | 11400 | | 5000 | 92.6 | | P |
| Cobalt | ug/L | 75−125 | 526 | | 1 | U | 500 | 105 | | P |
| Copper | ug/L | 75−125 | 533 | | 3 | U | 500 | 106 | | P |
| Iron | ug/L | 75−125 | 5070 | | 30 | U | 5000 | 101 | | P |
| Magnesium | ug/L | 75−125 | 8840 | | 3760 | | 5000 | 101 | | P |
| Manganese | ug/L | 75−125 | 519 | | 2 | U | 500 | 103 | | P |
| Potassium | ug/L | 75−125 | 6580 | | 1470 | | 5000 | 102 | | P |
| Sodium | ug/L | 75−125 | 16900 | | 11800 | | 5000 | 101 | | P |
| Vanadium | ug/L | 75−125 | 552 | | 4.49 | J | 500 | 110 | | P |
| Zinc | ug/L | 75−125 | 526 | | 3.3 | U | 500 | 105 | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84187S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 93.7

**Sample ID:** 352465001 **Spike ID:** 1203126097

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | 75−125 | 6110 | | 989 | J | 5090 | 101 | | MS |
| Beryllium | ug/kg | 75−125 | 5510 | | 535 | | 5090 | 97.8 | | MS |
| Nickel | ug/kg | 75−125 | 11300 | | 6250 | | 5090 | 98.9 | | MS |
| Selenium | ug/kg | 75−125 | 5180 | | 351 | U | 5090 | 97.4 | | MS |
| Thallium | ug/kg | 75−125 | 4720 | | 63.8 | U | 5090 | 92.8 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3718 **Client ID** CAMO−14−84010S

**Contract:** LANL00114 **Level:** Low

**Matrix:** GROUND WATER **% Solids:**

**Sample ID:** 352519002 **Spike ID:** 1203126214

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | 75−125 | 54 | | 1 | U | 50 | 108 | | MS |
| Arsenic | ug/L | 75−125 | 49.9 | | 1.7 | U | 50 | 98.2 | | MS |
| Cadmium | ug/L | 75−125 | 52 | | 0.11 | U | 50 | 104 | | MS |
| Chromium | ug/L | 75−125 | 72.1 | | 18.7 | | 50 | 107 | | MS |
| Lead | ug/L | 75−125 | 50.1 | | 0.5 | U | 50 | 100 | | MS |
| Nickel | ug/L | 75−125 | 56.4 | | 0.694 | J | 50 | 111 | | MS |
| Selenium | ug/L | 75−125 | 53.3 | | 1.5 | U | 50 | 106 | | MS |
| Silver | ug/L | 75−125 | 50.4 | | 0.2 | U | 50 | 101 | | MS |
| Thallium | ug/L | 75−125 | 48.9 | | 0.45 | U | 50 | 97.8 | | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84187S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 93.7

**Sample ID:** 352465001 **Spike ID:** 1203127127

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/kg | 75−125 | 45200 | | 337 | U | 51600 | 87.6 | | P |
| Barium | ug/kg | 75−125 | 89800 | | 42600 | | 51600 | 91.4 | | P |
| Cadmium | ug/kg | 75−125 | 49500 | | 140 | J | 51600 | 95.7 | | P |
| Calcium | ug/kg | 75−125 | 798000 | | 362000 | | 516000 | 84.5 | | P |
| Chromium | ug/kg | 75−125 | 127000 | | 113000 | | 51600 | 28.1 | N | P |
| Cobalt | ug/kg | 75−125 | 49700 | | 1270 | | 51600 | 93.8 | | P |
| Copper | ug/kg | 75−125 | 57400 | | 4550 | | 51600 | 102 | | P |
| Iron | ug/kg | | 8020000 | | 7930000 | | 516000 | 16.4 | N/A | P |
| Lead | ug/kg | 75−125 | 61400 | | 9050 | | 51600 | 102 | | P |
| Magnesium | ug/kg | 75−125 | 643000 | | 112000 | | 516000 | 103 | | P |
| Manganese | ug/kg | | 420000 | | 415000 | | 51600 | 10.4 | N/A | P |
| Potassium | ug/kg | 75−125 | 1670000 | | 712000 | | 516000 | 186 | N | P |
| Silver | ug/kg | 75−125 | 48800 | | 102 | U | 51600 | 94.7 | | P |
| Sodium | ug/kg | 75−125 | 1160000 | | 418000 | | 516000 | 144 | N | P |
| Vanadium | ug/kg | 75−125 | 52700 | | 1730 | | 51600 | 98.8 | | P |
| Zinc | ug/kg | 75−125 | 114000 | | 66500 | | 51600 | 92.6 | | P |
| Aluminum | ug/kg | | 4890000 | | 3200000 | | 516000 | 327 | N/A | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84197S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352465003 **Spike ID:** 1203129980

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | 75−125 | 2.05 | | 0.067 | U | 2 | 103 | | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84187S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 93.7

**Sample ID:** 352465001 **Spike ID:** 1203132302

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | 80−120 | 132 | | 11.2 | J | 123 | 97.7 | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−5a−**

**Spike Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84187PS

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 93.7

**Sample ID:** 352465001 **Spike ID:** 1203143922

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Chromium | ug/L | 80−120 | 1640 | | 1100 | | 500 | 107 | | P |
| Potassium | ug/L | 80−120 | 13700 | | 6980 | | 5000 | 134 | N | P |
| Sodium | ug/L | 80−120 | 10700 | | 4100 | | 5000 | 132 | N | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3718 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** CAMO−14−81584D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352431006 **Duplicate ID:** 1203126080 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | | 68 | U | 68 | U | | | P |
| Barium | ug/L | +/−20% | 32 | | 31.9 | | .15 | | P |
| Beryllium | ug/L | | 1 | U | 1 | U | | | P |
| Calcium | ug/L | +/−20% | 11400 | | 11100 | | 3.06 | | P |
| Cobalt | ug/L | | 1 | U | 1 | U | | | P |
| Copper | ug/L | | 3 | U | 3 | U | | | P |
| Iron | ug/L | | 30 | U | 30 | U | | | P |
| Magnesium | ug/L | +/−20% | 3760 | | 3840 | | 2.1 | | P |
| Manganese | ug/L | | 2 | U | 2 | U | | | P |
| Potassium | ug/L | +/−20% | 1470 | | 1600 | | 8.13 | | P |
| Sodium | ug/L | +/−20% | 11800 | | 11700 | | .332 | | P |
| Vanadium | ug/L | +/−5 | 4.49 | J | 4.98 | J | 10.3 | | P |
| Zinc | ug/L | | 3.3 | U | 3.3 | U | | | P |

***Analytical Methods:**

**P SW846 3005A/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3718 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84187D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352465001 **Duplicate ID:** 1203126096 **Percent Solids for Dup:** 93.7

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | +/−1050 | 989 | J | 969 | J | 2.09 | | MS |
| Beryllium | ug/kg | +/−105 | 535 | | 498 | | 7.3 | | MS |
| Nickel | ug/kg | +/−20% | 6250 | | 6050 | | 3.26 | | MS |
| Selenium | ug/kg | | 351 | U | 347 | U | | | MS |
| Thallium | ug/kg | | 63.8 | U | 63.1 | U | | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3718 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** CAMO−14−84010D

**Matrix:** GROUND WATER **Level:** Low

**Sample ID:** 352519002 **Duplicate ID:** 1203126213 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | | 1 | U | 1 | U | | | MS |
| Arsenic | ug/L | | 1.7 | U | 1.7 | U | | | MS |
| Cadmium | ug/L | | 0.11 | U | 0.11 | U | | | MS |
| Chromium | ug/L | +/−10 | 18.7 | | 18.1 | | 2.87 | | MS |
| Lead | ug/L | | 0.5 | U | 0.5 | U | | | MS |
| Nickel | ug/L | +/−2 | 0.694 | J | 0.653 | J | 6.09 | | MS |
| Selenium | ug/L | | 1.5 | U | 1.5 | U | | | MS |
| Silver | ug/L | | 0.2 | U | 0.2 | U | | | MS |
| Thallium | ug/L | | 0.45 | U | 0.45 | U | | | MS |

***Analytical Methods:**

**MS SW846 3005A/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3718 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84187D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352465001 **Duplicate ID:** 1203127126 **Percent Solids for Dup:** 93.7

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | +/−20% | 3200000 | | 3060000 | | 4.62 | | P |
| Antimony | ug/kg | | 337 | U | 348 | U | | | P |
| Barium | ug/kg | +/−20% | 42600 | | 38900 | | 9.16 | | P |
| Cadmium | ug/kg | | 140 | J | 105 | U | 200 | | P |
| Calcium | ug/kg | +/−20% | 362000 | | 267000 | | 30.2 | * | P |
| Chromium | ug/kg | +/−20% | 113000 | | 106000 | | 6.1 | | P |
| Cobalt | ug/kg | +/−527 | 1270 | | 1220 | | 4.42 | | P |
| Copper | ug/kg | +/−1050 | 4550 | | 4230 | | 7.36 | | P |
| Iron | ug/kg | +/−20% | 7930000 | | 7570000 | | 4.65 | | P |
| Lead | ug/kg | +/−20% | 9050 | | 7770 | | 15.1 | | P |
| Magnesium | ug/kg | +/−31600 | 112000 | | 92100 | | 19.5 | | P |
| Manganese | ug/kg | +/−20% | 415000 | | 389000 | | 6.48 | | P |
| Potassium | ug/kg | +/−20% | 712000 | | 705000 | | 1.05 | | P |
| Silver | ug/kg | | 102 | U | 105 | U | | | P |
| Sodium | ug/kg | +/−20% | 418000 | | 424000 | | 1.46 | | P |
| Vanadium | ug/kg | +/−527 | 1730 | | 1460 | | 17.2 | | P |
| Zinc | ug/kg | +/−20% | 66500 | | 64600 | | 2.87 | | P |

***Analytical Methods:**

**P SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3718 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84197D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352465003 **Duplicate ID:** 1203129979 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | | 0.067 | U | 0.067 | U | | | AV |

***Analytical Methods:**

**AV EPA 245.1/245.2**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3718 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84187D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352465001 **Duplicate ID:** 1203132301 **Percent Solids for Dup:** 93.7

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | +/−12.7 | 11.2 | J | 10.6 | J | 5.84 | | AV |

***Analytical Methods:**

**AV SW846 7471A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3718

**Contract:** LANL00114

**Aqueous LCS Source:** OS2I **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203126084 | | | | | | | | |
| | Aluminum | ug/L | 5000 | 5180 | | 104 | 80−120 | P |
| | Barium | ug/L | 500 | 515 | | 103 | 80−120 | P |
| | Beryllium | ug/L | 500 | 519 | | 104 | 80−120 | P |
| | Calcium | ug/L | 5000 | 4990 | | 99.7 | 80−120 | P |
| | Cobalt | ug/L | 500 | 526 | | 105 | 80−120 | P |
| | Copper | ug/L | 500 | 502 | | 100 | 80−120 | P |
| | Iron | ug/L | 5000 | 5050 | | 101 | 80−120 | P |
| | Magnesium | ug/L | 5000 | 5310 | | 106 | 80−120 | P |
| | Manganese | ug/L | 500 | 509 | | 102 | 80−120 | P |
| | Potassium | ug/L | 5000 | 5380 | | 108 | 80−120 | P |
| | Sodium | ug/L | 5000 | 5060 | | 101 | 80−120 | P |
| | Vanadium | ug/L | 500 | 534 | | 107 | 80−120 | P |
| | Zinc | ug/L | 500 | 513 | | 103 | 80−120 | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3718

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203126095 | | | | | | | | |
| | Arsenic | ug/kg | 137000 | 138000 | | 101 | 83.2−117.5 | MS |
| | Beryllium | ug/kg | 138000 | 148000 | | 108 | 84.1−115.9 | MS |
| | Nickel | ug/kg | 159000 | 176000 | | 110 | 84.3−115.7 | MS |
| | Selenium | ug/kg | 43500 | 48200 | | 111 | 77.9−122.3 | MS |
| | Thallium | ug/kg | 146000 | 149000 | | 102 | 81.5−119.2 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3718

**Contract:** LANL00114

**Aqueous LCS Source:** O2Si **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203126212 | | | | | | | | |
| | Antimony | ug/L | 50 | 51.6 | | 103 | 80−120 | MS |
| | Arsenic | ug/L | 50 | 49.8 | | 99.7 | 80−120 | MS |
| | Cadmium | ug/L | 50 | 51.3 | | 103 | 80−120 | MS |
| | Chromium | ug/L | 50 | 54.7 | | 109 | 80−120 | MS |
| | Lead | ug/L | 50 | 55.4 | | 111 | 80−120 | MS |
| | Nickel | ug/L | 50 | 56.4 | | 113 | 80−120 | MS |
| | Selenium | ug/L | 50 | 53.3 | | 107 | 80−120 | MS |
| | Silver | ug/L | 50 | 50.5 | | 101 | 80−120 | MS |
| | Thallium | ug/L | 50 | 54.4 | | 109 | 80−120 | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3718

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203127125 | | | | | | | | |
| | Aluminum | ug/kg | 8680000 | 6780000 | | 78.1 | 44.9−154.4 | P |
| | Antimony | ug/kg | 166000 | 114000 | | 68.5 | 33.1−167.3 | P |
| | Barium | ug/kg | 290000 | 278000 | | 95.7 | 82.8−117.6 | P |
| | Cadmium | ug/kg | 85000 | 82900 | | 97.5 | 84−115.9 | P |
| | Calcium | ug/kg | 6120000 | 6040000 | | 98.7 | 83.2−117 | P |
| | Chromium | ug/kg | 168000 | 167000 | | 99.3 | 81.5−117.9 | P |
| | Cobalt | ug/kg | 87000 | 85800 | | 98.6 | 84.8−114.9 | P |
| | Copper | ug/kg | 187000 | 191000 | | 102 | 84−116.6 | P |
| | Iron | ug/kg | 12500000 | 12700000 | | 102 | 50.5−148.8 | P |
| | Lead | ug/kg | 120000 | 113000 | | 93.8 | 83.3−116.7 | P |
| | Magnesium | ug/kg | 2920000 | 2750000 | | 94.2 | 75−125.3 | P |
| | Manganese | ug/kg | 310000 | 297000 | | 95.8 | 82.6−117.4 | P |
| | Potassium | ug/kg | 2780000 | 2420000 | | 87.1 | 69.1−130.9 | P |
| | Silver | ug/kg | 55200 | 52900 | | 95.8 | 66.3−133.7 | P |
| | Sodium | ug/kg | 504000 | 484000 | | 96 | 73.6−126.4 | P |
| | Vanadium | ug/kg | 138000 | 143000 | | 104 | 79.7−120.3 | P |
| | Zinc | ug/kg | 206000 | 195000 | | 94.6 | 82−118 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3718

**Contract:** LANL00114

**Aqueous LCS Source:** GEL **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203129978 | | | | | | | | |
| | Mercury | ug/L | 2 | 2.02 | | 101 | 85−115 | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3718

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203132300 | | | | | | | | |
| | Mercury | ug/kg | 7690 | 9130 | | 119 | 71.4−129 | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3718 **Client ID** CAMO−14−81584L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352431006 **Serial Dilution ID:** 1203126081

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 68 | U | 340 | U | | | | P |
| Barium | 32 | | 31.8 | | .602 | | | P |
| Beryllium | 1 | U | 5 | U | | | | P |
| Calcium | 11400 | | 11300 | | 1.19 | | 10 | P |
| Cobalt | 1 | U | 5 | U | | | | P |
| Copper | 3 | U | 15 | U | | | | P |
| Iron | 30 | U | 150 | U | | | | P |
| Magnesium | 3760 | | 4260 | | 13.1 | | | P |
| Manganese | 2 | U | 10 | U | | | | P |
| Potassium | 1470 | | 1360 | | 7.92 | | | P |
| Sodium | 11800 | | 12000 | | 1.88 | | 10 | P |
| Vanadium | 4.49 | J | 5 | U | 100 | | | P |
| Zinc | 3.3 | U | 16.5 | U | | | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84187L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352465001 **Serial Dilution ID:** 1203126098

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 4.65 | J | 6.51 | J | 39.8 | | | MS |
| Beryllium | 2.52 | | 2.67 | | 5.8 | | | MS |
| Nickel | 29.4 | | 29.1 | | 1.06 | | | MS |
| Selenium | 1.65 | U | 8.25 | U | | | | MS |
| Thallium | .3 | U | 1.5 | U | | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3718 **Client ID** CAMO−14−84010L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352519002 **Serial Dilution ID:** 1203126215

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Antimony | 1 | U | 5 | U | | | | MS |
| Arsenic | 1.7 | U | 8.5 | U | | | | MS |
| Cadmium | .11 | U | .55 | U | | | | MS |
| Chromium | 18.7 | | 17.5 | J | 6.42 | | | MS |
| Lead | .5 | U | 2.5 | U | | | | MS |
| Nickel | .694 | J | 2.5 | U | 100 | | | MS |
| Selenium | 1.5 | U | 7.5 | U | | | | MS |
| Silver | .2 | U | 1 | U | | | | MS |
| Thallium | .45 | U | 2.25 | U | | | | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84187L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352465001 **Serial Dilution ID:** 1203127128

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 31400 | | 31900 | | 1.69 | | 10 | P |
| Antimony | 3.3 | U | 16.5 | U | | | | P |
| Barium | 418 | | 437 | | 4.46 | | 10 | P |
| Cadmium | 1.37 | J | 5 | U | 100 | | | P |
| Calcium | 3550 | | 3690 | | 4 | | | P |
| Chromium | 1100 | | 1140 | | 3.34 | | 10 | P |
| Cobalt | 12.5 | | 12.8 | J | 2.45 | | | P |
| Copper | 44.6 | | 46.7 | J | 4.72 | | | P |
| Iron | 77800 | | 78500 | | .9 | | 10 | P |
| Lead | 88.7 | | 87.7 | | 1.2 | | | P |
| Magnesium | 1100 | | 1250 | J | 13.7 | | | P |
| Manganese | 4070 | | 4280 | | 5.2 | | 10 | P |
| Potassium | 6980 | | 6740 | | 3.43 | | 10 | P |
| Silver | 1 | U | 5 | U | | | | P |
| Sodium | 4100 | | 4070 | | .737 | | 10 | P |
| Vanadium | 17 | | 13.7 | J | 19.2 | | | P |
| Zinc | 652 | | 676 | | 3.74 | | 10 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84197L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352465003 **Serial Dilution ID:** 1203129981

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .067 | U | .335 | U | | | | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3718 **Client ID** RE57−14−84187L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352465001 **Serial Dilution ID:** 1203132303

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .176 | J | .335 | U | 100 | | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 07-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| ICP | SW846 3050B/6010C | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1403245 | See Below | | |

**Potentially affected work order(s)(SDG): 352446(2014-3716),352460(2014-3718),352465(2014-3719)**

**Application Issues:**

Failed Recovery for MS/PS

Failed RPD for DUP

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed Recovery for MS/PS:<br><br>QC 1203127127MS,1203143922PS<br><br>2. Failed RPD for DUP:<br><br>QC 1203127126DUP | 1. The matrix spike recovery failed outside of the control limits for chromium,potassium and sodium. The post spike failed outside the required control limits for potassium and sodium but passed for all other analytes. This verifies the presence of a matrix interference for potassium and sodium and verifies the absence of a matrix interference for all the other analytes.<br><br>2. The sample and sample duplicate % RPD failed outside the control limits for calcium due to possible sample non-homogeneity and/or matrix interference. |

**Originator's Name:**

Helen Camello 07-AUG-14

**Data Validator/Group Leader:**

Louise Smith 07-AUG-14

# General Chem Analysis

# Case Narrative

**General Chemistry Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3718**

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Cyanide and Total** | | |
| **Analytical Batch:** | 1402824 | **Method:** | SW9012A Cyanide and Total |
| **Prep Batch :** | 1402823 | **Method:** | SSW846 9010B Prep |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| Sample ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |
| 1203126017 | MB for batch 1402823 |
| 1203126022 | Laboratory Control Sample (LCS) |
| 1203126018 | 352460001(RE57-14-84119) Sample Duplicate (DUP) |
| 1203126019 | 352522001(RE57-14-84157) Sample Duplicate (DUP) |
| 1203126020 | 352460001(RE57-14-84119) Matrix Spike (MS) |
| 1203126021 | 352522001(RE57-14-84157) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 17.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories,

LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**Calibration Information**

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following samples were selected for QC analysis: 352460001 (RE57-14-84119) and 352522001 (RE57-14-84157).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recoveries for this sample set were within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1203126018 (RE57-14-84119) and 1203126019 (RE57-14-84157).

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**
All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**

The following sample in this sample group was diluted due to high concentration: 1203126022 (LCS).

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Method/Analysis Information**

| | | | |
|---|---|---|---|
| **Product:** | **Ion Chromatography** | | |
| **Analytical Batch:** | 1403032 and 1403036 | **Method:** | EPA 300.0 Nitrate in Soil |
| **Prep Batch :** | 1403027 and 1403034 | **Method:** | EPA 300.0 PREP |

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

| Sample ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |
| 1203126590 | MB for batch 1403027 |
| 1203126607 | MB for batch 1403034 |
| 1203126595 | Laboratory Control Sample (LCS) |
| 1203126612 | Laboratory Control Sample (LCS) |
| 1203126591 | 352306002(RE57-14-84182) Sample Duplicate (DUP) |
| 1203126592 | 352306004(RE57-14-84179) Sample Duplicate (DUP) |
| 1203126608 | 352460011(RE57-14-84158) Sample Duplicate (DUP) |
| 1203126609 | 352460012(RE57-14-84137) Sample Duplicate (DUP) |
| 1203126593 | 352306002(RE57-14-84182) Matrix Spike (MS) |
| 1203126594 | 352306004(RE57-14-84179) Matrix Spike (MS) |
| 1203126610 | 352460011(RE57-14-84158) Matrix Spike (MS) |
| 1203126611 | 352460012(RE57-14-84137) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 22.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**Calibration Information**

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MBs analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Designation**
The following samples were selected for QC analysis: 352306002 (RE57-14-84182), 352306004 (RE57-14-84179)- Batch 1403032, 352460011 (RE57-14-84158) and 352460012 (RE57-14-84137)- Batch 1403036.

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recoveries for this sample set were within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD between the sample and its duplicate met the acceptance limits.

**Technical Information**

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
The following samples from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1203126592 (RE57-14-84179)- Batch 1403032 and 1203126608 (RE57-14-84158)- Batch 1403036.

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:**_____ **Date:** 8/7/14

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis Report
## for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3718  GEL Work Order: 352460

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

**  Analyte is a surrogate compound

B  The target analyte was detected in the associated blank.

H  Analytical holding time was exceeded

J  Value is estimated

N  Metals--The Matrix spike sample recovery is not within specified control limits

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____ 8/7/14

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

Client Sample ID: RE57-14-84119
Sample ID: 352460001
Matrix: SO
Collect Date: 09-JUL-14 08:10
Receive Date: 11-JUL-14
Collector: Client
Moisture: 3.67%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 80.3 | 240 | ug/kg | 1 | AXH3 | 07/17/14 | 1221 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.343 | 1.04 | mg/kg | 1 | RXB5 | 07/15/14 | 0421 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

Client Sample ID: RE57-14-84134
Sample ID: 352460002
Matrix: SO
Collect Date: 09-JUL-14 07:50
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.93%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 88.0 | 263 | ug/kg | 1 | AXH3 | 07/17/14 | 1228 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | J | 0.790 | 0.355 | 1.07 | mg/kg | 1 | RXB5 | 07/15/14 | 0452 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

Client Sample ID: RE57-14-84145
Sample ID: 352460003
Matrix: SO
Collect Date: 09-JUL-14 08:10
Receive Date: 11-JUL-14
Collector: Client
Moisture: 3.43%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 73.3 | 219 | ug/kg | 1 | AXH3 | 07/17/14 | 1228 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.342 | 1.04 | mg/kg | 1 | RXB5 | 07/15/14 | 0625 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

Client Sample ID: RE57-14-84156
Sample ID: 352460004
Matrix: SO
Collect Date: 09-JUL-14 08:50
Receive Date: 11-JUL-14
Collector: Client
Moisture: 5.08%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 81.5 | 244 | ug/kg | 1 | AXH3 | 07/17/14 | 1229 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | J | 0.588 | 0.348 | 1.05 | mg/kg | 1 | RXB5 | 07/15/14 | 0656 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84135 | Project: | LANL00114 |
| Sample ID: | 352460005 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 09-JUL-14 10:47 | | |
| Receive Date: | 11-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 10.4% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 93.2 | 279 | ug/kg | 1 | AXH3 | 07/17/14 | 1230 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.368 | 1.12 | mg/kg | 1 | RXB5 | 07/15/14 | 0727 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84146 | Project: | LANL00114 |
| Sample ID: | 352460006 | Client ID: | ARSL004 |
| Matrix: | SED | | |
| Collect Date: | 09-JUL-14 11:15 | | |
| Receive Date: | 11-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 4.73% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 79.7 | 239 | ug/kg | 1 | AXH3 | 07/17/14 | 1231 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.346 | 1.05 | mg/kg | 1 | RXB5 | 07/15/14 | 0758 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

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## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84136 | Project: | LANL00114 |
| Sample ID: | 352460009 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 09-JUL-14 09:10 | | |
| Receive Date: | 11-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 7.51% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 90.3 | 270 | ug/kg | 1 | AXH3 | 07/17/14 | 1232 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 1.16 | 0.357 | 1.08 | mg/kg | 1 | RXB5 | 07/15/14 | 0828 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84147 | Project: | LANL00114 |
| Sample ID: | 352460010 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 09-JUL-14 09:45 | | |
| Receive Date: | 11-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 5.31% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | J | 171 | 84.8 | 254 | ug/kg | 1 | AXH3 | 07/17/14 | 1233 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | J | 0.656 | 0.349 | 1.06 | mg/kg | 1 | RXB5 | 07/15/14 | 0859 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

Client Sample ID: RE57-14-84158
Sample ID: 352460011
Matrix: SO
Collect Date: 09-JUL-14 12:00
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.77%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 75.9 | 227 | ug/kg | 1 | AXH3 | 07/17/14 | 1234 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | J | 0.521 | 0.354 | 1.07 | mg/kg | 1 | RXB5 | 07/15/14 | 0130 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84137 | Project: | LANL00114 |
| Sample ID: | 352460012 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 09-JUL-14 13:55 | | |
| Receive Date: | 11-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 3.85% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 73.6 | 220 | ug/kg | 1 | AXH3 | 07/17/14 | 1235 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | U | ND | 0.343 | 1.04 | mg/kg | 1 | RXB5 | 07/15/14 | 0300 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 7, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3718

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84148 | Project: | LANL00114 |
| Sample ID: | 352460013 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 09-JUL-14 11:50 | | |
| Receive Date: | 11-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 6.73% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | J | 85.0 | 69.9 | 209 | ug/kg | 1 | AXH3 | 07/17/14 | 1239 | 1402824 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | J | 0.432 | 0.354 | 1.07 | mg/kg | 1 | RXB5 | 07/15/14 | 0430 | 1403036 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1545 | 1403034 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/16/14 | 1114 | 1402823 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# Quality Control Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: August 7, 2014**



**Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**
**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352460**

| Parmname | NOM | | Sample | Qual | QC | Units | RPD% | | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flow Injection Analysis** | | | | | | | | | | | | |
| Batch 1402824 | | | | | | | | | | | | |
| QC1203126018 352460001 DUP | | | | | | | | | | | | |
| Cyanide, Total | | U | ND | U | ND | ug/kg | N/A | | | | AXH3 | 07/17/14 12:22 |
| QC1203126019 352522001 DUP | | | | | | | | | | | | |
| Cyanide, Total | | U | ND | U | ND | ug/kg | N/A | | | | | 07/17/14 12:41 |
| QC1203126022 LCS | | | | | | | | | | | | |
| Cyanide, Total | 90600 | | | | 96400 | ug/kg | | | 106 | (68%-140%) | | 07/17/14 12:20 |
| QC1203126017 MB | | | | | | | | | | | | |
| Cyanide, Total | | | | U | 250 | ug/kg | | | | | | 07/17/14 12:19 |
| QC1203126020 352460001 MS | | | | | | | | | | | | |
| Cyanide, Total | 4720 | U | ND | | 5140 | ug/kg | | | 108 | (55%-125%) | | 07/17/14 12:27 |
| QC1203126021 352522001 MS | | | | | | | | | | | | |
| Cyanide, Total | 5010 | U | ND | | 5560 | ug/kg | | | 111 | (55%-125%) | | 07/17/14 12:42 |
| **Ion Chromatography** | | | | | | | | | | | | |
| Batch 1403032 | | | | | | | | | | | | |
| QC1203126591 352306002 DUP | | | | | | | | | | | | |
| Nitrate-N | | | 3.24 | | 3.33 | mg/kg | 2.83 | ^ | | (+/-1.09) | RXB5 | 07/14/14 20:06 |
| QC1203126592 352306004 DUP | | | | | | | | | | | | |
| Nitrate-N | | J | 0.563 | J | 0.575 | mg/kg | 2.18 | ^ | | (+/-1.13) | | 07/14/14 22:10 |
| QC1203126595 LCS | | | | | | | | | | | | |
| Nitrate-N | 25.0 | | | | 24.7 | mg/kg | | | 99 | (90%-110%) | | 07/14/14 18:33 |
| QC1203126590 MB | | | | | | | | | | | | |
| Nitrate-N | | | | U | 1.00 | mg/kg | | | | | | 07/14/14 18:02 |
| QC1203126593 352306002 MS | | | | | | | | | | | | |
| Nitrate-N | 27.4 | | 3.24 | | 28.5 | mg/kg | | | 92.3 | (90%-110%) | | 07/14/14 20:37 |
| QC1203126594 352306004 MS | | | | | | | | | | | | |
| Nitrate-N | 28.3 | J | 0.563 | | 27.9 | mg/kg | | | 96.6 | (90%-110%) | | 07/14/14 22:41 |
| Batch 1403036 | | | | | | | | | | | | |
| QC1203126608 352460011 DUP | | | | | | | | | | | | |
| Nitrate-N | | J | 0.521 | J | 0.594 | mg/kg | 13.1 | ^ | | (+/-1.07) | RXB5 | 07/15/14 02:00 |
| QC1203126609 352460012 DUP | | | | | | | | | | | | |
| | | | | | ND | | | | | | | |

## QC Summary

**Workorder:** **352460**



| Parmname | NOM | | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ion Chromatography** | | | | | | | | | | | |
| Batch 1403036 | | | | | | | | | | | |
| Nitrate-N | | U | ND | U | | mg/kg | N/A | | | | 07/15/14 03:30 |
| QC1203126612 LCS | | | | | | | | | | | |
| Nitrate-N | 25.0 | | | | 23.6 | mg/kg | | 94.5 | (90%-110%) | RXB5 | 07/15/14 01:00 |
| QC1203126607 MB | | | | | | | | | | | |
| Nitrate-N | | | | U | 1.00 | mg/kg | | | | | 07/15/14 00:31 |
| QC1203126610 352460011 MS | | | | | | | | | | | |
| Nitrate-N | 26.8 | J | 0.521 | | 26.3 | mg/kg | | 96 | (90%-110%) | | 07/15/14 02:30 |
| QC1203126611 352460012 MS | | | | | | | | | | | |
| Nitrate-N | 26.0 | U | ND | | 25.1 | mg/kg | | 96.4 | (90%-110%) | | 07/15/14 04:00 |

**Notes:**

| | |
|---|---|
| < | Result is less than value reported |
| > | Result is greater than value reported |
| B | The target analyte was detected in the associated blank. |
| E | General Chemistry--Concentration of the target analyte exceeds the instrument calibration range |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Z | Paint Filter Test--Particulates passed through the filter, however no free liquids were observed. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| d | 5-day BOD--The 2:1 depletion requirement was not met for this sample |
| e | 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes |
| h | Preparation or preservation holding time was exceeded |

## QC Summary

**Workorder:** **352460**



| Parmname | NOM | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# Radiological Analysis

**Radiochemistry Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3718**
**Work Order 352460**

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **ISOU** |
| Analytical Method: | DOE EML HASL-300, U-02-RC Modified |
| Prep Method: | Dry Soil Prep |
| Analytical Batch Number: | 1402588 |
| Prep Batch Number: | 1402575 |

| Sample ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |
| 1203125485 | MB for batch 1402588 |
| 1203125487 | Laboratory Control Sample (LCS) |
| 1203125486 | 352446001(SFBMACRO-14-83950) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 25.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244. The initial Calibration was performed in July 2014.

**Standards Information**
Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used

before the expiration dates.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**
Aliquot for sample 1203125485 (MB) was changed to 1.0 per client request.

**Designated QC**
The following sample was used for QC: 352446001 (SFBMACRO-14-83950). The QC was from ARSL work order 352446.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
Sample 352460006 (RE57-14-84146) was recounted due to low carrier/tracer yield. The recount is reported.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integration**
No manual integrations were performed on data in this batch.

**Sample-Specific MDA/MDC**
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

**Additional Comments**
The MDCs (and Lc if requested) are calculated using a blank population. Sample 352460006 (RE57-14-84146) did not meet the client's yield requirement. However, there are 400 tracer counts, GEL's standard tracer yield requirements are met, and the client's detection limits are met.

**Blank Decision Level**
The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **Dry Weight-Percent Moisture** |
| Analytical Method: | Dry Soil Prep |
| Analytical Batch Number: | 1402575 |

| Sample ID | Client ID |
|---|---|
| 352460001 | RE57-14-84119 |
| 352460002 | RE57-14-84134 |
| 352460003 | RE57-14-84145 |
| 352460004 | RE57-14-84156 |
| 352460005 | RE57-14-84135 |
| 352460006 | RE57-14-84146 |
| 352460009 | RE57-14-84136 |
| 352460010 | RE57-14-84147 |
| 352460011 | RE57-14-84158 |
| 352460012 | RE57-14-84137 |
| 352460013 | RE57-14-84148 |
| 1203125473 | 352460001(RE57-14-84119) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 10 and GL-RAD-A-021 REV# 20.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Designated QC**
The following sample was used for QC: 352460001 (RE57-14-84119). The QC was from ARSL work order 352460.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
Not applicable. The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this sample set.

**Blank Decision Level**
Not Applicable. The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3718  GEL Work Order: 352460

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Heather M. McCarty  **Name:** **Heather McCarty**

**Date:** **31 JUL 2014**  **Title:** **Analyst II**

# Sample Data Summary

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545 Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84119
Sample ID: 352460001
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 3.67%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.24 | +/-0.0867 | 0.149 | 0.0663 | +/-0.120 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0365 | +/-0.0264 | 0.107 | 0.0434 | +/-0.0265 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.28 | +/-0.0881 | 0.093 | 0.0385 | +/-0.123 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 58.1 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84134
Sample ID: 352460002
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.93%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.15 | +/-0.0735 | 0.117 | 0.052 | +/-0.105 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0574 | +/-0.0229 | 0.0837 | 0.0341 | +/-0.0232 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.15 | +/-0.0732 | 0.073 | 0.0302 | +/-0.105 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 78.9 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84145
Sample ID: 352460003
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 3.43%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.10 | +/-0.0683 | 0.103 | 0.046 | +/-0.0981 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0558 | +/-0.0183 | 0.074 | 0.0301 | +/-0.0186 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.19 | +/-0.071 | 0.0646 | 0.0267 | +/-0.104 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 83.1 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84156
Sample ID: 352460004
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 5.08%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.11 | +/-0.0714 | 0.110 | 0.049 | +/-0.101 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0702 | +/-0.0223 | 0.0788 | 0.0321 | +/-0.0227 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.19 | +/-0.0731 | 0.0688 | 0.0285 | +/-0.106 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 81.5 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84135
Sample ID: 352460005
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 10.4%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.26 | +/-0.0704 | 0.0973 | 0.0434 | +/-0.107 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.067 | +/-0.0192 | 0.0698 | 0.0284 | +/-0.0196 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.32 | +/-0.0721 | 0.0609 | 0.0252 | +/-0.111 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 89.5 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84146
Sample ID: 352460006
Matrix: SED
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 4.73%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.24 | +/-0.100 | 0.195 | 0.087 | +/-0.133 | 0.100 | pCi/g | | JXD2 | 07/29/14 | 1544 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0864 | +/-0.0318 | 0.140 | 0.057 | +/-0.0324 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.41 | +/-0.107 | 0.122 | 0.0505 | +/-0.146 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | | Acceptable Limits |
|---|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 44.0 | * | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84136
Sample ID: 352460009
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 7.51%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.27 | +/-0.0754 | 0.110 | 0.0491 | +/-0.112 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.065 | +/-0.0203 | 0.0791 | 0.0322 | +/-0.0207 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.18 | +/-0.073 | 0.069 | 0.0285 | +/-0.106 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 77.8 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84147
Sample ID: 352460010
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 5.31%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.17 | +/-0.0699 | 0.100 | 0.0448 | +/-0.102 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0346 | +/-0.0178 | 0.072 | 0.0293 | +/-0.0179 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.25 | +/-0.0716 | 0.0628 | 0.026 | +/-0.107 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 87.2 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84158
Sample ID: 352460011
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.77%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.46 | +/-0.0788 | 0.105 | 0.0467 | +/-0.122 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | | 0.0978 | +/-0.0236 | 0.0751 | 0.0306 | +/-0.0244 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.65 | +/-0.0831 | 0.0655 | 0.0271 | +/-0.135 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 84.2 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84137
Sample ID: 352460012
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 3.85%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.44 | +/-0.0763 | 0.100 | 0.0448 | +/-0.120 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0642 | +/-0.0226 | 0.0721 | 0.0293 | +/-0.023 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.44 | +/-0.0764 | 0.0629 | 0.026 | +/-0.119 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 88.3 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 31, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84148
Sample ID: 352460013
Matrix: SO
Collect Date: 09-JUL-14
Receive Date: 11-JUL-14
Collector: Client
Moisture: 6.73%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.17 | +/-0.0691 | 0.0997 | 0.0445 | +/-0.102 | 0.100 | pCi/g | | JXD2 | 07/26/14 | 1159 | 1402588 | 2 |
| Uranium-235/236 | U | 0.0589 | +/-0.0184 | 0.0716 | 0.0291 | +/-0.0187 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.27 | +/-0.0711 | 0.0624 | 0.0258 | +/-0.108 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | LYT1 | 07/15/14 | 1026 | 1402575 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1402588 | 87.9 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# Quality Control Data

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: July 31, 2014**


**Client :** **Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**

**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352460**

| Parmname | NOM | | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Rad Alpha Spec** | | | | | | | | | | | |
| Batch 1402588 | | | | | | | | | | | |
| QC1203125486 352446001 DUP | | | | | | | | | | | |
| Uranium-233/234 | | | 1.54 | | 1.69 | pCi/g | 0.271 | | (0-1) | JXD2 | 07/26/1417:52 |
| | | TPU: | +/-0.134 | | +/-0.138 | | | | | | |
| Uranium-235/236 | | U | 0.0785 | U | 0.0684 | pCi/g | 0.103 | | (0-1) | | |
| | | TPU: | +/-0.0268 | | +/-0.0222 | | | | | | |
| Uranium-238 | | | 1.48 | | 1.55 | pCi/g | 0.134 | | (0-1) | | |
| | | TPU: | +/-0.130 | | +/-0.129 | | | | | | |
| **Uranium-232 Tracer | 4.34 | | 3.53 | | 3.58 | pCi/g | | 82.5 | (50%-105%) | | |
| | | TPU: | +/-0.323 | | +/-0.312 | | | | | | |
| QC1203125487 LCS | | | | | | | | | | | |
| Uranium-233/234 | | | | | 6.22 | pCi/g | | | | JXD2 | 07/26/1417:52 |
| | | TPU: | | | +/-0.554 | | | | | | |
| Uranium-235/236 | | | | U | 0.184 | pCi/g | | | | | |
| | | TPU: | | | +/-0.132 | | | | | | |
| Uranium-238 | 5.75 | | | | 5.56 | pCi/g | | 96.8 | (75%-125%) | | |
| | | TPU: | | | +/-0.511 | | | | | | |
| **Uranium-232 Tracer | 21.7 | | | | 17.6 | pCi/g | | 81.2 | (50%-105%) | | |
| | | TPU: | | | +/-1.57 | | | | | | |
| QC1203125485 MB | | | | | | | | | | | |
| Uranium-233/234 | | | | U | -0.00585 | pCi/g | | | | JXD2 | 07/26/1417:52 |
| | | TPU: | | | +/-0.0117 | | | | | | |
| Uranium-235/236 | | | | U | 0.0108 | pCi/g | | | | | |
| | | TPU: | | | +/-0.0109 | | | | | | |
| Uranium-238 | | | | U | 0.00 | pCi/g | | | | | |
| | | TPU: | | | +/-0.0101 | | | | | | |
| **Uranium-232 Tracer | 2.19 | | | | 1.31 | pCi/g | | 59.6 | (50%-105%) | | |
| | | TPU: | | | +/-0.168 | | | | | | |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

| | |
|---|---|
| ** | Analyte is a Tracer compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| BD | Results are either below the MDC or tracer recovery is low |
| FA | Failed analysis. |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| K | Analyte present. Reported value may be biased high. Actual value is expected to be lower. |
| L | Analyte present. Reported value may be biased low. Actual value is expected to be higher. |

## QC Summary

**Workorder:** **352460**



| Parmname | NOM | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| M | M if above MDC and less than LLD |
| M | REMP Result > MDC/CL and < RDL |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| UI | Gamma Spectroscopy--Uncertain identification |
| UJ | Gamma Spectroscopy--Uncertain identification |
| UL | Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | Other specific qualifiers were required to properly define the results. Consult case narrative. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
** Indicates analyte is a surrogate/tracer compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

COC/Lab Request #: 2014-3701



Client Contact:

Lab Agreement # : 126310011

Project Number :

Analysis Turnaround Time:

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

Site Name: Los Alamos National Laboratory

Rad Screening Info: Yes, Below Background

Lab Reporting Limit Type: Sample Quantitation Limit

Special Instructions:

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 | Metals(W) |
|---|---|---|---|---|---|---|---|
| RE57-14-84178 | Jul 8 2014 | 08:30 | SO | 1 | 1 | 1 | |
| RE57-14-84182 | Jul 8 2014 | 11:45 | SO | 1 | 1 | 1 | |
| RE57-14-84186 | Jul 8 2014 | 09:15 | SO | 1 | 1 | 1 | |
| RE57-14-84179 | Jul 8 2014 | 13:00 | SO | 1 | 1 | 1 | |
| RE57-14-84183 | Jul 8 2014 | 13:20 | SO | 1 | 1 | 1 | |
| RE57-14-84199 | Jul 8 2014 | 13:00 | SO | 1 | | | |
| RE57-14-84180 | Jul 8 2014 | 8:30 | SO | 1 | 1 | 1 | |
| RE57-14-84184 | Jul 8 2014 | 8:55 | SO | 1 | 1 | 1 | |
| RE57-14-84188 | Jul 8 2014 | 11:35 | SO | 1 | 1 | 1 | |
| RE57-14-84181 | Jul 8 2014 | 08:16 | SO | 1 | 1 | 1 | |
| RE57-14-84185 | Jul 8 2014 | 08:31 | SO | 1 | 1 | 1 | |
| RE57-14-84189 | Jul 8 2014 | 11:20 | SO | 1 | 1 | 1 | |
| RE57-14-84196 | Jul 8 2014 | 12:15 | W | | | | 1 |
| RE57-14-84198 | Jul 8 2014 | 08:16 | SO | 1 | | | |
| RE57-14-84194 | Jul 8 2014 | 13:20 | SO | 1 | 1 | 1 | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| | Mcliss. Montz. | 7/9/14 3:00 | | | |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84178 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/8/14 | FIELD MATRIX: | S | ok |
| TIME COLLECTED (HH:MM): | | 0830 | MEDIA: | | Fill |
| PRS ID: | 57-006 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4022 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4022 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 3 ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 4 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

SAMPLE COMMENTS: JJ 7-8-14 ~~6ft~~ grayish-brown fill, moist, no odor

LOCATION COMMENTS: 6-1, 3 & 4 ft

FIELD PARAMETERS:
FIELD SCREENING/MEASUREMENT RESULTS: PID = 0.0 ppm

Alpha 19 dpm

Beta/Gamma 1466 dpm

PID Ambient Reading = 0.0 / 0.0 ppm

COLLECTED BY (PRINT) J. Jordan

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Brapoe<br>(Signature) Brapoe | 07/08/14 1545 | (Printed Name) J. Sherwood<br>(Signature) J. Sherwood | 7/8/14 1545 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84179

**WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/08/14 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 1360 | MEDIA: | | | Fill ~~[illegible]~~ JW 7/08/14 |
| PRS ID: | 57-006 | | ok | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 57-4023 | | OK | FIELD PREP: | NA | | ok |
| LOCATION TYPE: | 57-4023 | | ok | FIELD QC TYPE: | REG | | ok |
| TOP DEPTH: | | | 3 ft | SAMPLE USAGE: | INV | | ok |
| BOTTOM DEPTH: | | | 4 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** Fill, brown, fine-med. grained sandy clay, moist

**LOCATION COMMENTS:** 6-2

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 4 dpm

Beta/Gamma 1603 dpm

PID Ambient / Reading = 0.4 / 0.4 ppm

**COLLECTED BY (PRINT)** Wayne Sanchez

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Judy | 7-8-14 1545 | (Printed Name) D. Sherwood | 7/8/14 1545 |
| (Signature) James Judy | | (Signature) Dan Sherwood | |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84180 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/8/14 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 8:30 | MEDIA: | | Fill |
| PRS ID: | 57-006 | Okay | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4024 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | 57-4024 | OK | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | | 3 ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | | 4 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y 8:30 | N/A |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | ↓ |

SAMPLE COMMENTS: ~~Tough~~ fill / tuff light grey w/ sanidine crystals, lightly welded

7/8/14

LOCATION COMMENTS: 6-3

FIELD PARAMETERS:

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha 29 dpm

Beta/Gamma 1509 dpm

PID Ambient Reading = 0.0 ppm

COLLECTED BY (PRINT) Wayne Sanchez

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Jed | 7-8-14 1545 | (Printed Name) S. Sherwood | 7/8/14 15:48 |
| (Signature) James Jed | | (Signature) Sherwood | |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84181 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/08/14 | FIELD MATRIX: | S | ok |
| TIME COLLECTED (HH:MM): | | 0816 | MEDIA: | | Fill |
| PRS ID: | 57-006 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4025 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4025 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 3 ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 4 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | |

**SAMPLE COMMENTS:** fill, grayish-brown, moist, no HC odor

**LOCATION COMMENTS:** 6-4, 3-4 ft

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:** PID = 0.2 ppm

**Alpha** 4 **dpm** **PID** Ambient Reading = 0.2 **ppm**

**Beta/Gamma** 1591 **dpm** 0.2 PPM

**COLLECTED BY (PRINT)** J. Jordan

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) BRapp (Signature) Brapp | 07/08/14 1545 | (Printed Name) S. Sherwood (Signature) Sherwood | 7/8/14 1545 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84182 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/08/14 | FIELD MATRIX: | S | ~~07/08/14~~ ok Rock |
| TIME COLLECTED (HH:MM): | | 1145 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-006 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4022 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4022 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 8 ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 9 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** tuff, grayish-brown, ~~hard~~ ~~slightly to~~ moderately welded, sl. moist, no HC odor 545 7-8-14

**LOCATION COMMENTS:** 6-1, 8-9 ft

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:** PID = 0.5 ppm

**Alpha** 44 **dpm** **PID** Ambient / Reading = 0.4 / 0.5 **ppm**

**Beta/Gamma** 1603 **dpm**

**COLLECTED BY (PRINT)** Jim Jordan

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Brappe<br>(Signature) Brappe | 07/08/14 1545 | (Printed Name) D. Sherwood<br>(Signature) Dan Sherwood | 7/8/14 1545 |
| **RELINQUISHED BY** | **Date/Time** | **RECEIVED BY** | **Date/Time** |
| (Printed Name)<br>(Signature) | | (Printed Name)<br>(Signature) | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84183 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/08/14 | FIELD MATRIX: | SL | Rock |
| TIME COLLECTED (HH:MM): | | 1320 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-006 | Ok | SAMPLE TECH CODE: | HA | Ok |
| LOCATION ID: | 57-4023 | ok | FIELD PREP: | NA | Ok |
| LOCATION TYPE: | 57-4023 | Ok | FIELD QC TYPE: | REG | Ok |
| TOP DEPTH: | | 5 ft | SAMPLE USAGE: | INV | Ok |
| BOTTOM DEPTH: | | 6 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** tuff, grayish-brown, moderately welded, slightly moist, no HC odor

**LOCATION COMMENTS:** 6-2

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

**Alpha** 19 **dpm** **PID** Ambient / Reading = 0.4 / 0.4 **ppm**

**Beta/Gamma** 1736 **dpm**

**COLLECTED BY (PRINT)** James Jordan

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Jordan | 7-8-14 1545 | S. Sherwood | 7/8/14 1545 |
| **RELINQUISHED BY (Printed Name) (Signature)** | **Date/Time** | **RECEIVED BY (Printed Name) (Signature)** | **Date/Time** |
| | | | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84184

**WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/8/14 | FIELD MATRIX: | S | | ok |
| TIME COLLECTED (HH:MM): | | | 8:55 | MEDIA: | | | fill |
| PRS ID: | 57-006 | | ok | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 57-4024 | | ok | FIELD PREP: | NA | | ok |
| LOCATION TYPE: | 57-4024 | | ok | FIELD QC TYPE: | REG | | ok |
| TOP DEPTH: | | | 5ft | SAMPLE USAGE: | INV | | ok |
| BOTTOM DEPTH: | | | 6ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | NA |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | NA |

**SAMPLE COMMENTS:** Tuff fill

**LOCATION COMMENTS:** C-3

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 14 dpm

Beta/Gamma 1588 dpm

PID Ambient / Reading = 0.0 / 0.0 ppm

**COLLECTED BY (PRINT)** Thomas Sower

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| BNapp BNapp | 07/08/14 1545 | Sherwood Sher Sherwood | 7/8/14 1545 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
| | | | |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84185 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/08/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 0831 | MEDIA: | | Fill |
| PRS ID: | 57-006 | ok | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4025 | ↓ | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | 57-4025 | ↓ | FIELD QC TYPE: | REG | ↓ |
| TOP DEPTH: | | 5 ft | SAMPLE USAGE: | INV | ↓ |
| BOTTOM DEPTH: | | 6 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | ↓ | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | ↓ | |

**SAMPLE COMMENTS:** Fill 5-5.5 ft light grey (tuff) / slightly red to light brow (Fill)
Tuff 5.5-6.0 ft

**LOCATION COMMENTS:** 6-4

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 39 dpm PID Ambient Reading = 0.0 / 0.0 ppm
Beta/Gamma 1500 dpm

**COLLECTED BY (PRINT)** M. Shendo

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Bapple (Signature) Bapple | 07/08/14 1545 | (Printed Name) S. Sherwood (Signature) Sheri Sherwood | 7/8/14 1545 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84186 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/08/14 | FIELD MATRIX: | S | | ok |
| TIME COLLECTED (HH:MM): | | | 0915 | MEDIA: | | | Fill |
| PRS ID: | 57-006 | | ok | SAMPLE TECH CODE: | HA | | ok |
| LOCATION ID: | 57-4022 | | ok | FIELD PREP: | NA | | ok |
| LOCATION TYPE: | 57-4022 | | ok | FIELD QC TYPE: | REG | | ok |
| TOP DEPTH: | | | 5 ft | SAMPLE USAGE: | INV | | ok |
| BOTTOM DEPTH: | | | 6 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** fill, grayish-brown w/ tuff, moist, no HC odor

**LOCATION COMMENTS:** 6-1, 5 to 6 ft

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:** PID = 0.1 ppm

**Alpha** 29 **dpm**

**Beta/Gamma** 1488 **dpm**

**PID** Ambient / Reading = 0.1 / 0.1 **ppm**

**COLLECTED BY (PRINT)** J Jordan

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) B Rappe<br>(Signature) Bonafape | 07/08/14 1545 | (Printed Name) R. Sherwood<br>(Signature) Sherwood | 7/8/14 1545 |
| RELINQUISHED BY<br>(Printed Name)<br>(Signature) | Date/Time | RECEIVED BY<br>(Printed Name)<br>(Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84188 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/8/14 | FIELD MATRIX: | S | ~~OK~~ RQCK |
| TIME COLLECTED (HH:MM): | | 11:35 | MEDIA: | | Qbt3 |
| PRS ID: | 57-006 | OK | SAMPLE TECH CODE: | HA | OK |
| LOCATION ID: | 57-4024 | OK | FIELD PREP: | NA | OK |
| LOCATION TYPE: | 57-4024 | OK | FIELD QC TYPE: | REG | OK |
| TOP DEPTH: | | 8ft | SAMPLE USAGE: | INV | OK |
| BOTTOM DEPTH: | | 9ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | ↓ |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | ↓ |

**SAMPLE COMMENTS:** tuff, grayish-brown, moderately welded, slightly moist no HC odor

**LOCATION COMMENTS:** 6-3, 8 to 9 ft

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 19 dpm

Beta/Gamma 1651 dpm

PID Ambient / Reading = 0.4 / 0.4 ppm

**COLLECTED BY (PRINT)** Thomas Sowa

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Brapple (Signature) Brapple | 07/08/14 1545 | (Printed Name) D. Sherwood (Signature) Sherwood | 7/8/14 1545 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84189

**WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/08/14 | FIELD MATRIX: | S | ~~ok~~ 07/08/14 Rock |
| TIME COLLECTED (HH:MM): | | 1120 | MEDIA: | | Qbt3 |
| PRS ID: | 57-006 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | 57-4025 | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | 57-4025 | ok | FIELD QC TYPE: | REG | ok |
| TOP DEPTH: | | 8 ft | SAMPLE USAGE: | INV | ok |
| BOTTOM DEPTH: | | 9 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** tuff, grayish-brown, moderately welded, sl. moist, no HC odor

**LOCATION COMMENTS:** 6-4, 8 to 9 ft

**FIELD PARAMETERS:**

**FIELD SCREENING/MEASUREMENT RESULTS:**

**Alpha** 24 **dpm**

**Beta/Gamma** 1524 **dpm**

**PID** Ambient / Reading = ~~0.2~~ JLT 7-8-14 0.4 / 0.4 **ppm**

**COLLECTED BY (PRINT)** M. Shendo

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) James Jordan (Signature) | 7-8-14 1545 | (Printed Name) S. Sherwood (Signature) | 7/8/14 15:45 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84194 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 7/08/14 | FIELD MATRIX: | JW ~~8~~ 7-8-14 | Rock |
| TIME COLLECTED (HH:MM): | | 1320 | MEDIA: | | Qbt 3 |
| PRS ID: | 57-006 | ok | SAMPLE TECH CODE: | HA | ok |
| LOCATION ID: | UNK | ok | FIELD PREP: | NA | ok |
| LOCATION TYPE: | | ok | FIELD QC TYPE: | FD | ok |
| TOP DEPTH: | | 5 ft | SAMPLE USAGE: | QC | ok |
| BOTTOM DEPTH: | | 6 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |
| | 8270C | 250 ML AMBER GLASS | 1 | ICE | Y | |
| | Met+ISOU+TCN+NO3+CLO4 | 1 LITER POLY | 1 | ICE | Y | |

**SAMPLE COMMENTS:** tuff, grayish brown, moderately welded, slightly moist, no HC odor

**LOCATION COMMENTS:** 6-2 QC of RE57-14-84183

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha 9 dpm PID Ambient / Reading = 0.4 / 0.4 ppm

Beta/Gamma 1648 dpm

**COLLECTED BY (PRINT)** Kyle Paffett

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Jordan / James Jordan | 7-8-14 1545 | S. Sherwood / Sheri Sherwood | 7/8/14 1545 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757

**EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84196

**WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 7/08/14 | FIELD MATRIX: | W | | ok |
| TIME COLLECTED (HH:MM): | | | 1215 | MEDIA: | | | NA |
| PRS ID: | 57-006 | | | SAMPLE TECH CODE: | DC | | ok |
| LOCATION ID: | UNK | | 57-4025 | FIELD PREP: | UF | | ok |
| LOCATION TYPE: | | | 57-4025 | FIELD QC TYPE: | FR | | ok |
| TOP DEPTH: | | | 8 ft | SAMPLE USAGE: | QC | | ok |
| BOTTOM DEPTH: | | | 9 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | Metals(W) | 1 LITER POLY | 1 | HNO3 | Y | |

**SAMPLE COMMENTS:** field rinseate from hand auger bucket, soil mixing bowl and mixing spoon

**LOCATION COMMENTS:** 6-4

**FIELD PARAMETERS:** NA

**COLLECTED BY (PRINT)** James Jordan

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Jordan / James Jordan | 7-8-14 1545 | Sherwood / Sherwood | 7-8-14 1545 |
| **RELINQUISHED BY (Printed Name) (Signature)** | **Date/Time** | **RECEIVED BY (Printed Name) (Signature)** | **Date/Time** |
| | | | |

Report Date 07/08/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84198 **WORK ORDER:**

| | | AS PLANNED | AS COLLECTED | | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | | 07/08/2014 | FIELD MATRIX: | S | | OK |
| TIME COLLECTED (HH:MM): | | | 0816 | MEDIA: | | | Sand |
| PRS ID: | 57-006 | | OK | SAMPLE TECH CODE: | DC | | OK |
| LOCATION ID: | UNK | | 57-4025 | FIELD PREP: | NA | | |
| LOCATION TYPE: | | | 57-4025 | FIELD QC TYPE: | FTB | | |
| TOP DEPTH: | | | 3 ft | SAMPLE USAGE: | QC | | |
| BOTTOM DEPTH: | | | 4 ft | EXCAVATED: | | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | NA |

**SAMPLE COMMENTS:** QC of RE57-14-84181

**LOCATION COMMENTS:** 6-4

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha NA dpm PID Ambient Reading = NA ppm

Beta/Gamma NA dpm

**COLLECTED BY (PRINT)** J. Jordan

| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |
|---|---|---|---|
| James Jordan | 1545 | S. Sherwood | 7/8/14 15:45 |
| RELINQUISHED BY (Printed Name) (Signature) | Date/Time | RECEIVED BY (Printed Name) (Signature) | Date/Time |

Report Date 06/26/2014

# SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

**EVENT ID:** 5757 **EVENT NAME:** TA-57 Fenton Hill Soil Sampling - AOC 57-006

**SAMPLE ID:** RE57-14-84199 **WORK ORDER:**

| | AS PLANNED | AS COLLECTED | | AS PLANNED | AS COLLECTED |
|---|---|---|---|---|---|
| DATE COLLECTED (MM/DD/YYYY): | | 07/08/2014 | FIELD MATRIX: | S | OK |
| TIME COLLECTED (HH:MM): | | 1300 | MEDIA: | | Sand |
| PRS ID: | 57-006 | OK | SAMPLE TECH CODE: | DC | OK |
| LOCATION ID: | UNK | 57-4023 | FIELD PREP: | NA | ↓ |
| LOCATION TYPE: | | 57-4023 | FIELD QC TYPE: | FTB | ↓ |
| TOP DEPTH: | | 3 ft | SAMPLE USAGE: | QC | ↓ |
| BOTTOM DEPTH: | | 4 ft | EXCAVATED: | | YES / NO / NA |

| PRIORITY | ORDER | CONTAINER | # | PRESERVATIVE | COLLECTED Y/N | SPECIAL INSTRUCTIONS |
|---|---|---|---|---|---|---|
| | 8260B | 125 ML SEPTUM AMBER GLASS | 1 | ICE | Y | |

**SAMPLE COMMENTS:** QC of RE57-14-84179

**LOCATION COMMENTS:** 6-2

**FIELD PARAMETERS:**
**FIELD SCREENING/MEASUREMENT RESULTS:**

Alpha NA dpm PID Ambient Reading = NA ppm

Beta/Gamma NA dpm

**COLLECTED BY (PRINT)** Wayne Sanchez

| RELINQUISHED BY | Date/Time | RECEIVED BY | Date/Time |
|---|---|---|---|
| (Printed Name) Porappe<br>(Signature) Porappe | 07/08/14 1545 | (Printed Name) S. Sherwood<br>(Signature) Sher Sherwood | 7/8/14 1545 |
| **RELINQUISHED BY** | **Date/Time** | **RECEIVED BY** | **Date/Time** |
| (Printed Name)<br>(Signature) | | (Printed Name)<br>(Signature) | |

Report Date 06/26/2014

# DATA VALIDATION REPORT

Chain Of Custody No. 2014-3701

1. Distribution Of Samples In EDD.

| SDG | Analytical Method | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks |
|---|---|---|---|---|---|---|
| 352306 | EPA:245.2 | | | | | |
| 352306 | EPA:300.0 | 11 | 1 | | | |
| 352306 | HASL-300:ISOU | 11 | 1 | | | |
| 352306 | SW-846:6010C | 11 | 1 | | | |
| 352306 | SW-846:6020 | 11 | 1 | | | |
| 352306 | SW-846:6850 | 11 | 1 | | | |
| 352306 | SW-846:7471A | 11 | 1 | | | |
| 352306 | SW-846:8260B | 11 | 1 | 2 | | |
| 352306 | SW-846:8270D | 11 | 1 | | | |
| 352306 | SW-846:9012A | 11 | 1 | | | |

| SDG | Analytical Method | Analysis Lot ID | Prep Lot ID | Regular Samples | Field Duplicates | Trip Blanks | Field Blanks | Equipment Blanks | Method Blanks | Matrix Spikes | Matrix Spike Dups | Analytical Spikes | Post-Digestion Spikes | Lab Control Samples | Lab Control Sample Dups | Blank Spike | Blank Spike Dups | Lab Duplicates | Storage Blanks | Preparation Blanks | Reagent Blanks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 352306 | EPA:245.2 | 1404427 | 1404425 | | | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352306 | EPA:300.0 | 1403032 | 1403027 | 11 | 1 | | | | 1 | | | | | 1 | | | | 2 | | | |
| 352306 | HASL-300:ISOU | 1401981 | 1401981 | 11 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352306 | SW-846:6010C | 1401945 | 1401943 | | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352306 | SW-846:6010C | 1401948 | 1401947 | 11 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352306 | SW-846:6020 | 1401959 | 1401958 | | | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352306 | SW-846:6020 | 1401963 | 1401961 | 11 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352306 | SW-846:6020 | 1410027 | 1410025 | 11 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352306 | SW-846:6850 | 1402579 | 1402578 | 11 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352306 | SW-846:7471A | 1404938 | 1404933 | 11 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |
| 352306 | SW-846:8260B | 1407703 | 1407702 | 11 | 1 | 2 | | | 1 | | | | | 2 | | | | | | | |
| 352306 | SW-846:8270D | 1402564 | 1402563 | 11 | 1 | | | | 1 | | | | | 1 | | | | | | | |
| 352306 | SW-846:9012A | 1402234 | 1402233 | 11 | 1 | | | | 1 | | | | | 1 | | | | 1 | | | |

# DATA VALIDATION REPORT

2. Distribution Of Analytes In EDD.

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| EPA:245.2 | INORGANIC | LCS | 1203129978 | LCS | 0 | 0 | 1 | 0 |
| EPA:245.2 | INORGANIC | MB | 1203129977 | MB | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84196 | 352306013 | FR | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | RE57-14-84197 | 1203129979 | DUP | 1 | 0 | 0 | 0 |
| EPA:245.2 | INORGANIC | WT_IPC-14-55927 | 1203129982 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | LCS | 1203126595 | LCS | 0 | 0 | 1 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | MB | 1203126590 | MB | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84178 | 352306001 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84179 | 1203126592 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84179 | 352306004 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84180 | 352306007 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84181 | 352306010 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84182 | 1203126591 | DUP | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84182 | 352306002 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84183 | 352306005 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84184 | 352306008 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84185 | 352306011 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84186 | 352306003 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84188 | 352306009 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84189 | 352306012 | REG | 1 | 0 | 0 | 0 |
| EPA:300.0 | GENERAL CHEMISTRY | RE57-14-84194 | 352306015 | FD | 1 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | LCS | 1203123983 | LCS | 0 | 0 | 1 | 0 |
| HASL-300:ISOU | RAD | MB | 1203123981 | MB | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84178 | 1203123982 | DUP | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84178 | 352306001 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84179 | 352306004 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84180 | 352306007 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84181 | 352306010 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84182 | 352306002 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84183 | 352306005 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84184 | 352306008 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84185 | 352306011 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84186 | 352306003 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84188 | 352306009 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84189 | 352306012 | REG | 3 | 0 | 0 | 0 |
| HASL-300:ISOU | RAD | RE57-14-84194 | 352306015 | FD | 3 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203123914 | LCS | 0 | 0 | 13 | 0 |
| SW-846:6010C | INORGANIC | LCS | 1203123920 | LCS | 0 | 0 | 17 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:6010C | INORGANIC | MB | 1203123913 | MB | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | MB | 1203123919 | MB | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84178 | 1203123921 | DUP | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84178 | 352306001 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84179 | 352306004 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84180 | 352306007 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84181 | 352306010 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84182 | 352306002 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84183 | 352306005 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84184 | 352306008 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84185 | 352306011 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84186 | 352306003 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84188 | 352306009 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84189 | 352306012 | REG | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84194 | 352306015 | FD | 17 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84196 | 1203123915 | DUP | 13 | 0 | 0 | 0 |
| SW-846:6010C | INORGANIC | RE57-14-84196 | 352306013 | FR | 13 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203123936 | LCS | 0 | 0 | 9 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203123941 | LCS | 0 | 0 | 4 | 0 |
| SW-846:6020 | INORGANIC | LCS | 1203144440 | LCS | 0 | 0 | 1 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203123935 | MB | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203123940 | MB | 4 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | MB | 1203144439 | MB | 1 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84178 | 1203123942 | DUP | 4 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84178 | 1203144441 | DUP | 1 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84178 | 352306001 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84179 | 352306004 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84180 | 352306007 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84181 | 352306010 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84182 | 352306002 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84183 | 352306005 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84184 | 352306008 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84185 | 352306011 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84186 | 352306003 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84188 | 352306009 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84189 | 352306012 | REG | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84194 | 352306015 | FD | 5 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84196 | 1203123937 | DUP | 9 | 0 | 0 | 0 |
| SW-846:6020 | INORGANIC | RE57-14-84196 | 352306013 | FR | 9 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | LCS | 1203125475 | LCS | 0 | 0 | 1 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:6850 | LCMS/MS PERCHLORATE | MB | 1203125474 | MB | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84178 | 352306001 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84179 | 352306004 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84180 | 352306007 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84181 | 352306010 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84182 | 352306002 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84183 | 352306005 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84184 | 352306008 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84185 | 352306011 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84186 | 352306003 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84188 | 352306009 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84189 | 352306012 | REG | 1 | 0 | 0 | 0 |
| SW-846:6850 | LCMS/MS PERCHLORATE | RE57-14-84194 | 352306015 | FD | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | LCS | 1203131319 | LCS | 0 | 0 | 1 | 0 |
| SW-846:7471A | INORGANIC | MB | 1203131318 | MB | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84178 | 352306001 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84179 | 352306004 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84180 | 352306007 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84181 | 352306010 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84182 | 352306002 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84183 | 352306005 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84184 | 352306008 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84185 | 352306011 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84186 | 352306003 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84188 | 352306009 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84189 | 352306012 | REG | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | RE57-14-84194 | 352306015 | FD | 1 | 0 | 0 | 0 |
| SW-846:7471A | INORGANIC | WST40-14-84681 | 1203131320 | DUP | 1 | 0 | 0 | 0 |
| SW-846:8260B | VOC | LCS | 1203138402 | LCS | 0 | 3 | 61 | 0 |
| SW-846:8260B | VOC | LCS | 1203138403 | LCS | 0 | 3 | 1 | 0 |
| SW-846:8260B | VOC | MB | 1203138397 | MB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84178 | 352306001 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84179 | 352306004 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84180 | 352306007 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84181 | 352306010 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84182 | 352306002 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84183 | 352306005 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84184 | 352306008 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84185 | 352306011 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84186 | 352306003 | REG | 62 | 3 | 0 | 0 |

# DATA VALIDATION REPORT

| Analytical Method | Analytical Method Category | Field Sample ID | Lab Sample ID | Sample Purpose | Target Analytes | Surrogates | Spiked Compounds | TICS |
|---|---|---|---|---|---|---|---|---|
| SW-846:8260B | VOC | RE57-14-84188 | 352306009 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84189 | 352306012 | REG | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84194 | 352306015 | FD | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84198 | 352306014 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8260B | VOC | RE57-14-84199 | 352306006 | FTB | 62 | 3 | 0 | 0 |
| SW-846:8270D | SVOC | LCS | 1203125439 | LCS | 0 | 6 | 69 | 0 |
| SW-846:8270D | SVOC | MB | 1203125438 | MB | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84178 | 352306001 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84179 | 352306004 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84180 | 352306007 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84181 | 352306010 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84182 | 352306002 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84183 | 352306005 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84184 | 352306008 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84185 | 352306011 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84186 | 352306003 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84188 | 352306009 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84189 | 352306012 | REG | 69 | 6 | 0 | 0 |
| SW-846:8270D | SVOC | RE57-14-84194 | 352306015 | FD | 69 | 6 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | LCS | 1203124669 | LCS | 0 | 0 | 1 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | MB | 1203124664 | MB | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84178 | 1203124666 | DUP | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84178 | 352306001 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84179 | 352306004 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84180 | 352306007 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84181 | 352306010 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84182 | 352306002 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84183 | 352306005 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84184 | 352306008 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84185 | 352306011 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84186 | 352306003 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84188 | 352306009 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84189 | 352306012 | REG | 1 | 0 | 0 | 0 |
| SW-846:9012A | GENERAL CHEMISTRY | RE57-14-84194 | 352306015 | FD | 1 | 0 | 0 | 0 |

3. Are any analytes missing?

No.

# DATA VALIDATION REPORT

4. Were any holding times exceeded?

No.

5. Any contaminants in blanks?

| Blank FS ID | Blank Lab Sample | Blank Type | Analytical Method | Sample | Parameter Name | Blank Lab Result | Lab Qualifier | Blank Lab Units | Blank Lab Detection Limit |
|---|---|---|---|---|---|---|---|---|---|
| MB | 1203123913 | METHOD BLANK | SW-846:6010C | W | Potassium | 56.8 | J | ug/L | 150 |
| MB | 1203123935 | METHOD BLANK | SW-846:6020 | W | Nickel | 2.51 | | ug/L | 2.00 |

| Field Sample ID | Blank Lab | Blank Type | Analytical Method | Parameter Name | Blank Lab Result | Blank Lab Units | Lab Result | Lab Qualifier | Lab Detection Limit | Detect Flag | Detect to Nondetect Factor | Detect to Estimated Factor | Use Factors |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84196 | 1203123935 | METHOD BLANK | SW-846:6020 | Nickel | 2.51 | ug/L | 1.71 | J | 2.00 | Y | 5 | 100 | Y |

6. Any surrogate recoveries outside the control limits?

| Field Sample ID | Lab Sample ID | Analytical Method | Parameter Name | Analysis Lot ID | Analysis Date | Spike Recovery | Upper Limit | Lower Limit | Rejection Limit |
|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84183 | 352306005 | SW-846:8260B | Bromofluorobenzene[4-] | 1407703 | 07-30-2014 | 126 | 120 | 80 | 10 |
| RE57-14-84194 | 352306015 | SW-846:8260B | Bromofluorobenzene[4-] | 1407703 | 07-30-2014 | 129 | 120 | 80 | 10 |

7. Any MS/MSD recoveries or RPDs outside the control limits?

No.

# DATA VALIDATION REPORT

8. Any LCS/LCSD or BS/BSD recoveries or RPDs outside the control limits?

| LCS Lab Sample | LCSD Lab | Analytical Method | Parameter Name | Lab Lot ID | Analysis | Sample Matrix | LCS Spike Recovery | LCSD Spike Recovery | Upper Limit | Lower Limit | Upper Rejection Limit | Lower Rejection Limit | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1203125439 | | SW-846:8270D | Dinitrophenol[2,4-] | 1402563 | 07-14-2014 | SD | 21 | | 83 | 22 | | | | |

9. Any Field Duplicate RPDs outside the desired limits?

No.

10. Any Lab Duplicate RPDs outside the desired limits?

| Field Sample ID | Lab Sample ID | LD Lab Sample ID | Analytical Method | Parameter Name | Sample Matrix | Lab Result | LD Lab Result | Lab Units | Detect Flag | LD Detect Flag | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RE57-14-84178 | 352306001 | 1203123921 | SW-846:6010C | Chromium | SO | 8290 | 5640 | ug/kg | Y | Y | 38.0 | 20 |
| RE57-14-84178 | 352306001 | 1203123921 | SW-846:6010C | Cobalt | SO | 1260 | 1820 | ug/kg | Y | Y | 36.5 | 20 |
| RE57-14-84178 | 352306001 | 1203123921 | SW-846:6010C | Manganese | SO | 326000 | 505000 | ug/kg | Y | Y | 43.0 | 20 |
| RE57-14-84178 | 352306001 | 1203123921 | SW-846:6010C | Vanadium | SO | 5630 | 7430 | ug/kg | Y | Y | 27.4 | 20 |

11. Any required reporting limits exceeded?

No.

12. Additional Validator's Comments.

13. Display Flagged Data.

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4022 | 2014-3701 | RE57-14-84178 | REG | INIT | INORGANIC | SW-846:6010C | Chromium | * | J | I10a | Y | 8290 | ug/kg | 8.29 | mg/kg | | | SD | 07/08/2014 | | 1401948 | VAL | Y |

# DATA VALIDATION REPORT

| Location ID | COC Number | Field Sample ID | Sample Purpose | Analysis Type Code | Analytical Suite | Analytical Method | Paramter Name | Lab Qualifier | Validation Qualifier | Validation Reason Codes | Detect Flag | Lab Result | Lab Units | Report Result | Report Units | Report MDA | Report Uncertainty | Lab Matrix | Sample Date | Percent | Analysis Lot ID | Validation Status Code | Use Flag |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-4022 | 2014-3701 | RE57-14-84178 | REG | INIT | INORGANIC | SW-846:6010C | Cobalt | * | J | I10a | Y | 1260 | ug/kg | 1.26 | mg/kg | | | SD | 07/08/2014 | | 1401948 | VAL | Y |
| 57-4022 | 2014-3701 | RE57-14-84178 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 746 | ug/kg | 0.746 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4022 | 2014-3701 | RE57-14-84178 | REG | INIT | INORGANIC | SW-846:6010C | Manganese | * | J | I10a | Y | 326000 | ug/kg | 326 | mg/kg | | | SD | 07/08/2014 | | 1401948 | VAL | Y |
| 57-4022 | 2014-3701 | RE57-14-84178 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0717 | pCi/g | .0717 | pCi/g | 0.0747 | 0.0205 | SD | 07/08/2014 | | 1401981 | VAL | Y |
| 57-4022 | 2014-3701 | RE57-14-84178 | REG | INIT | INORGANIC | SW-846:6010C | Vanadium | * | J | I10a | Y | 5630 | ug/kg | 5.63 | mg/kg | | | SD | 07/08/2014 | | 1401948 | VAL | Y |
| 57-4023 | 2014-3701 | RE57-14-84179 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 753 | ug/kg | 0.753 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4023 | 2014-3701 | RE57-14-84179 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0461 | pCi/g | .0461 | pCi/g | 0.112 | 0.0217 | SD | 07/08/2014 | | 1401981 | VAL | Y |
| 57-4024 | 2014-3701 | RE57-14-84180 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 747 | ug/kg | 0.747 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4024 | 2014-3701 | RE57-14-84180 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0665 | pCi/g | .0665 | pCi/g | 0.0746 | 0.0245 | SD | 07/08/2014 | | 1401981 | VAL | Y |
| 57-4025 | 2014-3701 | RE57-14-84181 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 751 | ug/kg | 0.751 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4022 | 2014-3701 | RE57-14-84182 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 729 | ug/kg | 0.729 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4022 | 2014-3701 | RE57-14-84182 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0555 | pCi/g | .0555 | pCi/g | 0.090 | 0.0205 | SD | 07/08/2014 | | 1401981 | VAL | Y |
| 57-4023 | 2014-3701 | RE57-14-84183 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 734 | ug/kg | 0.734 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4023 | 2014-3701 | RE57-14-84183 | REG | INIT | VOC | SW-846:8260B | Methylene Chloride | HJ | J+ | V3b | Y | 2.80 | ug/kg | 0.0028 | mg/kg | | | SD | 07/08/2014 | | 1407703 | VAL | Y |
| 57-4023 | 2014-3701 | RE57-14-84183 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0708 | pCi/g | .0708 | pCi/g | 0.086 | 0.0221 | SD | 07/08/2014 | | 1401981 | VAL | Y |
| 57-4024 | 2014-3701 | RE57-14-84184 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 710 | ug/kg | 0.71 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4025 | 2014-3701 | RE57-14-84185 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 732 | ug/kg | 0.732 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4025 | 2014-3701 | RE57-14-84185 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | -.0163 | pCi/g | -.0163 | pCi/g | 0.0792 | 0.0249 | SD | 07/08/2014 | | 1401981 | VAL | Y |
| 57-4022 | 2014-3701 | RE57-14-84186 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 767 | ug/kg | 0.767 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4024 | 2014-3701 | RE57-14-84188 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 712 | ug/kg | 0.712 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4025 | 2014-3701 | RE57-14-84189 | REG | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 717 | ug/kg | 0.717 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4025 | 2014-3701 | RE57-14-84189 | REG | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0376 | pCi/g | .0376 | pCi/g | 0.0783 | 0.0194 | SD | 07/08/2014 | | 1401981 | VAL | Y |
| 57-4023 | 2014-3701 | RE57-14-84194 | FD | INIT | SVOC | SW-846:8270D | Dinitrophenol[2,4-] | U | UJ | SV12a | N | 735 | ug/kg | 0.735 | mg/kg | | | SD | 07/08/2014 | | 1402564 | VAL | Y |
| 57-4023 | 2014-3701 | RE57-14-84194 | FD | INIT | VOC | SW-846:8260B | Methylene Chloride | HJ | J+ | V3b | Y | 2.72 | ug/kg | 0.00272 | mg/kg | | | SD | 07/08/2014 | | 1407703 | VAL | Y |
| 57-4023 | 2014-3701 | RE57-14-84194 | FD | INIT | RAD | HASL-300:ISOU | Uranium-235/236 | U | U | R5 | N | .0696 | pCi/g | .0696 | pCi/g | 0.0846 | 0.0217 | SD | 07/08/2014 | | 1401981 | VAL | Y |
| 57-4025 | 2014-3701 | RE57-14-84196 | FR | INIT | INORGANIC | SW-846:6020 | Nickel | J | U | I4 | N | 1.71 | ug/L | 1.71 | ug/L | | | W | 07/08/2014 | | 1401959 | VAL | Y |

| Reason Code | Description |
|---|---|
| I10a | The sample and the duplicate sample results were >=5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples. |
| I4 | the sample result is =<5x the concentration of related analyte in the method blank. |

# DATA VALIDATION REPORT

| Reason Code | Description |
|---|---|
| J_LAB | The analytical laboratory qualified the detected result as estimated (J) because the result was less the PQL but greater than the MDL |
| NQ | The analytical laboratory did not qualifiy the analyte as not detected and/or any other standard qualifire. The analyte is detected in the sample. |
| R5 | Analyte is not detected because the amount reported is less than the MDC. |
| SV12a | The LCS percent recovery was < the LAL but >10%. Follow the external laboratory limits located within the associated data package. |
| U_LAB | The analytical laboratory qualified the analyte as not detected. |
| V3b | The surrogate is less than 10%R and the result is a detect, which indicates the potential for a severely low bias in the results. |

14. Usable Result Count.

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84178 | 57-4022 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84178 | 57-4022 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84178 | 57-4022 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84178 | 57-4022 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84178 | 57-4022 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84178 | 57-4022 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84178 | 57-4022 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84178 | 57-4022 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84178 | 57-4022 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84179 | 57-4023 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84179 | 57-4023 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84179 | 57-4023 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84179 | 57-4023 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84179 | 57-4023 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84179 | 57-4023 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84179 | 57-4023 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84179 | 57-4023 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84179 | 57-4023 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84180 | 57-4024 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84180 | 57-4024 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84180 | 57-4024 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84180 | 57-4024 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84180 | 57-4024 | REG | SW-846:6850 | 0 | 1 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84180 | 57-4024 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84180 | 57-4024 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84180 | 57-4024 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84180 | 57-4024 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84181 | 57-4025 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84181 | 57-4025 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84181 | 57-4025 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84181 | 57-4025 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84181 | 57-4025 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84181 | 57-4025 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84181 | 57-4025 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84181 | 57-4025 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84181 | 57-4025 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84182 | 57-4022 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84182 | 57-4022 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84182 | 57-4022 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84182 | 57-4022 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84182 | 57-4022 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84182 | 57-4022 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84182 | 57-4022 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84182 | 57-4022 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84182 | 57-4022 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84183 | 57-4023 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84183 | 57-4023 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84183 | 57-4023 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84183 | 57-4023 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84183 | 57-4023 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84183 | 57-4023 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84183 | 57-4023 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84183 | 57-4023 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84183 | 57-4023 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84184 | 57-4024 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84184 | 57-4024 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84184 | 57-4024 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84184 | 57-4024 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84184 | 57-4024 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84184 | 57-4024 | REG | SW-846:7471A | 0 | 1 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84184 | 57-4024 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84184 | 57-4024 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84184 | 57-4024 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84185 | 57-4025 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84185 | 57-4025 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84185 | 57-4025 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84185 | 57-4025 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84185 | 57-4025 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84185 | 57-4025 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84185 | 57-4025 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84185 | 57-4025 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84185 | 57-4025 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84186 | 57-4022 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84186 | 57-4022 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84186 | 57-4022 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84186 | 57-4022 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84186 | 57-4022 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84186 | 57-4022 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84186 | 57-4022 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84186 | 57-4022 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84186 | 57-4022 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84188 | 57-4024 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84188 | 57-4024 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84188 | 57-4024 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84188 | 57-4024 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84188 | 57-4024 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84188 | 57-4024 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84188 | 57-4024 | REG | SW-846:8260B | 0 | 62 |
| RE57-14-84188 | 57-4024 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84188 | 57-4024 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84189 | 57-4025 | REG | EPA:300.0 | 0 | 1 |
| RE57-14-84189 | 57-4025 | REG | HASL-300:ISOU | 0 | 3 |
| RE57-14-84189 | 57-4025 | REG | SW-846:6010C | 0 | 17 |
| RE57-14-84189 | 57-4025 | REG | SW-846:6020 | 0 | 5 |
| RE57-14-84189 | 57-4025 | REG | SW-846:6850 | 0 | 1 |
| RE57-14-84189 | 57-4025 | REG | SW-846:7471A | 0 | 1 |
| RE57-14-84189 | 57-4025 | REG | SW-846:8260B | 0 | 62 |

# DATA VALIDATION REPORT

| Field Sample ID | Location ID | Sample Purpose | Analytical Method | No. Unuseable Records | Total Records |
|---|---|---|---|---|---|
| RE57-14-84189 | 57-4025 | REG | SW-846:8270D | 0 | 69 |
| RE57-14-84189 | 57-4025 | REG | SW-846:9012A | 0 | 1 |
| RE57-14-84194 | 57-4023 | FD | EPA:300.0 | 0 | 1 |
| RE57-14-84194 | 57-4023 | FD | HASL-300:ISOU | 0 | 3 |
| RE57-14-84194 | 57-4023 | FD | SW-846:6010C | 0 | 17 |
| RE57-14-84194 | 57-4023 | FD | SW-846:6020 | 0 | 5 |
| RE57-14-84194 | 57-4023 | FD | SW-846:6850 | 0 | 1 |
| RE57-14-84194 | 57-4023 | FD | SW-846:7471A | 0 | 1 |
| RE57-14-84194 | 57-4023 | FD | SW-846:8260B | 0 | 62 |
| RE57-14-84194 | 57-4023 | FD | SW-846:8270D | 0 | 69 |
| RE57-14-84194 | 57-4023 | FD | SW-846:9012A | 0 | 1 |
| RE57-14-84196 | 57-4025 | FR | EPA:245.2 | 0 | 1 |
| RE57-14-84196 | 57-4025 | FR | SW-846:6010C | 0 | 13 |
| RE57-14-84196 | 57-4025 | FR | SW-846:6020 | 0 | 9 |
| RE57-14-84198 | 57-4025 | FTB | SW-846:8260B | 0 | 62 |
| RE57-14-84199 | 57-4023 | FTB | SW-846:8260B | 0 | 62 |

GEL Laboratories LLC
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August 04, 2014

Mr. Keith Greene
Los Alamos National Laboratory
TA-03, SM271, Drop Pt. 02U, Rm111
Los Alamos, New Mexico 87545

Re: LANL ER
Work Order: 352306
SDG: 2014-3701

Dear Mr. Greene:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on July 10, 2014, and analyzed for GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4485.

Sincerely,

Hope Taylor for
Valerie Davis
Project Manager

Chain of Custody: 2014-3701
Enclosures

**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Work Order #: 352306**
**SDG: 2014-3701**

Table of Contents

Case Narrative.....1

Chain of Custody and Supporting Documentation.....5

Data Review Qualifier Flag Definition Sheet.....10

Volatile Analysis.....13

Case Narrative.....14

Sample Data Summary.....20

Quality Control Summary.....49

Quality Control Data.....64

Miscellaneous.....79

Semi-Volatile Analysis.....81

Case Narrative.....82

Sample Data Summary.....88

Quality Control Summary.....125

Quality Control Data.....140

Miscellaneous.....150

Perchlorates by LCMSMS Analysis.....152

Case Narrative.....153

Sample Data Summary.....159

Quality Control Summary.....172

Quality Control Data.....175

Metals Analysis.....181
Case Narrative.....182
Sample Data Summary.....188
Quality Control Summary.....204
Miscellaneous.....237
General Chem Analysis.....240
Case Narrative.....241
Sample Data Summary.....249
Quality Control Summary.....263
Radiological Analysis.....266
Sample Data Summary.....272
Quality Control Data.....285

# Case Narrative

**Case Narrative for**
**ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)**
**LANL ER**
**Workorder #: 352306**
**SDG # : 2014-3701**

**August 04, 2014**

**Laboratory Identification:**

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

**Summary**

**Sample receipt** The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on July 10, 2014 for analysis. The samples were delivered with proper chain of custody documentation and signatures. The samples were screened according to GEL Standard Operating Procedure. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C). Shipping container temperatures were checked, documented, and within specifications. There are no additional comments concerning sample receipt.

**Sample Identification** The laboratory received the following samples:

| Laboratory ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306006 | RE57-14-84199 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306013 | RE57-14-84196 |
| 352306014 | RE57-14-84198 |
| 352306015 | RE57-14-84194 |

**Case Narrative**

Sample analyses were conducted using methodology as outlined in GEL Laboratories, LLC (GEL) Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

**Data Package**

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: GC/MS Semivolatile, GC/MS Volatile, General Chemistry, Metals, Perchlorates by LCMSMS and Radiochemistry.

I certify that this data report is in compliance with the terms and conditions of the subcontract and task order, both technically and for completeness, for other than the conditions detailed in the attached case narrative.

Hope Taylor for
Valerie Davis
Project Manager

**List of current GEL Certifications as of 04 August 2014**

| State | Certification |
|---|---|
| Alaska | UST−110 |
| Arkansas | 88−0651 |
| CLIA | 42D0904046 |
| California NELAP | 01151CA |
| Colorado | SC00012 |
| Connecticut | PH−0169 |
| Delaware | SC000122013−10 |
| DoD ELAP/ ISO17025 A2LA | 2567.01 |
| Florida NELAP | E87156 |
| Foreign Soils Permit | P330−12−00283, P330−12−00284 |
| Georgia | SC00012 |
| Georgia SDWA | 967 |
| Hawaii | SC000122013−10 |
| Idaho Chemistry | SC00012 |
| Idaho Radiochemistry | SC00012 |
| Illinois NELAP | 200029 |
| Indiana | C−SC−01 |
| Kansas NELAP | E−10332 |
| Kentucky | 90129 |
| Louisiana NELAP | 03046 (AI33904) |
| Louisiana SDWA | LA130005 |
| Maryland | 270 |
| Massachusetts | M−SC012 |
| Michigan | 9976 |
| Mississippi | SC000122013−10 |
| Nebraska | NE−OS−26−13 |
| Nevada | SC000122014−1 |
| New Hampshire NELAP | 2054 |
| New Jersey NELAP | SC002 |
| New Mexico | SC00012 |
| New York NELAP | 11501 |
| North Carolina | 233 |
| North Carolina SDWA | 45709 |
| Oklahoma | 9904 |
| Pennsylvania NELAP | 68−00485 |
| Plant Material Permit | PDEP−12−00260 |
| South Carolina Chemistry | 10120001 |
| South Carolina GVL | 23611001 |
| South Carolina Radiochemi | 10120002 |
| Tennessee | TN 02934 |
| Texas NELAP | T104704235−14−9 |
| Utah NELAP | SC000122014−14 |
| Vermont | VT87156 |
| Virginia NELAP | 460202 |
| Washington | C780−12 |
| Wisconsin | 999887790 |

# Chain of Custody and Supporting Documentation

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd
Charleston SC 29407

# Chain of Custody/Analysis Request

352306

**COC/Lab Request #:** 2014-3701

Page 1 of 1

**Client Contact:**

**Lab Agreement # :** 126310011

**Project Number :**

**Analysis Turnaround Time:**

24 Hour - ☐ Other - ☐
7 Day - ☐
14 Day - ☐
21 Day - ☐
28 Day - ☒

**Site Name:** Los Alamos National Laboratory

**Rad Screening Info:** Yes, Below Background

**Lab Reporting Limit Type:** Sample Quantitation Limit

**Special Instructions:**

| Field Sample ID | Sample Date | Sample Time | Sample Matrix | 8260B | 8270C | Met+ISOU+TCN+NO3+CLO4 | Metals(W) |
|---|---|---|---|---|---|---|---|
| RE57-14-84178 | Jul 8 2014 | 08:30 | SO | 1 | 1 | 1 | |
| RE57-14-84182 | Jul 8 2014 | 11:45 | SO | 1 | 1 | 1 | |
| RE57-14-84186 | Jul 8 2014 | 09:15 | SO | 1 | 1 | 1 | |
| RE57-14-84179 | Jul 8 2014 | 13:00 | SO | 1 | 1 | 1 | |
| RE57-14-84183 | Jul 8 2014 | 13:20 | SO | 1 | 1 | 1 | |
| RE57-14-84199 | Jul 8 2014 | 13:00 | SO | 1 | | | |
| RE57-14-84180 | Jul 8 2014 | 8:30 | SO | 1 | 1 | 1 | |
| RE57-14-84184 | Jul 8 2014 | 8:55 | SO | 1 | 1 | 1 | |
| RE57-14-84188 | Jul 8 2014 | 11:35 | SO | 1 | 1 | 1 | |
| RE57-14-84181 | Jul 8 2014 | 08:16 | SO | 1 | 1 | 1 | |
| RE57-14-84185 | Jul 8 2014 | 08:31 | SO | 1 | 1 | 1 | |
| RE57-14-84189 | Jul 8 2014 | 11:20 | SO | 1 | 1 | 1 | |
| RE57-14-84196 | Jul 8 2014 | 12:15 | W | | | | 1 |
| RE57-14-84198 | Jul 8 2014 | 08:16 | SO | 1 | | | |
| RE57-14-84194 | Jul 8 2014 | 13:20 | SO | 1 | 1 | 1 | |

Special Instructions:

| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | Melissa Montoya | 7/9/14 3:00 | P. Nient | Patricia Dent | 7-10-14 0845 |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |
| Relinquished by: | Print Name: | Date/Time: | Received by: | Print Name: | Date/Time: |

GEL Laboratories LLC

# SAMPLE RECEIPT & REVIEW FORM

| | |
|---|---|
| Client: LANL | SDG/AR/COC/Work Order: 352306 |
| Received By: P. Valent | Date Received: 7-10-14 |

| Suspected Hazard Information | Yes | No | *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation. |
|---|---|---|---|
| COC/Samples marked as radioactive? | | X | Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0CPM |
| Classified Radioactive II or III by RSO? | | X | If yes, Were swipes taken of sample contatiners < action levels? |
| COC/Samples marked containing PCBs? | | X | |
| Package, COC, and/or Samples marked as beryllium or asbestos containing? | | X | If yes, samples are to be segregeated as Safety Controlled Samples, and opened by the GEL Safety Group. |
| Shipped as a DOT Hazardous? | | X | Hazard Class Shipped: UN#: |
| Samples identified as Foreign Soil? | | X | |

| | Sample Receipt Criteria | Yes | NA | No | Comments/Qualifiers (Required for Non-Conforming Items) |
|---|---|---|---|---|---|
| 1 | Shipping containers received intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 2 | Samples requiring cold preservation within (0 ≤ 6 deg. C)?* | X | | | Preservation Method: Ice bags Blue ice Dry ice None Other (describe) 2.3c *all temperatures are recorded in Celsius |
| 2a | Daily check performed and passed on IR temperature gun? | X | | | Temperature Device Serial #: Secondary Temperature Device Serial # (If Applicable): 130462966 |
| 3 | Chain of custody documents included with shipment? | X | | | |
| 4 | Sample containers intact and sealed? | X | | | Circle Applicable: Seals broken Damaged container Leaking container Other (describe) |
| 5 | Samples requiring chemical preservation at proper pH? | X | | | Sample ID's, containers affected and observed pH: If Preservation added, Lot#: |
| 6 | VOA vials free of headspace (defined as < 6mm bubble)? | X | | | Sample ID's and containers affected: |
| 7 | Are Encore containers present? | | | X | (If yes, immediately deliver to Volatiles laboratory) |
| 8 | Samples received within holding time? | X | | | ID's and tests affected: |
| 9 | Sample ID's on COC match ID's on bottles? | X | | | Sample ID's and containers affected: |
| 10 | Date & time on COC match date & time on bottles? | X | | | Sample ID's affected: |
| 11 | Number of containers received match number indicated on COC? | X | | | Sample ID's affected: |
| 12 | Are sample containers identifiable as GEL provided? | | | X | |
| 13 | COC form is properly signed in relinquished/received sections? | X | | | |
| 14 | Carrier and tracking number. | | | | Circle Applicable: FedEx Air FedEx Ground UPS Field Services Courier Other<br>5908 1777 2590<br>5908 1777 2604 } 2<br>5908 1777 2589 - 3c |

Comments (Use Continuation Form if needed):

PM (or PMA) review: Initials MD Date 7-14-14 Page 1 of 1

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 09JUL14
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

10 VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWKO

2C

FedEx Express

E

J1412140522B1uv

2 of 2

MPS# 0263 5908 1777 2590

Mstr# 5908 1777 2589

0201

THU - 10 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 09JUL14
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: MR1A015AGWK0

3c

521C2/ED4F/6F03

FedEx Express

J412140522 01uv

1 of 2

TRK# 0201 5908 1777 2589

THU - 10 JUL 10:30A
PRIORITY OVERNIGHT

## MASTER ##

XX CHSA

29407
SC-US CHS

Part # 156148-434 RIT2 10/11

ORIGIN ID:SAFA (505) 665-9966
KEITH GREENE
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 09JUL14
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2804

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: WE6L11551000

2c

521C2/ED4F/6F03

FedEx Express

J412140522 01uv

TRK# 0201 5908 1777 2604

THU - 10 JUL 10:30A
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US CHS

# 156148-434 RIT2 10/11

# Data Review Qualifier Flag Definition Sheet

## Data Review Qualifier Definitions

| Qualifier | Explanation |
|---|---|
| * | A quality control analyte recovery is outside of specified acceptance criteria |
| ** | Analyte is a surrogate compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL |
| A | The TIC is a suspected aldol-condensation product |
| B | Target analyte was detected in the associated blank |
| B | Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL |
| BD | Results are either below the MDC or tracer recovery is low |
| C | Analyte has been confirmed by GC/MS analysis |
| D | Results are reported from a diluted aliquot of the sample |
| d | 5-day BOD-The 2:1 depletion requirement was not met for this sample |
| E | Organics-Concentration of the target analyte exceeds the instrument calibration range |
| E | Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria |
| H | Analytical holding time was exceeded |
| h | Preparation or preservation holding time was exceeded |
| J | Value is estimated |
| N | Metals-The Matrix spike sample recovery is not within specified control limits |
| N | Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor |
| N/A | Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more |
| ND | Analyte concentration is not detected above the reporting limit |
| UI | Gamma Spectroscopy-Uncertain identification |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | QC Samples were not spiked with this compound |
| Z | Paint Filter Test-Particulates passed through the filter, however no free liquids were observed. |

P Organics-The concentrations between the primary and confirmation columns/detectors is >40% difference. For HPLC, the difference is >70%.

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

# Volatile Analysis

# Case Narrative

**ChemStation Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3701**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Volatile Organic Compounds (VOC) by Gas Chromatograph/Mass Spectrometer** |
| Analytical Method: | SW846 8260B |
| Prep Method: | SW846 5030 |
| Analytical Batch Number: | 1407703 |
| Prep Batch Number: | 1407702 |

## Sample Analysis

The following client and quality control samples were analyzed to complete this SDG using the methods referenced in the Analysis Information section:

| Sample ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306006 | RE57-14-84199 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306014 | RE57-14-84198 |
| 352306015 | RE57-14-84194 |
| 1203138397 | Method Blank (MB) |
| 1203138398 | 352306001(RE57-14-84178) Post Spike (PS) |
| 1203138399 | 352306001(RE57-14-84178) Post Spike (PS) |
| 1203138400 | 352306001(RE57-14-84178) Post Spike Duplicate (PSD) |
| 1203138401 | 352306001(RE57-14-84178) Post Spike Duplicate (PSD) |
| 1203138402 | Laboratory Control Sample (LCS) |
| 1203138403 | Laboratory Control Sample (LCS) |

NOTE: For volatile organic analyses the matrix spike designations may be indicated as "PS" or "PSD". The "PS" designation (post spike) indicates that the matrix was fortified prior to analysis but after applying any prep factors, such as a dilution. The laboratory considers the MS/MSD and PS/PSD designations interchangeable.

Samples 352306 001, 002, 003, 004, 005, 007, 008, 009, 010, 011, 012 and 015 in this SDG were analyzed on an

"dry weight" basis. Samples 352306 006 and 014 in this SDG were analyzed on a "as received" basis.

**Preparation/Analytical Method Verification**

**SOP Reference**

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-038 REV# 21.

Raw data reports are processed and reviewed by the analyst using the Chemstation software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP) section 19.1.2. False positive analytes are designated on the quantitation report with a 'd' qualifier.

**Calibration Information**

A complete list of the initial calibration data files with the correct dates and times of analysis are shown in the Calibration History report located in the Standard Data section of the data package.

The surrogate compounds were calibrated using a minimum five-point calibration curve. The surrogates were added by the auto sampler at a concentration of 50 ug/L or 20 ug/L for low level analyses. GEL Laboratories LLC will not have surrogate recoveries reported for Dibromofluoromethane. This is due to increased regulations for this analyte and an industry shortage.

**Initial Calibration**

All initial calibration requirements have been met for this sample delivery group (SDG).

**Continuing Calibration Verification Requirements**

All associated calibration verification standard(s) (CCV) met the acceptance criteria.

**Quality Control (QC) Information**

**Blank (MB) Statement**

The blank analyzed with this SDG met the acceptance criteria.

**Surrogate Recoveries**

Surrogate recoveries, in samples 352306005 (RE57-14-84183) and 352306015 (RE57-14-84194), were outside the acceptance limits. Sample re-analysis confirmed matrix interference. See the Data Exception Report in the miscellaneous section of the deliverable.

**Laboratory Control Sample (LCS) Recovery**

The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**

Sample 352306001 (RE57-14-84178) was designated for spike analysis.

**Matrix Spike (PS) Recovery Statement**

The spike recoveries were within the required acceptance limits.

**Matrix Spike Duplicate (PSD) Recovery Statement**

The spike duplicate recoveries were within the required acceptance limits.

**Relative Percent Difference (RPD) Statement**

The RPD between the matrix spike pair 1203138399 (RE57-14-84178) and 1203138401 (RE57-14-84178) were not all within the acceptance limits. See the Data Exception Report in the miscellaneous section of the deliverable.

**Internal Standard (ISTD) Acceptance**

In samples 352306005 (RE57-14-84183) and 352306015 (RE57-14-84194), internal standard responses were outside the required acceptance criteria. Sample re-analysis confirmed matrix interference. See the Data Exception Report in the miscellaneous section of the deliverable.

## Technical Information

### Holding Time Specifications
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration. Samples were not analyzed within the recommended holding. However, the samples were analyzed within two times the holding period. This satisfies the client criteria.

### Sample Preservation and Integrity
All samples met the sample preservation and integrity requirements.

### Sample Dilutions/Methanol Dilutions
The samples in this SDG did not require dilutions.

### Sample Re-extraction/Re-analysis
Samples 352306005 (RE57-14-84183) and 352306015 (RE57-14-84194) were re-analyzed due to unacceptable surrogate or internal standard recoveries in the initial analysis.

## Miscellaneous Information

### Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

### Data Exception (DER) Documentation
The following DER was generated for this SDG: 1320712.

### Manual Integrations
Data files associated with the initial calibration, continuing calibration check, and samples did not require manual integrations.

### TIC Comment
Tentatively identified compounds (TIC) were requested for this sample delivery group/work order. Please note that non-requested target analytes that are reported on the quantitation reports will be present on the Form I. These detected analytes are included in the calibrated method and as a result will be reported on the Sample Data Summary (Form I) or Certificate of Analysis (C of A). TIC data are included on the Sample Data Summary (Form I).

### Additional Comments
Additional comments were not required for this SDG.

### Residual Chlorine
Residual Chlorine was not detected in any of the samples in this SDG.

**System Configuration**

The Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description | P & T Trap |
|---|---|---|---|---|---|
| VOA4.I | Agilent 6890/5973 GC/MS w/ OI 4560/Archon Autosampler | HP6890/HP5973 | DB-624 | J&W, 60m x 0.25mm x 1.4um | Trap 10 |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 − (843) 556−8171 − www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS−LANS−MTOA6−25093−GEL)

Client SDG: 2014−3701  GEL Work Order: 352306

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

H  Analytical holding time was exceeded

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

h  Preparation or preservation holding time was exceeded

DL  Indicates that sample is diluted.
RA  Indicates that sample is re−analyzed without re−extraction.
RE  Indicates that sample is re−extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP−like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Erin Haubert  **Name:** **Erin Haubert**

**Date:** **06 AUG 2014**  **Title:** **Data Validator**

# Sample Data Summary

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306001** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84178** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 14:10** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 12:17** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W311.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.12 | ug/kg | 0.560 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 78-93-3 | 2-Butanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 591-78-6 | 2-Hexanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 67-64-1 | Acetone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 71-43-2 | Benzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-86-1 | Bromobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-97-5 | Bromochloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-27-4 | Bromodichloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-25-2 | Bromoform | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-83-9 | Bromomethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-15-0 | Carbon disulfide | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-90-7 | Chlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-00-3 | Chloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 67-66-3 | Chloroform | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-87-3 | Chloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306001** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84178** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 14:10** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 12:17** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W311.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-95-3 | Dibromomethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 100-41-4 | Ethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-88-4 | Iodomethane | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 98-82-8 | Isopropylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-09-2 | Methylene chloride | HJh | 2.48 | ug/kg | 1.87 | 5.60 |
| 100-42-5 | Styrene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-88-3 | Toluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-01-6 | Trichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 75-01-4 | Vinyl chloride | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.24 | ug/kg | 0.747 | 2.24 |
| 104-51-8 | n-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 103-65-1 | n-Propylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-47-6 | o-Xylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306002** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **8.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84182** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 14:38** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 12:18** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W312.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.09 | ug/kg | 0.547 | 1.09 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 78-93-3 | 2-Butanone | HUh | 5.47 | ug/kg | 1.82 | 5.47 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 591-78-6 | 2-Hexanone | HUh | 5.47 | ug/kg | 1.82 | 5.47 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.47 | ug/kg | 1.82 | 5.47 |
| 67-64-1 | Acetone | HUh | 5.47 | ug/kg | 1.82 | 5.47 |
| 71-43-2 | Benzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 108-86-1 | Bromobenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 74-97-5 | Bromochloromethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-27-4 | Bromodichloromethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-25-2 | Bromoform | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 74-83-9 | Bromomethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-15-0 | Carbon disulfide | HUh | 5.47 | ug/kg | 1.82 | 5.47 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 108-90-7 | Chlorobenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-00-3 | Chloroethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 67-66-3 | Chloroform | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 74-87-3 | Chloromethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306002** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **8.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84182** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 14:38** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 12:18** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W312.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 74-95-3 | Dibromomethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 100-41-4 | Ethylbenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 74-88-4 | Iodomethane | HUh | 5.47 | ug/kg | 1.82 | 5.47 |
| 98-82-8 | Isopropylbenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-09-2 | Methylene chloride | HUh | 5.47 | ug/kg | 1.82 | 5.47 |
| 100-42-5 | Styrene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 108-88-3 | Toluene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 79-01-6 | Trichloroethylene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.47 | ug/kg | 1.82 | 5.47 |
| 75-01-4 | Vinyl chloride | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.19 | ug/kg | 0.730 | 2.19 |
| 104-51-8 | n-Butylbenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 103-65-1 | n-Propylbenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 95-47-6 | o-Xylene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.09 | ug/kg | 0.364 | 1.09 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 09:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306003** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **13.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84186** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 15:06** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 14:20** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W313.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.15 | ug/kg | 0.576 | 1.15 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 78-93-3 | 2-Butanone | HUh | 5.76 | ug/kg | 1.92 | 5.76 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 591-78-6 | 2-Hexanone | HUh | 5.76 | ug/kg | 1.92 | 5.76 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.76 | ug/kg | 1.92 | 5.76 |
| 67-64-1 | Acetone | HUh | 5.76 | ug/kg | 1.92 | 5.76 |
| 71-43-2 | Benzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 108-86-1 | Bromobenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 74-97-5 | Bromochloromethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-27-4 | Bromodichloromethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-25-2 | Bromoform | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 74-83-9 | Bromomethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-15-0 | Carbon disulfide | HUh | 5.76 | ug/kg | 1.92 | 5.76 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 108-90-7 | Chlorobenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-00-3 | Chloroethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 67-66-3 | Chloroform | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 74-87-3 | Chloromethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 09:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306003** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **13.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84186** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 15:06** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 14:20** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W313.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 74-95-3 | Dibromomethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 100-41-4 | Ethylbenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 74-88-4 | Iodomethane | HUh | 5.76 | ug/kg | 1.92 | 5.76 |
| 98-82-8 | Isopropylbenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-09-2 | Methylene chloride | HUh | 5.76 | ug/kg | 1.92 | 5.76 |
| 100-42-5 | Styrene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 108-88-3 | Toluene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 79-01-6 | Trichloroethylene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.76 | ug/kg | 1.92 | 5.76 |
| 75-01-4 | Vinyl chloride | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.30 | ug/kg | 0.769 | 2.30 |
| 104-51-8 | n-Butylbenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 103-65-1 | n-Propylbenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 95-47-6 | o-Xylene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.15 | ug/kg | 0.384 | 1.15 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306004** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84179** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 15:34** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 14:21** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W314.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.13 | ug/kg | 0.565 | 1.13 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 78-93-3 | 2-Butanone | HUh | 5.65 | ug/kg | 1.88 | 5.65 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 591-78-6 | 2-Hexanone | HUh | 5.65 | ug/kg | 1.88 | 5.65 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.65 | ug/kg | 1.88 | 5.65 |
| 67-64-1 | Acetone | HUh | 5.65 | ug/kg | 1.88 | 5.65 |
| 71-43-2 | Benzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 108-86-1 | Bromobenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 74-97-5 | Bromochloromethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-27-4 | Bromodichloromethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-25-2 | Bromoform | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 74-83-9 | Bromomethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-15-0 | Carbon disulfide | HUh | 5.65 | ug/kg | 1.88 | 5.65 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 108-90-7 | Chlorobenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-00-3 | Chloroethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 67-66-3 | Chloroform | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 74-87-3 | Chloromethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306004** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84179** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 15:34** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 14:21** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W314.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 74-95-3 | Dibromomethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 100-41-4 | Ethylbenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 74-88-4 | Iodomethane | HUh | 5.65 | ug/kg | 1.88 | 5.65 |
| 98-82-8 | Isopropylbenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-09-2 | Methylene chloride | HUh | 5.65 | ug/kg | 1.88 | 5.65 |
| 100-42-5 | Styrene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 108-88-3 | Toluene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 79-01-6 | Trichloroethylene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.65 | ug/kg | 1.88 | 5.65 |
| 75-01-4 | Vinyl chloride | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.26 | ug/kg | 0.754 | 2.26 |
| 104-51-8 | n-Butylbenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 103-65-1 | n-Propylbenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 95-47-6 | o-Xylene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.13 | ug/kg | 0.377 | 1.13 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306005** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84183** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 16:02** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 14:22** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W315.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.10 | ug/kg | 0.552 | 1.10 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 78-93-3 | 2-Butanone | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 591-78-6 | 2-Hexanone | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 67-64-1 | Acetone | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 71-43-2 | Benzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 108-86-1 | Bromobenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 74-97-5 | Bromochloromethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-27-4 | Bromodichloromethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-25-2 | Bromoform | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 74-83-9 | Bromomethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-15-0 | Carbon disulfide | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 108-90-7 | Chlorobenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-00-3 | Chloroethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 67-66-3 | Chloroform | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 74-87-3 | Chloromethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306005** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84183** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 16:02** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 14:22** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W315.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 74-95-3 | Dibromomethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 100-41-4 | Ethylbenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 74-88-4 | Iodomethane | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 98-82-8 | Isopropylbenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-09-2 | Methylene chloride | HJh | 2.80 | ug/kg | 1.84 | 5.52 |
| 100-42-5 | Styrene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 108-88-3 | Toluene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 79-01-6 | Trichloroethylene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 75-01-4 | Vinyl chloride | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.21 | ug/kg | 0.736 | 2.21 |
| 104-51-8 | n-Butylbenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 103-65-1 | n-Propylbenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 95-47-6 | o-Xylene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.10 | ug/kg | 0.367 | 1.10 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306006** | **Date Received:** | **07/10/2014 08:45** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84199** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 13:13** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 12:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W309.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306006** | **Date Received:** | **07/10/2014 08:45** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84199** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 13:13** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 12:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W309.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306007** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84180** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 16:30** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 15:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W316.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.12 | ug/kg | 0.561 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 78-93-3 | 2-Butanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 591-78-6 | 2-Hexanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 67-64-1 | Acetone | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 71-43-2 | Benzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-86-1 | Bromobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-97-5 | Bromochloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-27-4 | Bromodichloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-25-2 | Bromoform | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-83-9 | Bromomethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-15-0 | Carbon disulfide | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-90-7 | Chlorobenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-00-3 | Chloroethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 67-66-3 | Chloroform | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-87-3 | Chloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306007** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84180** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 16:30** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 15:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W316.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-95-3 | Dibromomethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 100-41-4 | Ethylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 74-88-4 | Iodomethane | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 98-82-8 | Isopropylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 75-09-2 | Methylene chloride | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 100-42-5 | Styrene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 108-88-3 | Toluene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 79-01-6 | Trichloroethylene | HJh | 0.539 | ug/kg | 0.374 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.61 | ug/kg | 1.87 | 5.61 |
| 75-01-4 | Vinyl chloride | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.24 | ug/kg | 0.748 | 2.24 |
| 104-51-8 | n-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 103-65-1 | n-Propylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 95-47-6 | o-Xylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.374 | 1.12 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306008** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84184** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 16:58** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W317.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.534 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 67-64-1 | Acetone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306008** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84184** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 16:58** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:02** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W317.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 79-01-6 | Trichloroethylene | HJh | 0.726 | ug/kg | 0.355 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.13 | ug/kg | 0.712 | 2.13 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.355 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:35** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306009** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84188** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 17:26** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:45** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W318.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.07 | ug/kg | 0.534 | 1.07 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 78-93-3 | 2-Butanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 591-78-6 | 2-Hexanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 67-64-1 | Acetone | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 71-43-2 | Benzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-86-1 | Bromobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-97-5 | Bromochloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-27-4 | Bromodichloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-25-2 | Bromoform | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-83-9 | Bromomethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-15-0 | Carbon disulfide | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-90-7 | Chlorobenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-00-3 | Chloroethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 67-66-3 | Chloroform | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-87-3 | Chloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:35** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306009** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84188** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 17:26** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:45** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W318.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-95-3 | Dibromomethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 100-41-4 | Ethylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 74-88-4 | Iodomethane | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 98-82-8 | Isopropylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-09-2 | Methylene chloride | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 100-42-5 | Styrene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 108-88-3 | Toluene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 79-01-6 | Trichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.34 | ug/kg | 1.78 | 5.34 |
| 75-01-4 | Vinyl chloride | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.14 | ug/kg | 0.713 | 2.14 |
| 104-51-8 | n-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 103-65-1 | n-Propylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 95-47-6 | o-Xylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.07 | ug/kg | 0.356 | 1.07 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:16** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306010** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84181** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 17:54** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:46** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W319.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.13 | ug/kg | 0.564 | 1.13 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 78-93-3 | 2-Butanone | HUh | 5.64 | ug/kg | 1.88 | 5.64 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 591-78-6 | 2-Hexanone | HUh | 5.64 | ug/kg | 1.88 | 5.64 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.64 | ug/kg | 1.88 | 5.64 |
| 67-64-1 | Acetone | HUh | 5.64 | ug/kg | 1.88 | 5.64 |
| 71-43-2 | Benzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 108-86-1 | Bromobenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 74-97-5 | Bromochloromethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-27-4 | Bromodichloromethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-25-2 | Bromoform | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 74-83-9 | Bromomethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-15-0 | Carbon disulfide | HUh | 5.64 | ug/kg | 1.88 | 5.64 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 108-90-7 | Chlorobenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-00-3 | Chloroethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 67-66-3 | Chloroform | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 74-87-3 | Chloromethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:16** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306010** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84181** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 17:54** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:46** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W319.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 74-95-3 | Dibromomethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 100-41-4 | Ethylbenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 74-88-4 | Iodomethane | HUh | 5.64 | ug/kg | 1.88 | 5.64 |
| 98-82-8 | Isopropylbenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-09-2 | Methylene chloride | HUh | 5.64 | ug/kg | 1.88 | 5.64 |
| 100-42-5 | Styrene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 108-88-3 | Toluene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 79-01-6 | Trichloroethylene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.64 | ug/kg | 1.88 | 5.64 |
| 75-01-4 | Vinyl chloride | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.26 | ug/kg | 0.753 | 2.26 |
| 104-51-8 | n-Butylbenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 103-65-1 | n-Propylbenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 95-47-6 | o-Xylene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.13 | ug/kg | 0.376 | 1.13 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:31** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306011** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84185** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 18:22** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:47** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W320.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.10 | ug/kg | 0.550 | 1.10 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 78-93-3 | 2-Butanone | HUh | 5.50 | ug/kg | 1.83 | 5.50 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 591-78-6 | 2-Hexanone | HUh | 5.50 | ug/kg | 1.83 | 5.50 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.50 | ug/kg | 1.83 | 5.50 |
| 67-64-1 | Acetone | HUh | 5.50 | ug/kg | 1.83 | 5.50 |
| 71-43-2 | Benzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-86-1 | Bromobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-97-5 | Bromochloromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-27-4 | Bromodichloromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-25-2 | Bromoform | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-83-9 | Bromomethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-15-0 | Carbon disulfide | HUh | 5.50 | ug/kg | 1.83 | 5.50 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-90-7 | Chlorobenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-00-3 | Chloroethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 67-66-3 | Chloroform | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-87-3 | Chloromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:31** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306011** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84185** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 18:22** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:47** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W320.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-95-3 | Dibromomethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 100-41-4 | Ethylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 74-88-4 | Iodomethane | HUh | 5.50 | ug/kg | 1.83 | 5.50 |
| 98-82-8 | Isopropylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-09-2 | Methylene chloride | HUh | 5.50 | ug/kg | 1.83 | 5.50 |
| 100-42-5 | Styrene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 108-88-3 | Toluene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 79-01-6 | Trichloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.50 | ug/kg | 1.83 | 5.50 |
| 75-01-4 | Vinyl chloride | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.20 | ug/kg | 0.733 | 2.20 |
| 104-51-8 | n-Butylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 103-65-1 | n-Propylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 95-47-6 | o-Xylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.10 | ug/kg | 0.366 | 1.10 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306012** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **7.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84189** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 18:50** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:48** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W321.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.08 | ug/kg | 0.538 | 1.08 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 78-93-3 | 2-Butanone | HUh | 5.38 | ug/kg | 1.79 | 5.38 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 591-78-6 | 2-Hexanone | HUh | 5.38 | ug/kg | 1.79 | 5.38 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.38 | ug/kg | 1.79 | 5.38 |
| 67-64-1 | Acetone | HUh | 5.38 | ug/kg | 1.79 | 5.38 |
| 71-43-2 | Benzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 108-86-1 | Bromobenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 74-97-5 | Bromochloromethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-27-4 | Bromodichloromethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-25-2 | Bromoform | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 74-83-9 | Bromomethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-15-0 | Carbon disulfide | HUh | 5.38 | ug/kg | 1.79 | 5.38 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 108-90-7 | Chlorobenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-00-3 | Chloroethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 67-66-3 | Chloroform | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 74-87-3 | Chloromethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306012** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **7.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84189** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 18:50** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:48** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W321.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 74-95-3 | Dibromomethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 100-41-4 | Ethylbenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 74-88-4 | Iodomethane | HUh | 5.38 | ug/kg | 1.79 | 5.38 |
| 98-82-8 | Isopropylbenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-09-2 | Methylene chloride | HUh | 5.38 | ug/kg | 1.79 | 5.38 |
| 100-42-5 | Styrene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 108-88-3 | Toluene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 79-01-6 | Trichloroethylene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.38 | ug/kg | 1.79 | 5.38 |
| 75-01-4 | Vinyl chloride | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.15 | ug/kg | 0.718 | 2.15 |
| 104-51-8 | n-Butylbenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 103-65-1 | n-Propylbenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 95-47-6 | o-Xylene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.08 | ug/kg | 0.358 | 1.08 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:16** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306014** | **Date Received:** | **07/10/2014 08:45** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84198** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 13:42** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 12:16** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W310.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:16** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306014** | **Date Received:** | **07/10/2014 08:45** | | |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84198** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 13:42** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 12:16** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W310.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306015** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84194** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 19:19** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:49** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W322.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.10 | ug/kg | 0.552 | 1.10 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 78-93-3 | 2-Butanone | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 591-78-6 | 2-Hexanone | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 67-64-1 | Acetone | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 71-43-2 | Benzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 108-86-1 | Bromobenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 74-97-5 | Bromochloromethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-27-4 | Bromodichloromethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-25-2 | Bromoform | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 74-83-9 | Bromomethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-15-0 | Carbon disulfide | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 108-90-7 | Chlorobenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-00-3 | Chloroethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 67-66-3 | Chloroform | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 74-87-3 | Chloromethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306015** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84194** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 19:19** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:49** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W322.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 74-95-3 | Dibromomethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 100-41-4 | Ethylbenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 74-88-4 | Iodomethane | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 98-82-8 | Isopropylbenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-09-2 | Methylene chloride | HJh | 2.72 | ug/kg | 1.84 | 5.52 |
| 100-42-5 | Styrene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 108-88-3 | Toluene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 79-01-6 | Trichloroethylene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.52 | ug/kg | 1.84 | 5.52 |
| 75-01-4 | Vinyl chloride | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.21 | ug/kg | 0.737 | 2.21 |
| 104-51-8 | n-Butylbenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 103-65-1 | n-Propylbenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 95-47-6 | o-Xylene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.10 | ug/kg | 0.368 | 1.10 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Quality Control Summary

**Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3701**

**Matrix Type: SOLID**

| Sample ID | Client ID | DCED4 %REC | TOL %REC | BFB %REC |
|---|---|---|---|---|
| 1203138402 | LCS for batch 1407702 | 94 | 97 | 98 |
| 1203138403 | LCS for batch 1407702 | 94 | 98 | 99 |
| 1203138397 | MB for batch 1407702 | 104 | 102 | 102 |
| 352306006 | RE57-14-84199 | 109 | 100 | 103 |
| 352306014 | RE57-14-84198 | 106 | 102 | 107 |
| 352306001 | RE57-14-84178 | 109 | 105 | 116 |
| 352306002 | RE57-14-84182 | 108 | 105 | 111 |
| 352306003 | RE57-14-84186 | 111 | 101 | 105 |
| 352306004 | RE57-14-84179 | 108 | 103 | 107 |
| 352306005 | RE57-14-84183 | 106 | 116 | 126 * |
| 352306007 | RE57-14-84180 | 104 | 106 | 119 |
| 352306008 | RE57-14-84184 | 107 | 101 | 108 |
| 352306009 | RE57-14-84188 | 105 | 101 | 115 |
| 352306010 | RE57-14-84181 | 105 | 101 | 108 |
| 352306011 | RE57-14-84185 | 105 | 109 | 118 |
| 352306012 | RE57-14-84189 | 106 | 102 | 103 |
| 352306015 | RE57-14-84194 | 110 | 115 | 129 * |
| 1203138398 | RE57-14-84178PS | 102 | 102 | 108 |
| 1203138400 | RE57-14-84178PSD | 100 | 101 | 110 |
| 1203138399 | RE57-14-84178PS | 99 | 103 | 110 |
| 1203138401 | RE57-14-84178PSD | 101 | 103 | 111 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| DCED4 | = 1,2-Dichloroethane-d4 | (76%-122%) |
| TOL | = Toluene-d8 | (80%-120%) |
| BFB | = Bromofluorobenzene | (80%-120%) |

* Recovery outside Acceptance Limits
\# Column to be used to flag recovery values
D Sample Diluted

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178PS**
**Lab Sample ID** **1203138398**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/30/2014 19:47**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PS | m,p-Xylenes | 100 | 0.00 | HUh | 94.8 | 95 | 62-124 |
| 67-64-1 | PS | Acetone | 250 | 0.00 | HUh | 235 | 94 | 42-147 |
| 74-88-4 | PS | Iodomethane | 250 | 0.00 | HUh | 243 | 97 | 68-121 |
| 75-15-0 | PS | Carbon disulfide | 250 | 0.00 | HUh | 262 | 105 | 64-147 |
| 78-93-3 | PS | 2-Butanone | 250 | 0.00 | HUh | 223 | 89 | 44-145 |
| 108-10-1 | PS | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 238 | 95 | 71-133 |
| 591-78-6 | PS | 2-Hexanone | 250 | 0.00 | HUh | 219 | 88 | 47-147 |
| 75-09-2 | PS | Methylene chloride | 50.0 | 2.21 | HJh | 46.5 | 89 | 68-123 |
| 75-71-8 | PS | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 40.6 | 81 | 46-134 |
| 74-87-3 | PS | Chloromethane | 50.0 | 0.00 | HUh | 42.2 | 84 | 54-139 |
| 75-01-4 | PS | Vinyl chloride | 50.0 | 0.00 | HUh | 48.6 | 97 | 47-141 |
| 74-83-9 | PS | Bromomethane | 50.0 | 0.00 | HUh | 43.0 | 86 | 47-135 |
| 75-00-3 | PS | Chloroethane | 50.0 | 0.00 | HUh | 47.3 | 95 | 52-129 |
| 75-69-4 | PS | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 50.2 | 100 | 61-126 |
| 75-35-4 | PS | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 50.3 | 101 | 67-135 |
| 156-60-5 | PS | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 49.6 | 99 | 67-129 |
| 75-34-3 | PS | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 50.9 | 102 | 70-125 |
| 156-59-2 | PS | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 49.9 | 100 | 70-125 |
| 594-20-7 | PS | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 50.3 | 101 | 67-129 |
| 74-97-5 | PS | Bromochloromethane | 50.0 | 0.00 | HUh | 51.3 | 103 | 73-123 |
| 67-66-3 | PS | Chloroform | 50.0 | 0.00 | HUh | 51.6 | 103 | 70-123 |
| 71-55-6 | PS | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 50.8 | 102 | 71-128 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178PS**
**Lab Sample ID** **1203138398**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/30/2014 19:47**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PS | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 48.8 | 98 | 68-129 |
| 56-23-5 | PS | Carbon tetrachloride | 50.0 | 0.00 | HUh | 52.8 | 106 | 70-129 |
| 107-06-2 | PS | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 49.7 | 99 | 67-119 |
| 71-43-2 | PS | Benzene | 50.0 | 0.00 | HUh | 48.5 | 97 | 67-124 |
| 79-01-6 | PS | Trichloroethylene | 50.0 | 0.00 | HUh | 49.1 | 98 | 68-130 |
| 78-87-5 | PS | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 49.4 | 99 | 69-122 |
| 74-95-3 | PS | Dibromomethane | 50.0 | 0.00 | HUh | 50.5 | 101 | 73-120 |
| 75-27-4 | PS | Bromodichloromethane | 50.0 | 0.00 | HUh | 53.5 | 107 | 67-124 |
| 10061-01-5 | PS | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 50.8 | 102 | 67-127 |
| 108-88-3 | PS | Toluene | 50.0 | 0.00 | HUh | 47.5 | 95 | 64-124 |
| 10061-02-6 | PS | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 49.5 | 99 | 68-122 |
| 79-00-5 | PS | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 49.0 | 98 | 73-121 |
| 142-28-9 | PS | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 48.2 | 96 | 69-119 |
| 127-18-4 | PS | Tetrachloroethylene | 50.0 | 0.00 | HUh | 47.2 | 94 | 64-123 |
| 124-48-1 | PS | Dibromochloromethane | 50.0 | 0.00 | HUh | 56.2 | 112 | 66-122 |
| 106-93-4 | PS | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 49.5 | 99 | 73-125 |
| 108-90-7 | PS | Chlorobenzene | 50.0 | 0.00 | HUh | 46.5 | 93 | 68-120 |
| 100-41-4 | PS | Ethylbenzene | 50.0 | 0.00 | HUh | 48.0 | 96 | 63-122 |
| 95-47-6 | PS | o-Xylene | 50.0 | 0.00 | HUh | 49.3 | 99 | 64-122 |
| 100-42-5 | PS | Styrene | 50.0 | 0.00 | HUh | 47.1 | 94 | 70-126 |
| 75-25-2 | PS | Bromoform | 50.0 | 0.00 | HUh | 60.0 | 120 | 54-131 |
| 98-82-8 | PS | Isopropylbenzene | 50.0 | 0.00 | HUh | 54.0 | 108 | 64-132 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178PS**
**Lab Sample ID** **1203138398**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/30/2014 19:47**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 54.6 | 109 | 68-132 |
| 96-18-4 | PS | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 53.9 | 108 | 66-131 |
| 108-86-1 | PS | Bromobenzene | 50.0 | 0.00 | HUh | 49.7 | 99 | 67-124 |
| 103-65-1 | PS | n-Propylbenzene | 50.0 | 0.00 | HUh | 49.6 | 99 | 60-127 |
| 108-67-8 | PS | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 52.8 | 106 | 62-129 |
| 95-49-8 | PS | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 48.9 | 98 | 63-125 |
| 106-43-4 | PS | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 49.0 | 98 | 63-124 |
| 98-06-6 | PS | tert-Butylbenzene | 50.0 | 0.00 | HUh | 53.3 | 107 | 64-131 |
| 95-63-6 | PS | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 49.8 | 100 | 63-126 |
| 135-98-8 | PS | sec-Butylbenzene | 50.0 | 0.00 | HUh | 51.9 | 104 | 59-133 |
| 99-87-6 | PS | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 51.6 | 103 | 58-130 |
| 541-73-1 | PS | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 45.2 | 90 | 62-125 |
| 106-46-7 | PS | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 43.2 | 86 | 62-122 |
| 104-51-8 | PS | n-Butylbenzene | 50.0 | 0.00 | HUh | 47.9 | 96 | 55-133 |
| 96-12-8 | PS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 48.4 | 97 | 54-133 |
| 630-20-6 | PS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 51.7 | 103 | 72-126 |
| 95-50-1 | PS | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 44.6 | 89 | 63-123 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178PSD**
**Lab Sample ID** **1203138400**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/30/2014 20:15**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 179601-23-1 | PSD | m,p-Xylenes | 100 | 0.00 | HUh | 92.2 | 92 | 62-124 | 3 | 0-20 |
| 67-64-1 | PSD | Acetone | 250 | 0.00 | HUh | 218 | 87 | 42-147 | 8 | 0-20 |
| 74-88-4 | PSD | Iodomethane | 250 | 0.00 | HUh | 234 | 94 | 68-121 | 4 | 0-20 |
| 75-15-0 | PSD | Carbon disulfide | 250 | 0.00 | HUh | 256 | 102 | 64-147 | 3 | 0-20 |
| 78-93-3 | PSD | 2-Butanone | 250 | 0.00 | HUh | 211 | 84 | 44-145 | 5 | 0-20 |
| 108-10-1 | PSD | 4-Methyl-2-pentanone | 250 | 0.00 | HUh | 232 | 93 | 71-133 | 3 | 0-20 |
| 591-78-6 | PSD | 2-Hexanone | 250 | 0.00 | HUh | 192 | 77 | 47-147 | 13 | 0-20 |
| 75-09-2 | PSD | Methylene chloride | 50.0 | 2.21 | HJh | 45.0 | 86 | 68-123 | 3 | 0-20 |
| 75-71-8 | PSD | Dichlorodifluoromethane | 50.0 | 0.00 | HUh | 40.2 | 80 | 46-134 | 1 | 0-20 |
| 74-87-3 | PSD | Chloromethane | 50.0 | 0.00 | HUh | 41.1 | 82 | 54-139 | 3 | 0-20 |
| 75-01-4 | PSD | Vinyl chloride | 50.0 | 0.00 | HUh | 48.8 | 98 | 47-141 | 0 | 0-20 |
| 74-83-9 | PSD | Bromomethane | 50.0 | 0.00 | HUh | 42.3 | 85 | 47-135 | 2 | 0-20 |
| 75-00-3 | PSD | Chloroethane | 50.0 | 0.00 | HUh | 47.3 | 95 | 52-129 | 0 | 0-20 |
| 75-69-4 | PSD | Trichlorofluoromethane | 50.0 | 0.00 | HUh | 47.5 | 95 | 61-126 | 6 | 0-20 |
| 75-35-4 | PSD | 1,1-Dichloroethylene | 50.0 | 0.00 | HUh | 48.5 | 97 | 67-135 | 4 | 0-20 |
| 156-60-5 | PSD | trans-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 50.2 | 100 | 67-129 | 1 | 0-20 |
| 75-34-3 | PSD | 1,1-Dichloroethane | 50.0 | 0.00 | HUh | 50.7 | 101 | 70-125 | 0 | 0-20 |
| 156-59-2 | PSD | cis-1,2-Dichloroethylene | 50.0 | 0.00 | HUh | 48.7 | 97 | 70-125 | 2 | 0-20 |
| 594-20-7 | PSD | 2,2-Dichloropropane | 50.0 | 0.00 | HUh | 51.3 | 103 | 67-129 | 2 | 0-20 |
| 74-97-5 | PSD | Bromochloromethane | 50.0 | 0.00 | HUh | 50.2 | 100 | 73-123 | 2 | 0-20 |
| 67-66-3 | PSD | Chloroform | 50.0 | 0.00 | HUh | 50.8 | 102 | 70-123 | 2 | 0-20 |
| 71-55-6 | PSD | 1,1,1-Trichloroethane | 50.0 | 0.00 | HUh | 51.4 | 103 | 71-128 | 1 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178PSD**
**Lab Sample ID** **1203138400**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/30/2014 20:15**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 563-58-6 | PSD | 1,1-Dichloropropene | 50.0 | 0.00 | HUh | 49.4 | 99 | 68-129 | 1 | 0-20 |
| 56-23-5 | PSD | Carbon tetrachloride | 50.0 | 0.00 | HUh | 53.8 | 108 | 70-129 | 2 | 0-20 |
| 107-06-2 | PSD | 1,2-Dichloroethane | 50.0 | 0.00 | HUh | 48.0 | 96 | 67-119 | 3 | 0-20 |
| 71-43-2 | PSD | Benzene | 50.0 | 0.00 | HUh | 48.6 | 97 | 67-124 | 0 | 0-20 |
| 79-01-6 | PSD | Trichloroethylene | 50.0 | 0.00 | HUh | 49.0 | 98 | 68-130 | 0 | 0-20 |
| 78-87-5 | PSD | 1,2-Dichloropropane | 50.0 | 0.00 | HUh | 48.3 | 97 | 69-122 | 2 | 0-20 |
| 74-95-3 | PSD | Dibromomethane | 50.0 | 0.00 | HUh | 49.1 | 98 | 73-120 | 3 | 0-20 |
| 75-27-4 | PSD | Bromodichloromethane | 50.0 | 0.00 | HUh | 52.0 | 104 | 67-124 | 3 | 0-20 |
| 10061-01-5 | PSD | cis-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 49.0 | 98 | 67-127 | 3 | 0-20 |
| 108-88-3 | PSD | Toluene | 50.0 | 0.00 | HUh | 46.9 | 94 | 64-124 | 1 | 0-20 |
| 10061-02-6 | PSD | trans-1,3-Dichloropropylene | 50.0 | 0.00 | HUh | 47.7 | 95 | 68-122 | 4 | 0-20 |
| 79-00-5 | PSD | 1,1,2-Trichloroethane | 50.0 | 0.00 | HUh | 47.6 | 95 | 73-121 | 3 | 0-20 |
| 142-28-9 | PSD | 1,3-Dichloropropane | 50.0 | 0.00 | HUh | 46.7 | 93 | 69-119 | 3 | 0-20 |
| 127-18-4 | PSD | Tetrachloroethylene | 50.0 | 0.00 | HUh | 47.8 | 96 | 64-123 | 1 | 0-20 |
| 124-48-1 | PSD | Dibromochloromethane | 50.0 | 0.00 | HUh | 55.4 | 111 | 66-122 | 1 | 0-20 |
| 106-93-4 | PSD | 1,2-Dibromoethane | 50.0 | 0.00 | HUh | 48.5 | 97 | 73-125 | 2 | 0-20 |
| 108-90-7 | PSD | Chlorobenzene | 50.0 | 0.00 | HUh | 45.2 | 90 | 68-120 | 3 | 0-20 |
| 100-41-4 | PSD | Ethylbenzene | 50.0 | 0.00 | HUh | 47.1 | 94 | 63-122 | 2 | 0-20 |
| 95-47-6 | PSD | o-Xylene | 50.0 | 0.00 | HUh | 47.6 | 95 | 64-122 | 4 | 0-20 |
| 100-42-5 | PSD | Styrene | 50.0 | 0.00 | HUh | 45.3 | 91 | 70-126 | 4 | 0-20 |
| 75-25-2 | PSD | Bromoform | 50.0 | 0.00 | HUh | 59.4 | 119 | 54-131 | 1 | 0-20 |
| 98-82-8 | PSD | Isopropylbenzene | 50.0 | 0.00 | HUh | 54.5 | 109 | 64-132 | 1 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178PSD**
**Lab Sample ID** **1203138400**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Post Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/30/2014 20:15**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 79-34-5 | PSD | 1,1,2,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 53.2 | 106 | 68-132 | 3 | 0-20 |
| 96-18-4 | PSD | 1,2,3-Trichloropropane | 50.0 | 0.00 | HUh | 54.7 | 109 | 66-131 | 1 | 0-20 |
| 108-86-1 | PSD | Bromobenzene | 50.0 | 0.00 | HUh | 49.0 | 98 | 67-124 | 1 | 0-20 |
| 103-65-1 | PSD | n-Propylbenzene | 50.0 | 0.00 | HUh | 49.6 | 99 | 60-127 | 0 | 0-20 |
| 108-67-8 | PSD | 1,3,5-Trimethylbenzene | 50.0 | 0.00 | HUh | 52.4 | 105 | 62-129 | 1 | 0-20 |
| 95-49-8 | PSD | 2-Chlorotoluene | 50.0 | 0.00 | HUh | 48.2 | 96 | 63-125 | 1 | 0-20 |
| 106-43-4 | PSD | 4-Chlorotoluene | 50.0 | 0.00 | HUh | 48.1 | 96 | 63-124 | 2 | 0-20 |
| 98-06-6 | PSD | tert-Butylbenzene | 50.0 | 0.00 | HUh | 54.4 | 109 | 64-131 | 2 | 0-20 |
| 95-63-6 | PSD | 1,2,4-Trimethylbenzene | 50.0 | 0.00 | HUh | 49.0 | 98 | 63-126 | 2 | 0-20 |
| 135-98-8 | PSD | sec-Butylbenzene | 50.0 | 0.00 | HUh | 50.9 | 102 | 59-133 | 2 | 0-20 |
| 99-87-6 | PSD | 4-Isopropyltoluene | 50.0 | 0.00 | HUh | 50.5 | 101 | 58-130 | 2 | 0-20 |
| 541-73-1 | PSD | 1,3-Dichlorobenzene | 50.0 | 0.00 | HUh | 43.6 | 87 | 62-125 | 4 | 0-20 |
| 106-46-7 | PSD | 1,4-Dichlorobenzene | 50.0 | 0.00 | HUh | 42.1 | 84 | 62-122 | 3 | 0-20 |
| 104-51-8 | PSD | n-Butylbenzene | 50.0 | 0.00 | HUh | 44.8 | 90 | 55-133 | 7 | 0-20 |
| 96-12-8 | PSD | 1,2-Dibromo-3-chloropropane | 50.0 | 0.00 | HUh | 50.2 | 100 | 54-133 | 4 | 0-20 |
| 630-20-6 | PSD | 1,1,1,2-Tetrachloroethane | 50.0 | 0.00 | HUh | 50.6 | 101 | 72-126 | 2 | 0-20 |
| 95-50-1 | PSD | 1,2-Dichlorobenzene | 50.0 | 0.00 | HUh | 44.0 | 88 | 63-123 | 1 | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Sample Type:** | **Post Spike** |
| **Client ID:** | **RE57-14-84178PS** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203138399** | **%Moisture:** | **10.7** |
| **Instrument:** | **VOA4.I** | **Analysis Date:** | **07/30/2014 20:43** |
| **Analyst:** | **ACJ** | **Prep Batch ID:** | **1407702** |
| **Purge Vol:** | **5 mL** | **Batch ID:** | **1407703** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PS | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 279 | 112 | 68-146 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Sample Type:** | **Post Spike Duplicate** |
| **Client ID:** | **RE57-14-84178PSD** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203138401** | **%Moisture:** | **10.7** |
| **Instrument:** | **VOA4.I** | **Analysis Date:** | **07/30/2014 21:11** |
| **Analyst:** | **ACJ** | **Prep Batch ID:** | **1407702** |
| **Purge Vol:** | **5 mL** | **Batch ID:** | **1407703** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/L | | Spike Conc. ug/L | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 76-13-1 | PSD | 1,1,2-Trichloro-1,2,2-Trifluor<br>*Trichlorotrifluoroethane* | 250 | 0.00 | HUh | 215 | 86 | 68-146 | 26 * | 0-20 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **LCS for batch 1407702**
**Lab Sample ID** **1203138402**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/30/2014 10:53**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 179601-23-1 | LCS | m,p-Xylenes | 100 | 0.0 | 89.2 | 89 | 79-120 |
| 67-64-1 | LCS | Acetone | 250 | 0.0 | 236 | 94 | 55-146 |
| 74-88-4 | LCS | Iodomethane | 250 | 0.0 | 236 | 94 | 73-120 |
| 75-15-0 | LCS | Carbon disulfide | 250 | 0.0 | 238 | 95 | 78-136 |
| 78-93-3 | LCS | 2-Butanone | 250 | 0.0 | 219 | 88 | 57-149 |
| 108-10-1 | LCS | 4-Methyl-2-pentanone | 250 | 0.0 | 229 | 92 | 79-129 |
| 591-78-6 | LCS | 2-Hexanone | 250 | 0.0 | 214 | 86 | 69-145 |
| 75-71-8 | LCS | Dichlorodifluoromethane | 50.0 | 0.0 | 40.8 | 82 | 58-126 |
| 74-87-3 | LCS | Chloromethane | 50.0 | 0.0 | 40.3 | 81 | 59-124 |
| 75-01-4 | LCS | Vinyl chloride | 50.0 | 0.0 | 48.2 | 96 | 58-122 |
| 74-83-9 | LCS | Bromomethane | 50.0 | 0.0 | 42.4 | 85 | 67-120 |
| 75-00-3 | LCS | Chloroethane | 50.0 | 0.0 | 48.3 | 97 | 70-120 |
| 75-69-4 | LCS | Trichlorofluoromethane | 50.0 | 0.0 | 48.4 | 97 | 71-120 |
| 75-35-4 | LCS | 1,1-Dichloroethylene | 50.0 | 0.0 | 44.4 | 89 | 77-125 |
| 75-09-2 | LCS | Methylene chloride | 50.0 | 0.0 | 41.9 | 84 | 73-120 |
| 156-60-5 | LCS | trans-1,2-Dichloroethylene | 50.0 | 0.0 | 45.4 | 91 | 76-120 |
| 75-34-3 | LCS | 1,1-Dichloroethane | 50.0 | 0.0 | 45.0 | 90 | 75-120 |
| 156-59-2 | LCS | cis-1,2-Dichloroethylene | 50.0 | 0.0 | 46.3 | 93 | 76-120 |
| 594-20-7 | LCS | 2,2-Dichloropropane | 50.0 | 0.0 | 46.9 | 94 | 77-125 |
| 74-97-5 | LCS | Bromochloromethane | 50.0 | 0.0 | 49.1 | 98 | 80-120 |
| 67-66-3 | LCS | Chloroform | 50.0 | 0.0 | 46.5 | 93 | 75-120 |
| 71-55-6 | LCS | 1,1,1-Trichloroethane | 50.0 | 0.0 | 47.0 | 94 | 79-125 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **LCS for batch 1407702**
**Lab Sample ID** **1203138402**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/30/2014 10:53**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 563-58-6 | LCS | 1,1-Dichloropropene | 50.0 | 0.0 | 44.9 | 90 | 78-121 |
| 56-23-5 | LCS | Carbon tetrachloride | 50.0 | 0.0 | 49.2 | 98 | 80-127 |
| 107-06-2 | LCS | 1,2-Dichloroethane | 50.0 | 0.0 | 44.1 | 88 | 69-120 |
| 71-43-2 | LCS | Benzene | 50.0 | 0.0 | 45.1 | 90 | 74-120 |
| 79-01-6 | LCS | Trichloroethylene | 50.0 | 0.0 | 46.8 | 94 | 80-120 |
| 78-87-5 | LCS | 1,2-Dichloropropane | 50.0 | 0.0 | 45.5 | 91 | 75-120 |
| 74-95-3 | LCS | Dibromomethane | 50.0 | 0.0 | 47.2 | 94 | 79-120 |
| 75-27-4 | LCS | Bromodichloromethane | 50.0 | 0.0 | 49.7 | 99 | 77-121 |
| 10061-01-5 | LCS | cis-1,3-Dichloropropylene | 50.0 | 0.0 | 49.9 | 100 | 79-121 |
| 108-88-3 | LCS | Toluene | 50.0 | 0.0 | 43.5 | 87 | 75-120 |
| 10061-02-6 | LCS | trans-1,3-Dichloropropylene | 50.0 | 0.0 | 46.9 | 94 | 75-120 |
| 79-00-5 | LCS | 1,1,2-Trichloroethane | 50.0 | 0.0 | 44.0 | 88 | 77-120 |
| 142-28-9 | LCS | 1,3-Dichloropropane | 50.0 | 0.0 | 43.4 | 87 | 73-120 |
| 127-18-4 | LCS | Tetrachloroethylene | 50.0 | 0.0 | 44.8 | 90 | 77-120 |
| 124-48-1 | LCS | Dibromochloromethane | 50.0 | 0.0 | 53.9 | 108 | 72-123 |
| 106-93-4 | LCS | 1,2-Dibromoethane | 50.0 | 0.0 | 47.3 | 95 | 80-120 |
| 108-90-7 | LCS | Chlorobenzene | 50.0 | 0.0 | 44.3 | 89 | 78-120 |
| 100-41-4 | LCS | Ethylbenzene | 50.0 | 0.0 | 44.5 | 89 | 77-120 |
| 95-47-6 | LCS | o-Xylene | 50.0 | 0.0 | 45.4 | 91 | 78-120 |
| 100-42-5 | LCS | Styrene | 50.0 | 0.0 | 47.2 | 94 | 80-120 |
| 75-25-2 | LCS | Bromoform | 50.0 | 0.0 | 56.3 | 113 | 62-132 |
| 98-82-8 | LCS | Isopropylbenzene | 50.0 | 0.0 | 45.1 | 90 | 78-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **LCS for batch 1407702**
**Lab Sample ID** **1203138402**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/30/2014 10:53**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 79-34-5 | LCS | 1,1,2,2-Tetrachloroethane | 50.0 | 0.0 | 47.0 | 94 | 77-120 |
| 96-18-4 | LCS | 1,2,3-Trichloropropane | 50.0 | 0.0 | 47.6 | 95 | 75-120 |
| 108-86-1 | LCS | Bromobenzene | 50.0 | 0.0 | 46.1 | 92 | 78-120 |
| 103-65-1 | LCS | n-Propylbenzene | 50.0 | 0.0 | 42.2 | 84 | 76-120 |
| 108-67-8 | LCS | 1,3,5-Trimethylbenzene | 50.0 | 0.0 | 45.3 | 91 | 78-120 |
| 95-49-8 | LCS | 2-Chlorotoluene | 50.0 | 0.0 | 43.6 | 87 | 77-120 |
| 106-43-4 | LCS | 4-Chlorotoluene | 50.0 | 0.0 | 43.6 | 87 | 77-120 |
| 98-06-6 | LCS | tert-Butylbenzene | 50.0 | 0.0 | 47.9 | 96 | 80-120 |
| 95-63-6 | LCS | 1,2,4-Trimethylbenzene | 50.0 | 0.0 | 43.7 | 87 | 79-120 |
| 135-98-8 | LCS | sec-Butylbenzene | 50.0 | 0.0 | 45.1 | 90 | 78-120 |
| 99-87-6 | LCS | 4-Isopropyltoluene | 50.0 | 0.0 | 45.4 | 91 | 79-120 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 50.0 | 0.0 | 43.9 | 88 | 76-120 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 50.0 | 0.0 | 42.6 | 85 | 77-120 |
| 104-51-8 | LCS | n-Butylbenzene | 50.0 | 0.0 | 42.8 | 86 | 79-120 |
| 96-12-8 | LCS | 1,2-Dibromo-3-chloropropane | 50.0 | 0.0 | 53.5 | 107 | 62-133 |
| 630-20-6 | LCS | 1,1,1,2-Tetrachloroethane | 50.0 | 0.0 | 47.7 | 95 | 80-120 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 50.0 | 0.0 | 44.2 | 88 | 77-120 |

**Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **LCS for batch 1407702**
**Lab Sample ID** **1203138403**
**Instrument:** **VOA4.I**
**Analyst:** **ACJ**
**Purge Vol:** **5 mL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/30/2014 11:49**
**Dilution: 1**
**Prep Batch ID:** **1407702**
**Batch ID:** **1407703**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 76-13-1 | LCS | 1,1,2-Trichloro-1,2,2-Trifluor *Trichlorotrifluoroethane* | 250 | 0.0 | 219 | 88 | 76-130 |

## Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1407702** | **Instrument ID:** | **VOA4.I** | **Data File:** | **073014V4\4W307BA.D** |
| **Lab Sample ID:** | **1203138397** | **Prep Date:** | **07/30/2014 08:30** | **Analyzed:** | **07/30/14 12:18** |
| **Column:** | **DB-624** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1407702 | 1203138402 | 073014V4\4W304LA.D | 07/30/14 | 1053 |
| 02 | LCS for batch 1407702 | 1203138403 | 073014V4\4W306SA.D | 07/30/14 | 1149 |
| 03 | RE57-14-84199 | 352306006 | 073014V4\4W309.D | 07/30/14 | 1313 |
| 04 | RE57-14-84198 | 352306014 | 073014V4\4W310.D | 07/30/14 | 1342 |
| 05 | RE57-14-84178 | 352306001 | 073014V4\4W311.D | 07/30/14 | 1410 |
| 06 | RE57-14-84182 | 352306002 | 073014V4\4W312.D | 07/30/14 | 1438 |
| 07 | RE57-14-84186 | 352306003 | 073014V4\4W313.D | 07/30/14 | 1506 |
| 08 | RE57-14-84179 | 352306004 | 073014V4\4W314.D | 07/30/14 | 1534 |
| 09 | RE57-14-84183 | 352306005 | 073014V4\4W315.D | 07/30/14 | 1602 |
| 10 | RE57-14-84180 | 352306007 | 073014V4\4W316.D | 07/30/14 | 1630 |
| 11 | RE57-14-84184 | 352306008 | 073014V4\4W317.D | 07/30/14 | 1658 |
| 12 | RE57-14-84188 | 352306009 | 073014V4\4W318.D | 07/30/14 | 1726 |
| 13 | RE57-14-84181 | 352306010 | 073014V4\4W319.D | 07/30/14 | 1754 |
| 14 | RE57-14-84185 | 352306011 | 073014V4\4W320.D | 07/30/14 | 1822 |
| 15 | RE57-14-84189 | 352306012 | 073014V4\4W321.D | 07/30/14 | 1850 |
| 16 | RE57-14-84194 | 352306015 | 073014V4\4W322.D | 07/30/14 | 1919 |
| 17 | RE57-14-84178PS | 1203138398 | 073014V4\4W323.D | 07/30/14 | 1947 |
| 18 | RE57-14-84178PSD | 1203138400 | 073014V4\4W324.D | 07/30/14 | 2015 |
| 19 | RE57-14-84178PS | 1203138399 | 073014V4\4W325.D | 07/30/14 | 2043 |
| 20 | RE57-14-84178PSD | 1203138401 | 073014V4\4W326.D | 07/30/14 | 2111 |

# Quality Control Data

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203138397** | | | | |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407702** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 12:18** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W307BA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203138397** | | | | |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1407702** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 12:18** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 08:30** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W307BA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | No Tentatively Identified Compounds Found | | | ug/kg | | |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203138398** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 19:47** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W323.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 58.0 | ug/kg | 0.373 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 56.9 | ug/kg | 0.373 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 61.2 | ug/kg | 0.373 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 54.9 | ug/kg | 0.373 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 57.0 | ug/kg | 0.373 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 56.3 | ug/kg | 0.373 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 54.7 | ug/kg | 0.373 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 60.3 | ug/kg | 0.373 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 55.8 | ug/kg | 0.373 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 54.2 | ug/kg | 0.560 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 55.5 | ug/kg | 0.373 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 49.9 | ug/kg | 0.373 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 55.7 | ug/kg | 0.373 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 55.4 | ug/kg | 0.373 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 59.2 | ug/kg | 0.373 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 50.6 | ug/kg | 0.373 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 54.0 | ug/kg | 0.373 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 48.4 | ug/kg | 0.373 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 56.4 | ug/kg | 0.373 | 1.12 |
| 78-93-3 | 2-Butanone | Hh | 249 | ug/kg | 1.87 | 5.60 |
| 95-49-8 | 2-Chlorotoluene | Hh | 54.8 | ug/kg | 0.373 | 1.12 |
| 591-78-6 | 2-Hexanone | Hh | 245 | ug/kg | 1.87 | 5.60 |
| 106-43-4 | 4-Chlorotoluene | Hh | 54.9 | ug/kg | 0.373 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 57.8 | ug/kg | 0.373 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 267 | ug/kg | 1.87 | 5.60 |
| 67-64-1 | Acetone | Hh | 264 | ug/kg | 1.87 | 5.60 |
| 71-43-2 | Benzene | Hh | 54.3 | ug/kg | 0.373 | 1.12 |
| 108-86-1 | Bromobenzene | Hh | 55.7 | ug/kg | 0.373 | 1.12 |
| 74-97-5 | Bromochloromethane | Hh | 57.4 | ug/kg | 0.373 | 1.12 |
| 75-27-4 | Bromodichloromethane | Hh | 60.0 | ug/kg | 0.373 | 1.12 |
| 75-25-2 | Bromoform | Hh | 67.2 | ug/kg | 0.373 | 1.12 |
| 74-83-9 | Bromomethane | Hh | 48.1 | ug/kg | 0.373 | 1.12 |
| 75-15-0 | Carbon disulfide | Hh | 294 | ug/kg | 1.87 | 5.60 |
| 56-23-5 | Carbon tetrachloride | Hh | 59.2 | ug/kg | 0.373 | 1.12 |
| 108-90-7 | Chlorobenzene | Hh | 52.0 | ug/kg | 0.373 | 1.12 |
| 75-00-3 | Chloroethane | Hh | 52.9 | ug/kg | 0.373 | 1.12 |
| 67-66-3 | Chloroform | Hh | 57.8 | ug/kg | 0.373 | 1.12 |
| 74-87-3 | Chloromethane | Hh | 47.3 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203138398** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 19:47** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:50** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W323.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 63.0 | ug/kg | 0.373 | 1.12 |
| 74-95-3 | Dibromomethane | Hh | 56.5 | ug/kg | 0.373 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 45.5 | ug/kg | 0.373 | 1.12 |
| 100-41-4 | Ethylbenzene | Hh | 53.8 | ug/kg | 0.373 | 1.12 |
| 74-88-4 | Iodomethane | Hh | 272 | ug/kg | 1.87 | 5.60 |
| 98-82-8 | Isopropylbenzene | Hh | 60.5 | ug/kg | 0.373 | 1.12 |
| 75-09-2 | Methylene chloride | Hh | 52.1 | ug/kg | 1.87 | 5.60 |
| 100-42-5 | Styrene | Hh | 52.7 | ug/kg | 0.373 | 1.12 |
| 127-18-4 | Tetrachloroethylene | Hh | 52.9 | ug/kg | 0.373 | 1.12 |
| 108-88-3 | Toluene | Hh | 53.2 | ug/kg | 0.373 | 1.12 |
| 79-01-6 | Trichloroethylene | Hh | 55.0 | ug/kg | 0.373 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | Hh | 56.3 | ug/kg | 0.373 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 75-01-4 | Vinyl chloride | Hh | 54.5 | ug/kg | 0.373 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 55.9 | ug/kg | 0.373 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 56.9 | ug/kg | 0.373 | 1.12 |
| 179601-23-1 | m,p-Xylenes | Hh | 106 | ug/kg | 0.747 | 2.24 |
| 104-51-8 | n-Butylbenzene | Hh | 53.7 | ug/kg | 0.373 | 1.12 |
| 103-65-1 | n-Propylbenzene | Hh | 55.6 | ug/kg | 0.373 | 1.12 |
| 95-47-6 | o-Xylene | Hh | 55.2 | ug/kg | 0.373 | 1.12 |
| 135-98-8 | sec-Butylbenzene | Hh | 58.2 | ug/kg | 0.373 | 1.12 |
| 98-06-6 | tert-Butylbenzene | Hh | 59.7 | ug/kg | 0.373 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 55.5 | ug/kg | 0.373 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 55.5 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203138399** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 20:43** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W325.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.12 | ug/kg | 0.560 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 78-93-3 | 2-Butanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 591-78-6 | 2-Hexanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 67-64-1 | Acetone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 71-43-2 | Benzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-86-1 | Bromobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-97-5 | Bromochloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-27-4 | Bromodichloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-25-2 | Bromoform | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-83-9 | Bromomethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-15-0 | Carbon disulfide | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-90-7 | Chlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-00-3 | Chloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 67-66-3 | Chloroform | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-87-3 | Chloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203138399** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178PS** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 20:43** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:52** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W325.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-95-3 | Dibromomethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 100-41-4 | Ethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-88-4 | Iodomethane | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 98-82-8 | Isopropylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-09-2 | Methylene chloride | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 100-42-5 | Styrene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-88-3 | Toluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-01-6 | Trichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 313 | ug/kg | 1.87 | 5.60 |
| 75-01-4 | Vinyl chloride | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.24 | ug/kg | 0.747 | 2.24 |
| 104-51-8 | n-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 103-65-1 | n-Propylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-47-6 | o-Xylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203138400** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 20:15** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W324.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | Hh | 56.7 | ug/kg | 0.373 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | Hh | 57.5 | ug/kg | 0.373 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | Hh | 59.6 | ug/kg | 0.373 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | Hh | 53.3 | ug/kg | 0.373 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | Hh | 56.8 | ug/kg | 0.373 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | Hh | 54.4 | ug/kg | 0.373 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | Hh | 55.3 | ug/kg | 0.373 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | Hh | 61.2 | ug/kg | 0.373 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | Hh | 54.9 | ug/kg | 0.373 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | Hh | 56.3 | ug/kg | 0.560 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | Hh | 54.4 | ug/kg | 0.373 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | Hh | 49.3 | ug/kg | 0.373 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | Hh | 53.8 | ug/kg | 0.373 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | Hh | 54.1 | ug/kg | 0.373 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | Hh | 58.7 | ug/kg | 0.373 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | Hh | 48.8 | ug/kg | 0.373 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | Hh | 52.3 | ug/kg | 0.373 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | Hh | 47.2 | ug/kg | 0.373 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | Hh | 57.5 | ug/kg | 0.373 | 1.12 |
| 78-93-3 | 2-Butanone | Hh | 237 | ug/kg | 1.87 | 5.60 |
| 95-49-8 | 2-Chlorotoluene | Hh | 54.0 | ug/kg | 0.373 | 1.12 |
| 591-78-6 | 2-Hexanone | Hh | 215 | ug/kg | 1.87 | 5.60 |
| 106-43-4 | 4-Chlorotoluene | Hh | 53.9 | ug/kg | 0.373 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | Hh | 56.6 | ug/kg | 0.373 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | Hh | 259 | ug/kg | 1.87 | 5.60 |
| 67-64-1 | Acetone | Hh | 244 | ug/kg | 1.87 | 5.60 |
| 71-43-2 | Benzene | Hh | 54.4 | ug/kg | 0.373 | 1.12 |
| 108-86-1 | Bromobenzene | Hh | 54.9 | ug/kg | 0.373 | 1.12 |
| 74-97-5 | Bromochloromethane | Hh | 56.3 | ug/kg | 0.373 | 1.12 |
| 75-27-4 | Bromodichloromethane | Hh | 58.3 | ug/kg | 0.373 | 1.12 |
| 75-25-2 | Bromoform | Hh | 66.5 | ug/kg | 0.373 | 1.12 |
| 74-83-9 | Bromomethane | Hh | 47.4 | ug/kg | 0.373 | 1.12 |
| 75-15-0 | Carbon disulfide | Hh | 286 | ug/kg | 1.87 | 5.60 |
| 56-23-5 | Carbon tetrachloride | Hh | 60.2 | ug/kg | 0.373 | 1.12 |
| 108-90-7 | Chlorobenzene | Hh | 50.6 | ug/kg | 0.373 | 1.12 |
| 75-00-3 | Chloroethane | Hh | 53.0 | ug/kg | 0.373 | 1.12 |
| 67-66-3 | Chloroform | Hh | 56.9 | ug/kg | 0.373 | 1.12 |
| 74-87-3 | Chloromethane | Hh | 46.1 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

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|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203138400** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 20:15** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:51** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W324.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | Hh | 62.1 | ug/kg | 0.373 | 1.12 |
| 74-95-3 | Dibromomethane | Hh | 55.0 | ug/kg | 0.373 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | Hh | 45.0 | ug/kg | 0.373 | 1.12 |
| 100-41-4 | Ethylbenzene | Hh | 52.8 | ug/kg | 0.373 | 1.12 |
| 74-88-4 | Iodomethane | Hh | 262 | ug/kg | 1.87 | 5.60 |
| 98-82-8 | Isopropylbenzene | Hh | 61.1 | ug/kg | 0.373 | 1.12 |
| 75-09-2 | Methylene chloride | Hh | 50.4 | ug/kg | 1.87 | 5.60 |
| 100-42-5 | Styrene | Hh | 50.8 | ug/kg | 0.373 | 1.12 |
| 127-18-4 | Tetrachloroethylene | Hh | 53.5 | ug/kg | 0.373 | 1.12 |
| 108-88-3 | Toluene | Hh | 52.6 | ug/kg | 0.373 | 1.12 |
| 79-01-6 | Trichloroethylene | Hh | 54.9 | ug/kg | 0.373 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | Hh | 53.2 | ug/kg | 0.373 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 75-01-4 | Vinyl chloride | Hh | 54.7 | ug/kg | 0.373 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | Hh | 54.6 | ug/kg | 0.373 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | Hh | 54.9 | ug/kg | 0.373 | 1.12 |
| 179601-23-1 | m,p-Xylenes | Hh | 103 | ug/kg | 0.747 | 2.24 |
| 104-51-8 | n-Butylbenzene | Hh | 50.2 | ug/kg | 0.373 | 1.12 |
| 103-65-1 | n-Propylbenzene | Hh | 55.5 | ug/kg | 0.373 | 1.12 |
| 95-47-6 | o-Xylene | Hh | 53.3 | ug/kg | 0.373 | 1.12 |
| 135-98-8 | sec-Butylbenzene | Hh | 57.1 | ug/kg | 0.373 | 1.12 |
| 98-06-6 | tert-Butylbenzene | Hh | 60.9 | ug/kg | 0.373 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | Hh | 56.2 | ug/kg | 0.373 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | Hh | 53.4 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203138401** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 21:11** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W326.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 71-55-6 | 1,1,1-Trichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-00-5 | 1,1,2-Trichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-34-3 | 1,1-Dichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-35-4 | 1,1-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 563-58-6 | 1,1-Dichloropropene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 96-18-4 | 1,2,3-Trichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-63-6 | 1,2,4-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | HUh | 1.12 | ug/kg | 0.560 | 1.12 |
| 106-93-4 | 1,2-Dibromoethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-50-1 | 1,2-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 107-06-2 | 1,2-Dichloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 78-87-5 | 1,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-67-8 | 1,3,5-Trimethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 541-73-1 | 1,3-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 142-28-9 | 1,3-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 106-46-7 | 1,4-Dichlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 594-20-7 | 2,2-Dichloropropane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 78-93-3 | 2-Butanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 95-49-8 | 2-Chlorotoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 591-78-6 | 2-Hexanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 106-43-4 | 4-Chlorotoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 99-87-6 | 4-Isopropyltoluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-10-1 | 4-Methyl-2-pentanone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 67-64-1 | Acetone | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 71-43-2 | Benzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-86-1 | Bromobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-97-5 | Bromochloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-27-4 | Bromodichloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-25-2 | Bromoform | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-83-9 | Bromomethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-15-0 | Carbon disulfide | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 56-23-5 | Carbon tetrachloride | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-90-7 | Chlorobenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-00-3 | Chloroethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 67-66-3 | Chloroform | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-87-3 | Chloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203138401** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178PSD** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 21:11** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 16:53** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W326.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-95-3 | Dibromomethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-71-8 | Dichlorodifluoromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 100-41-4 | Ethylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 74-88-4 | Iodomethane | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 98-82-8 | Isopropylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-09-2 | Methylene chloride | HUh | 5.60 | ug/kg | 1.87 | 5.60 |
| 100-42-5 | Styrene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 127-18-4 | Tetrachloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 108-88-3 | Toluene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 79-01-6 | Trichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 75-69-4 | Trichlorofluoromethane | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | Hh | 240 | ug/kg | 1.87 | 5.60 |
| 75-01-4 | Vinyl chloride | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 156-59-2 | cis-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 10061-01-5 | cis-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 179601-23-1 | m,p-Xylenes | HUh | 2.24 | ug/kg | 0.747 | 2.24 |
| 104-51-8 | n-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 103-65-1 | n-Propylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 95-47-6 | o-Xylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 135-98-8 | sec-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 98-06-6 | tert-Butylbenzene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 156-60-5 | trans-1,2-Dichloroethylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |
| 10061-02-6 | trans-1,3-Dichloropropylene | HUh | 1.12 | ug/kg | 0.373 | 1.12 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203138402** | | | | |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407702** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 10:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W304LA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 47.7 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | | 47.0 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 47.0 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | | 44.0 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | | 45.0 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | | 44.4 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | | 44.9 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | | 47.6 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 43.7 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 53.5 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | | 47.3 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | | 44.2 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | | 44.1 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | | 45.5 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 45.3 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | | 43.9 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | | 43.4 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | | 42.6 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | | 46.9 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | | 219 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | | 43.6 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | | 214 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | | 43.6 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | | 45.4 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | | 229 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | | 236 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | | 46.1 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | | 49.1 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | | 49.7 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | | 56.3 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | | 42.4 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | | 238 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | | 49.2 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | | 44.3 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | | 48.3 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | | 46.5 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | | 40.3 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203138402** | | | | |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407702** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 10:53** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 08:00** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W304LA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | | 53.9 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | | 47.2 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | | 40.8 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | | 44.5 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | | 236 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | | 41.9 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | | 47.2 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | | 44.8 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | | 43.5 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | | 46.8 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | | 48.4 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | | 48.2 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | | 46.3 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | | 49.9 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | | 89.2 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | | 42.8 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | | 42.2 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | | 45.4 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | | 45.1 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | | 47.9 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | | 45.4 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | | 46.9 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203138403** | | | | |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407702** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 11:49** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W306SA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-34-3 | 1,1-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-35-4 | 1,1-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 563-58-6 | 1,1-Dichloropropene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-18-4 | 1,2,3-Trichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-63-6 | 1,2,4-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | U | 1.00 | ug/kg | 0.500 | 1.00 |
| 106-93-4 | 1,2-Dibromoethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 107-06-2 | 1,2-Dichloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-87-5 | 1,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-67-8 | 1,3,5-Trimethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 541-73-1 | 1,3-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 142-28-9 | 1,3-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 594-20-7 | 2,2-Dichloropropane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 78-93-3 | 2-Butanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 95-49-8 | 2-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 591-78-6 | 2-Hexanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 106-43-4 | 4-Chlorotoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 99-87-6 | 4-Isopropyltoluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-10-1 | 4-Methyl-2-pentanone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 67-64-1 | Acetone | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 71-43-2 | Benzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-86-1 | Bromobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-97-5 | Bromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-27-4 | Bromodichloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-25-2 | Bromoform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-83-9 | Bromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-15-0 | Carbon disulfide | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 56-23-5 | Carbon tetrachloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-90-7 | Chlorobenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-00-3 | Chloroethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 67-66-3 | Chloroform | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-87-3 | Chloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Volatile
## Certificate of Analysis
## Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203138403** | | | | |
| **Client Sample:** | **QC for batch 1407702** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1407702** | **Method:** | **SW846 8260B** | **SOP Ref:** | **GL-OA-E-038** |
| **Batch ID:** | **1407703** | **Inst:** | **VOA4.I** | **Dilution:** | **1** |
| **Run Date:** | **07/30/2014 11:49** | **Analyst:** | **ACJ** | **Purge Vol:** | **5 mL** |
| **Prep Date:** | **07/30/2014 08:15** | **Aliquot:** | **5 g** | **Final Volume:** | **5 mL** |
| **Data File:** | **073014V4\4W306SA.D** | **Column:** | **DB-624** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-95-3 | Dibromomethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-71-8 | Dichlorodifluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 100-41-4 | Ethylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 74-88-4 | Iodomethane | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 98-82-8 | Isopropylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-09-2 | Methylene chloride | U | 5.00 | ug/kg | 1.67 | 5.00 |
| 100-42-5 | Styrene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 127-18-4 | Tetrachloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 108-88-3 | Toluene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 79-01-6 | Trichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 75-69-4 | Trichlorofluoromethane | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-Trifluoroetha *Trichlorotrifluoroethane* | | 219 | ug/kg | 1.67 | 5.00 |
| 75-01-4 | Vinyl chloride | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-59-2 | cis-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-01-5 | cis-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 179601-23-1 | m,p-Xylenes | U | 2.00 | ug/kg | 0.667 | 2.00 |
| 104-51-8 | n-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 103-65-1 | n-Propylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 95-47-6 | o-Xylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 135-98-8 | sec-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 98-06-6 | tert-Butylbenzene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 156-60-5 | trans-1,2-Dichloroethylene | U | 1.00 | ug/kg | 0.333 | 1.00 |
| 10061-02-6 | trans-1,3-Dichloropropylene | U | 1.00 | ug/kg | 0.333 | 1.00 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 05-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| VOA GC/MS | SW846 8260B | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1407703 | See Below | | |

**Potentially affected work order(s)(SDG): 352306(2014-3701)**

**Application Issues:**

Failed RPD for MS/MSD, or PS/PSD

Sample Analyzed out of Holding

Other

Failed Yield for Surrogates

Sample Prepped out of Holding

Sample Logged out of Holding

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. QC samples 1203138399MS and 1203138401MSD were outside the %RPD acceptance limits for Trichlorotrifluoroethane (26.2%, limits 0%-20%).<br><br>2. The following samples were prepped and analyzed beyond the recommended fourteen day holding time:<br><br>352306001,002,003,004,005,006,007,008,009,010,011,012,014,015, 1203138398MS, 1203138399MS, 1203138400MSD and 1203138401MSD<br><br>3. The following samples were above the surrogate recovery acceptance limits for Bromofluorobenzene:<br><br>352306005 and 352306015<br><br>4. The following samples were outside the internal standard response recovery acceptance criteria for 1,4-Dichlorobenzene-d4:<br><br>352306005 and 352306015 | 1. Narrate and report data. The MS/MSD were within the spike recovery acceptance limits.<br><br>2. Narrate and report data. The samples were prepped and analyzed within the client required two times the holding time.<br><br>3,4. Narrate and report data. The samples were analyzed twice with similar results. It is believed matrix interference has been demonstrated. |

**Originator's Name:**

Amy Jamison 05-AUG-14

**Data Validator/Group Leader:**

Erin Haubert 06-AUG-14

# Semi-Volatile Analysis

# Case Narrative

**Semi-Volatile Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3701**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Analysis of Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry** |
| Analytical Method: | SW846 3541/8270D |
| Prep Method: | SW846 3541 |
| Analytical Batch Number: | 1402564 |
| Prep Batch Number: | 1402563 |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 3541/8270D:

| Sample ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306015 | RE57-14-84194 |
| 1203125438 | MB for batch 1402563 |
| 1203125439 | Laboratory Control Sample (LCS) |
| 1203125440 | 352306001(RE57-14-84178) Matrix Spike (MS) |
| 1203125441 | 352306001(RE57-14-84178) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-009 REV# 32.

Raw data reports are processed and reviewed by the analyst using the data analysis software package. False positives have been removed from the quantitation reports per standard operating procedures (SOP).

**Calibration Information**

A complete list of the initial calibration data files are shown in the Calibration History report located in the Standard Data section of the data package. The various calibration mixes may not be calibrated using all of the calibration levels. In addition, not all of the mixes are calibrated using the same levels.

Diphenylamine has now superseded N-Nitroso-diphenylamine on Quantitation Reports, Initial Calibration Reports, Calibration Check Standard Reports, etc. Previous versions of EPA Methodologies referenced N-Nitroso-diphenylamine. However, as stated in EPA Methodology, "N-Nitroso-diphenylamine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine." Studies of these two compounds at GEL, both independent of each other and together, showed that they not only co-elute, but also have similar mass spectra. N-Nitroso-diphenylamine and Diphenylamine will be reported as Diphenylamine on all reports and forms.

**Initial Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG) in this batch. A second source initial calibration verification (ICV) was included in the standard section directly behind the initial calibration.

**CCV Requirements**
All Calibration Verification Standards (CCV) did not meet the acceptance criteria as outlined in Method 8270D. However, the method allows for a designated number of outliers dependent on the requested analyte list. This SDG satisfied the 8270D outlier acceptance criteria. Detected concentrations of these analytes should be considered as estimated.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The MB analyzed with this SDG in this batch met the acceptance criteria.

**Surrogate Recoveries**
All the surrogate recoveries were within the established acceptance criteria for this SDG in this batch.

**Laboratory Control Sample (LCS) Recovery**
The LCS(1203125439) recovered 2,4-Dinitrophenol at 21%. The limits are 22%-83%. The 2,4-Dinitrophenol failure represents less than 5% of the total requested spike analyte list. That satisfied the acceptance criteria for the client and the data were reported.

**QC Sample Designation**
Sample 352306001 (RE57-14-84178) was selected for analysis as the matrix spike and matrix spike duplicate.

**Matrix Spike (MS) Recovery Statement**
The MS(1203125440(RE57-14-84178)) recovered spike analytes outside of the acceptance limits. Please see the QC Summary report for specific failures. Since the MS and MSD displayed similar spike recoveries, the failures were attributed to sample matrix interference and the data were reported.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD(1203125441(RE57-14-84178)) recovered spike analytes outside of the acceptance limits. Please see the QC Summary report for specific failures. Since the MS and MSD displayed similar spike recoveries, the failures were attributed to sample matrix interference and the data were reported.

**MS/MSD Relative Percent Difference (RPD) Statement**
The MS(1203125440(RE57-14-84178))/MSD(1203125441(RE57-14-84178)) pair displayed RPD values outside

of the acceptance limits. Please see the QC Summary report for specific failures. The RPD failures were attributed to sample matrix interference and the data were reported.

**Internal Standard (ISTD) Acceptance**
Samples 352306005 (RE57-14-84183) and 352306011 (RE57-14-84185) failed ISTD acceptance criteria. The samples were re-analyzed and passed ISTD acceptance criteria. The re-analysis data are reported. Sample 352306015 (RE57-14-84194) failed ISTD acceptance criteria. The sample was re-analyzed and confirmed the failure. The re-analysis data are reported. The initial analysis raw data have been placed in the Miscellaneous Section of the data package.

**Technical Information:**

**Holding Time Specifications**
All samples in this SDG met the specified holding time. GEL assigns holding times based on the associated methodology that assigns the date and time from sample collection or sample receipt. Those holding times expressed in hours are calculated in the ALPHALIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. All reported compound mass spectra met the detection specifications in the method.

**Sample Dilutions**
The samples in this SDG in this batch did not require dilutions.

**Sample Re-extraction/Re-analysis**
Samples 352306005 (RE57-14-84183), 352306011 (RE57-14-84185) and 352306015 (RE57-14-84194) were re-analyzed due to internal standard responses outside of the acceptance criteria.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
The following DER was generated for this SDG: 1314372.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations. Manual integrations were required in this SDG and are included with the raw data.

**TIC Comment**
Tentatively identified compounds (TIC) may be requested for samples in this delivery group/work order. Please note that non-requested calibrated analytes detected in a client sample may be reported on the Form 1/Certificate of Analysis as TICs. TIC data, if requested, are included on the Sample Data Summary (Form 1) and are also included with the sample raw data.

**Additional Comments**
The additional comments field is used to address special issues associated with each analysis, clarify method/contractual issues pertaining to the analysis, and to list any report documents generated as a result of sample analysis or review. The following additional comments were required:

Due to rounding differences in the calculation, the data reported in the Surrogate Recovery Report may differ slightly from the raw data. Due to software issue, the raw data may not correctly display the updated SPC limits. Please see Sample Data Summary Report and Surrogate Recovery Report for the correct surrogate acceptance limits.

**Electronic Package Comment**

The following package was generated using an electronic data processing program referred to as "virtual packaging". In an effort to increase quality and efficiency, the laboratory is developing systems to eventually generate all data packages electronically. The following change from "traditional" packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative of each electronic package will indicate the reviewer name associated with the generation of the data and package. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**System Configuration**

The Semi-Volatile-GC/MS analysis was performed on the following instrument configuration:

| Instrument ID | Instrument | System Configuration | Column ID | Column Description |
|---|---|---|---|---|
| MSD5.I | Agilent 6890/5973 GC/MS w/ 7683 Autosampler | HP6890/HP5973 | DB-5MS | 25m x 0.2mm, 0.33um (5% Phenylmethylpolysiloxane) |

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3701  GEL Work Order: 352306

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Barbara Bailey  **Name: Barbara Bailey**

**Date: 06 AUG 2014**  **Title: Data Validator**

# Sample Data Summary

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306001** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84178** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 11:42** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1407.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 122-66-7 | Azobenzene | U | 373 | ug/kg | 112 | 373 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 120-83-2 | 2,4-Dichlorophenol | U | 373 | ug/kg | 112 | 373 |
| 105-67-9 | 2,4-Dimethylphenol | U | 373 | ug/kg | 112 | 373 |
| 51-28-5 | 2,4-Dinitrophenol | U | 746 | ug/kg | 112 | 746 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 373 | ug/kg | 112 | 373 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 373 | ug/kg | 112 | 373 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 95-57-8 | 2-Chlorophenol | U | 373 | ug/kg | 112 | 373 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 373 | ug/kg | 112 | 373 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 88-75-5 | 2-Nitrophenol | U | 373 | ug/kg | 112 | 373 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 373 | ug/kg | 112 | 373 |
| 101-55-3 | 4-Bromophenylphenylether | U | 373 | ug/kg | 112 | 373 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 373 | ug/kg | 149 | 373 |
| 106-47-8 | 4-Chloroaniline | U | 373 | ug/kg | 112 | 373 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 373 | ug/kg | 112 | 373 |
| 100-02-7 | 4-Nitrophenol | U | 373 | ug/kg | 112 | 373 |
| 83-32-9 | Acenaphthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 208-96-8 | Acenaphthylene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 62-53-3 | Aniline | U | 373 | ug/kg | 112 | 373 |
| 120-12-7 | Anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 56-55-3 | Benzo(a)anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 50-32-8 | Benzo(a)pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 65-85-0 | Benzoic acid | U | 746 | ug/kg | 186 | 746 |
| 100-51-6 | Benzyl alcohol | U | 373 | ug/kg | 112 | 373 |
| 85-68-7 | Butylbenzylphthalate | U | 373 | ug/kg | 112 | 373 |
| 218-01-9 | Chrysene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 84-74-2 | Di-n-butylphthalate | U | 373 | ug/kg | 112 | 373 |
| 117-84-0 | Di-n-octylphthalate | U | 373 | ug/kg | 112 | 373 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306001** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84178** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 11:42** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1407.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 132-64-9 | Dibenzofuran | U | 373 | ug/kg | 112 | 373 |
| 84-66-2 | Diethylphthalate | U | 373 | ug/kg | 112 | 373 |
| 131-11-3 | Dimethylphthalate | U | 373 | ug/kg | 112 | 373 |
| 122-39-4 | Diphenylamine | U | 373 | ug/kg | 112 | 373 |
| 206-44-0 | Fluoranthene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 86-73-7 | Fluorene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 118-74-1 | Hexachlorobenzene | U | 373 | ug/kg | 112 | 373 |
| 87-68-3 | Hexachlorobutadiene | U | 373 | ug/kg | 112 | 373 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 373 | ug/kg | 112 | 373 |
| 67-72-1 | Hexachloroethane | U | 373 | ug/kg | 112 | 373 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 78-59-1 | Isophorone | U | 373 | ug/kg | 112 | 373 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 373 | ug/kg | 112 | 373 |
| 621-64-7 | N-Nitrosodipropylamine | U | 373 | ug/kg | 112 | 373 |
| 91-20-3 | Naphthalene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 98-95-3 | Nitrobenzene | U | 373 | ug/kg | 112 | 373 |
| 87-86-5 | Pentachlorophenol | U | 373 | ug/kg | 112 | 373 |
| 85-01-8 | Phenanthrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 108-95-2 | Phenol | U | 373 | ug/kg | 112 | 373 |
| 129-00-0 | Pyrene | U | 37.3 | ug/kg | 11.2 | 37.3 |
| 110-86-1 | Pyridine | U | 373 | ug/kg | 112 | 373 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 373 | ug/kg | 112 | 373 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 373 | ug/kg | 112 | 373 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 373 | ug/kg | 112 | 373 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 373 | ug/kg | 112 | 373 |
| 65794-96-9 | m,p-Cresols | U | 373 | ug/kg | 112 | 373 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 373 | ug/kg | 112 | 373 |
| 95-48-7 | o-Cresol | U | 373 | ug/kg | 112 | 373 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 373 | ug/kg | 123 | 373 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 373 | ug/kg | 112 | 373 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.777 | 591 | ug/kg | | AJ |
| | unknown | 3.82 | 1100 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306001** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.7** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84178** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 11:42** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1407.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 006765-39-5 | 1-Heptadecene | 15.082 | 326 | ug/kg | 97 | NJ |
| | unknown | 17.159 | 441 | ug/kg | 0 | J |
| | unknown | 18.135 | 177 | ug/kg | 0 | J |
| | unknown | 20.121 | 560 | ug/kg | 0 | J |
| | unknown | 22.744 | 981 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306002** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **8.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84182** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 13:17** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1410.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 364 | ug/kg | 109 | 364 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 364 | ug/kg | 109 | 364 |
| 122-66-7 | Azobenzene | U | 364 | ug/kg | 109 | 364 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 364 | ug/kg | 109 | 364 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 364 | ug/kg | 109 | 364 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 364 | ug/kg | 109 | 364 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 364 | ug/kg | 109 | 364 |
| 120-83-2 | 2,4-Dichlorophenol | U | 364 | ug/kg | 109 | 364 |
| 105-67-9 | 2,4-Dimethylphenol | U | 364 | ug/kg | 109 | 364 |
| 51-28-5 | 2,4-Dinitrophenol | U | 729 | ug/kg | 109 | 729 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 364 | ug/kg | 109 | 364 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 364 | ug/kg | 109 | 364 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 95-57-8 | 2-Chlorophenol | U | 364 | ug/kg | 109 | 364 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 364 | ug/kg | 109 | 364 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 88-75-5 | 2-Nitrophenol | U | 364 | ug/kg | 109 | 364 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 364 | ug/kg | 109 | 364 |
| 101-55-3 | 4-Bromophenylphenylether | U | 364 | ug/kg | 109 | 364 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 364 | ug/kg | 146 | 364 |
| 106-47-8 | 4-Chloroaniline | U | 364 | ug/kg | 109 | 364 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 364 | ug/kg | 109 | 364 |
| 100-02-7 | 4-Nitrophenol | U | 364 | ug/kg | 109 | 364 |
| 83-32-9 | Acenaphthene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 208-96-8 | Acenaphthylene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 62-53-3 | Aniline | U | 364 | ug/kg | 109 | 364 |
| 120-12-7 | Anthracene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 56-55-3 | Benzo(a)anthracene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 50-32-8 | Benzo(a)pyrene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 65-85-0 | Benzoic acid | U | 729 | ug/kg | 182 | 729 |
| 100-51-6 | Benzyl alcohol | U | 364 | ug/kg | 109 | 364 |
| 85-68-7 | Butylbenzylphthalate | U | 364 | ug/kg | 109 | 364 |
| 218-01-9 | Chrysene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 84-74-2 | Di-n-butylphthalate | U | 364 | ug/kg | 109 | 364 |
| 117-84-0 | Di-n-octylphthalate | U | 364 | ug/kg | 109 | 364 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306002** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **8.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84182** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 13:17** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1410.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 132-64-9 | Dibenzofuran | U | 364 | ug/kg | 109 | 364 |
| 84-66-2 | Diethylphthalate | U | 364 | ug/kg | 109 | 364 |
| 131-11-3 | Dimethylphthalate | U | 364 | ug/kg | 109 | 364 |
| 122-39-4 | Diphenylamine | U | 364 | ug/kg | 109 | 364 |
| 206-44-0 | Fluoranthene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 86-73-7 | Fluorene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 118-74-1 | Hexachlorobenzene | U | 364 | ug/kg | 109 | 364 |
| 87-68-3 | Hexachlorobutadiene | U | 364 | ug/kg | 109 | 364 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 364 | ug/kg | 109 | 364 |
| 67-72-1 | Hexachloroethane | U | 364 | ug/kg | 109 | 364 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 78-59-1 | Isophorone | U | 364 | ug/kg | 109 | 364 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 364 | ug/kg | 109 | 364 |
| 621-64-7 | N-Nitrosodipropylamine | U | 364 | ug/kg | 109 | 364 |
| 91-20-3 | Naphthalene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 98-95-3 | Nitrobenzene | U | 364 | ug/kg | 109 | 364 |
| 87-86-5 | Pentachlorophenol | U | 364 | ug/kg | 109 | 364 |
| 85-01-8 | Phenanthrene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 108-95-2 | Phenol | U | 364 | ug/kg | 109 | 364 |
| 129-00-0 | Pyrene | U | 36.4 | ug/kg | 10.9 | 36.4 |
| 110-86-1 | Pyridine | U | 364 | ug/kg | 109 | 364 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 364 | ug/kg | 109 | 364 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 364 | ug/kg | 109 | 364 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 364 | ug/kg | 109 | 364 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | J | 269 | ug/kg | 109 | 364 |
| 65794-96-9 | m,p-Cresols | U | 364 | ug/kg | 109 | 364 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 364 | ug/kg | 109 | 364 |
| 95-48-7 | o-Cresol | U | 364 | ug/kg | 109 | 364 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 364 | ug/kg | 120 | 364 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 364 | ug/kg | 109 | 364 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.23 | 306 | ug/kg | 0 | J |
| 000064-19-7 | Acetic acid | 2.596 | 174 | ug/kg | 86 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:45** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306002** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **8.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84182** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 13:17** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1410.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.839 | 9670 | ug/kg | | AJ |
| | unknown | 6.054 | 163 | ug/kg | 0 | J |
| | unknown | 6.568 | 181 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.311 | 358 | ug/kg | 96 | NJ |
| 000629-59-4 | Tetradecane | 14.963 | 536 | ug/kg | 86 | NJ |
| 000593-49-7 | Heptacosane | 16.32 | 1110 | ug/kg | 93 | NJ |
| | unknown | 18.135 | 395 | ug/kg | 0 | J |
| | unknown | 20.511 | 373 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 09:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306003** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **13.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84186** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 13:49** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1411.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 384 | ug/kg | 115 | 384 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 384 | ug/kg | 115 | 384 |
| 122-66-7 | Azobenzene | U | 384 | ug/kg | 115 | 384 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 384 | ug/kg | 115 | 384 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 384 | ug/kg | 115 | 384 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 384 | ug/kg | 115 | 384 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 384 | ug/kg | 115 | 384 |
| 120-83-2 | 2,4-Dichlorophenol | U | 384 | ug/kg | 115 | 384 |
| 105-67-9 | 2,4-Dimethylphenol | U | 384 | ug/kg | 115 | 384 |
| 51-28-5 | 2,4-Dinitrophenol | U | 767 | ug/kg | 115 | 767 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 384 | ug/kg | 115 | 384 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 384 | ug/kg | 115 | 384 |
| 91-58-7 | 2-Chloronaphthalene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 95-57-8 | 2-Chlorophenol | U | 384 | ug/kg | 115 | 384 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 384 | ug/kg | 115 | 384 |
| 91-57-6 | 2-Methylnaphthalene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 88-75-5 | 2-Nitrophenol | U | 384 | ug/kg | 115 | 384 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 384 | ug/kg | 115 | 384 |
| 101-55-3 | 4-Bromophenylphenylether | U | 384 | ug/kg | 115 | 384 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 384 | ug/kg | 153 | 384 |
| 106-47-8 | 4-Chloroaniline | U | 384 | ug/kg | 115 | 384 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 384 | ug/kg | 115 | 384 |
| 100-02-7 | 4-Nitrophenol | U | 384 | ug/kg | 115 | 384 |
| 83-32-9 | Acenaphthene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 208-96-8 | Acenaphthylene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 62-53-3 | Aniline | U | 384 | ug/kg | 115 | 384 |
| 120-12-7 | Anthracene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 56-55-3 | Benzo(a)anthracene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 50-32-8 | Benzo(a)pyrene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 205-99-2 | Benzo(b)fluoranthene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 191-24-2 | Benzo(ghi)perylene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 207-08-9 | Benzo(k)fluoranthene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 65-85-0 | Benzoic acid | U | 767 | ug/kg | 192 | 767 |
| 100-51-6 | Benzyl alcohol | U | 384 | ug/kg | 115 | 384 |
| 85-68-7 | Butylbenzylphthalate | U | 384 | ug/kg | 115 | 384 |
| 218-01-9 | Chrysene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 84-74-2 | Di-n-butylphthalate | U | 384 | ug/kg | 115 | 384 |
| 117-84-0 | Di-n-octylphthalate | U | 384 | ug/kg | 115 | 384 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 09:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306003** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **13.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84186** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 13:49** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1411.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 132-64-9 | Dibenzofuran | U | 384 | ug/kg | 115 | 384 |
| 84-66-2 | Diethylphthalate | U | 384 | ug/kg | 115 | 384 |
| 131-11-3 | Dimethylphthalate | U | 384 | ug/kg | 115 | 384 |
| 122-39-4 | Diphenylamine | U | 384 | ug/kg | 115 | 384 |
| 206-44-0 | Fluoranthene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 86-73-7 | Fluorene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 118-74-1 | Hexachlorobenzene | U | 384 | ug/kg | 115 | 384 |
| 87-68-3 | Hexachlorobutadiene | U | 384 | ug/kg | 115 | 384 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 384 | ug/kg | 115 | 384 |
| 67-72-1 | Hexachloroethane | U | 384 | ug/kg | 115 | 384 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 78-59-1 | Isophorone | U | 384 | ug/kg | 115 | 384 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 384 | ug/kg | 115 | 384 |
| 621-64-7 | N-Nitrosodipropylamine | U | 384 | ug/kg | 115 | 384 |
| 91-20-3 | Naphthalene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 98-95-3 | Nitrobenzene | U | 384 | ug/kg | 115 | 384 |
| 87-86-5 | Pentachlorophenol | U | 384 | ug/kg | 115 | 384 |
| 85-01-8 | Phenanthrene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 108-95-2 | Phenol | U | 384 | ug/kg | 115 | 384 |
| 129-00-0 | Pyrene | U | 38.4 | ug/kg | 11.5 | 38.4 |
| 110-86-1 | Pyridine | U | 384 | ug/kg | 115 | 384 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 384 | ug/kg | 115 | 384 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 384 | ug/kg | 115 | 384 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 384 | ug/kg | 115 | 384 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 384 | ug/kg | 115 | 384 |
| 65794-96-9 | m,p-Cresols | U | 384 | ug/kg | 115 | 384 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 384 | ug/kg | 115 | 384 |
| 95-48-7 | o-Cresol | U | 384 | ug/kg | 115 | 384 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 384 | ug/kg | 127 | 384 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 384 | ug/kg | 115 | 384 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 1.982 | 189 | ug/kg | 0 | J |
| 000064-19-7 | Acetic acid | 2.296 | 241 | ug/kg | 86 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 09:15** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306003** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **13.2** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84186** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 13:49** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1411.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.696 | 315 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.915 | 3930 | ug/kg | | AJ |
| | unknown | 6.035 | 176 | ug/kg | 0 | J |
| | unknown | 11.487 | 186 | ug/kg | 0 | J |
| | unknown | 12.139 | 317 | ug/kg | 0 | J |
| 000638-53-9 | Tridecanoic acid | 12.311 | 595 | ug/kg | 90 | NJ |
| | unknown | 12.525 | 172 | ug/kg | 0 | J |
| | unknown | 12.616 | 233 | ug/kg | 0 | J |
| 1000197-14-1 | 4b,8-Dimethyl-2-isopropylphenanthr | 12.82 | 367 | ug/kg | 95 | NJ |
| 001576-67-6 | Phenanthrene, 3,6-dimethyl- | 13.011 | 434 | ug/kg | 94 | NJ |
| 006566-19-4 | 10,18-Bisnorabieta-5,7,9(10),11,13 | 13.201 | 285 | ug/kg | 95 | NJ |
| | unknown | 13.282 | 602 | ug/kg | 0 | J |
| | unknown | 13.511 | 210 | ug/kg | 0 | J |
| 000483-65-8 | Phenanthrene, 1-methyl-7-(1-methyl | 13.782 | 1440 | ug/kg | 98 | NJ |
| | unknown | 14.158 | 919 | ug/kg | 0 | J |
| 135886-06-5 | 8-Isopropyl-1,3-dimethylphenanthre | 14.235 | 246 | ug/kg | 93 | NJ |
| | unknown | 14.292 | 1920 | ug/kg | 0 | J |
| | unknown | 14.597 | 387 | ug/kg | 0 | J |
| 036778-18-4 | 1-(10-Methylanthracen-9-yl)ethanon | 14.706 | 428 | ug/kg | 87 | NJ |
| 001740-19-8 | 1-Phenanthrenecarboxylic acid, 1,2 | 14.844 | 1940 | ug/kg | 91 | NJ |
| | unknown | 15.373 | 564 | ug/kg | 0 | J |
| 110936-78-2 | 7-Oxodehydroabietic acid, methyl e | 15.697 | 1820 | ug/kg | 95 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306004** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84179** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 14:20** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1412.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 377 | ug/kg | 113 | 377 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 377 | ug/kg | 113 | 377 |
| 122-66-7 | Azobenzene | U | 377 | ug/kg | 113 | 377 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 377 | ug/kg | 113 | 377 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 377 | ug/kg | 113 | 377 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 377 | ug/kg | 113 | 377 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 377 | ug/kg | 113 | 377 |
| 120-83-2 | 2,4-Dichlorophenol | U | 377 | ug/kg | 113 | 377 |
| 105-67-9 | 2,4-Dimethylphenol | U | 377 | ug/kg | 113 | 377 |
| 51-28-5 | 2,4-Dinitrophenol | U | 753 | ug/kg | 113 | 753 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 377 | ug/kg | 113 | 377 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 377 | ug/kg | 113 | 377 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 95-57-8 | 2-Chlorophenol | U | 377 | ug/kg | 113 | 377 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 377 | ug/kg | 113 | 377 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 88-75-5 | 2-Nitrophenol | U | 377 | ug/kg | 113 | 377 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 377 | ug/kg | 113 | 377 |
| 101-55-3 | 4-Bromophenylphenylether | U | 377 | ug/kg | 113 | 377 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 377 | ug/kg | 151 | 377 |
| 106-47-8 | 4-Chloroaniline | U | 377 | ug/kg | 113 | 377 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 377 | ug/kg | 113 | 377 |
| 100-02-7 | 4-Nitrophenol | U | 377 | ug/kg | 113 | 377 |
| 83-32-9 | Acenaphthene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 208-96-8 | Acenaphthylene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 62-53-3 | Aniline | U | 377 | ug/kg | 113 | 377 |
| 120-12-7 | Anthracene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 56-55-3 | Benzo(a)anthracene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 50-32-8 | Benzo(a)pyrene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 65-85-0 | Benzoic acid | U | 753 | ug/kg | 188 | 753 |
| 100-51-6 | Benzyl alcohol | U | 377 | ug/kg | 113 | 377 |
| 85-68-7 | Butylbenzylphthalate | U | 377 | ug/kg | 113 | 377 |
| 218-01-9 | Chrysene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 84-74-2 | Di-n-butylphthalate | U | 377 | ug/kg | 113 | 377 |
| 117-84-0 | Di-n-octylphthalate | U | 377 | ug/kg | 113 | 377 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306004** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84179** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 14:20** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1412.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 132-64-9 | Dibenzofuran | U | 377 | ug/kg | 113 | 377 |
| 84-66-2 | Diethylphthalate | U | 377 | ug/kg | 113 | 377 |
| 131-11-3 | Dimethylphthalate | U | 377 | ug/kg | 113 | 377 |
| 122-39-4 | Diphenylamine | U | 377 | ug/kg | 113 | 377 |
| 206-44-0 | Fluoranthene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 86-73-7 | Fluorene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 118-74-1 | Hexachlorobenzene | U | 377 | ug/kg | 113 | 377 |
| 87-68-3 | Hexachlorobutadiene | U | 377 | ug/kg | 113 | 377 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 377 | ug/kg | 113 | 377 |
| 67-72-1 | Hexachloroethane | U | 377 | ug/kg | 113 | 377 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 78-59-1 | Isophorone | U | 377 | ug/kg | 113 | 377 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 377 | ug/kg | 113 | 377 |
| 621-64-7 | N-Nitrosodipropylamine | U | 377 | ug/kg | 113 | 377 |
| 91-20-3 | Naphthalene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 98-95-3 | Nitrobenzene | U | 377 | ug/kg | 113 | 377 |
| 87-86-5 | Pentachlorophenol | U | 377 | ug/kg | 113 | 377 |
| 85-01-8 | Phenanthrene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 108-95-2 | Phenol | U | 377 | ug/kg | 113 | 377 |
| 129-00-0 | Pyrene | U | 37.7 | ug/kg | 11.3 | 37.7 |
| 110-86-1 | Pyridine | U | 377 | ug/kg | 113 | 377 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 377 | ug/kg | 113 | 377 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 377 | ug/kg | 113 | 377 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 377 | ug/kg | 113 | 377 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 377 | ug/kg | 113 | 377 |
| 65794-96-9 | m,p-Cresols | U | 377 | ug/kg | 113 | 377 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 377 | ug/kg | 113 | 377 |
| 95-48-7 | o-Cresol | U | 377 | ug/kg | 113 | 377 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 377 | ug/kg | 124 | 377 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 377 | ug/kg | 113 | 377 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.015 | 171 | ug/kg | 0 | J |
| | unknown | 2.358 | 174 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:00** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306004** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.6** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84179** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 14:20** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1412.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.92 | 12200 | ug/kg | | AJ |
| 000629-78-7 | Heptadecane | 10.93 | 315 | ug/kg | 93 | NJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.306 | 426 | ug/kg | 94 | NJ |
| | unknown | 12.53 | 488 | ug/kg | 0 | J |
| | unknown | 13.011 | 288 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.282 | 252 | ug/kg | 90 | NJ |
| | unknown | 14.287 | 621 | ug/kg | 0 | J |
| | unknown | 14.592 | 261 | ug/kg | 0 | J |
| 074685-30-6 | 5-Eicosene, (E)- | 15.049 | 715 | ug/kg | 91 | NJ |
| | unknown | 15.696 | 200 | ug/kg | 0 | J |
| | unknown | 16.316 | 270 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306005** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84183** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 14:42** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1510.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 367 | ug/kg | 110 | 367 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 367 | ug/kg | 110 | 367 |
| 122-66-7 | Azobenzene | U | 367 | ug/kg | 110 | 367 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 367 | ug/kg | 110 | 367 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 367 | ug/kg | 110 | 367 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 367 | ug/kg | 110 | 367 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 367 | ug/kg | 110 | 367 |
| 120-83-2 | 2,4-Dichlorophenol | U | 367 | ug/kg | 110 | 367 |
| 105-67-9 | 2,4-Dimethylphenol | U | 367 | ug/kg | 110 | 367 |
| 51-28-5 | 2,4-Dinitrophenol | U | 734 | ug/kg | 110 | 734 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 367 | ug/kg | 110 | 367 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 367 | ug/kg | 110 | 367 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 95-57-8 | 2-Chlorophenol | U | 367 | ug/kg | 110 | 367 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 367 | ug/kg | 110 | 367 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 88-75-5 | 2-Nitrophenol | U | 367 | ug/kg | 110 | 367 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 367 | ug/kg | 110 | 367 |
| 101-55-3 | 4-Bromophenylphenylether | U | 367 | ug/kg | 110 | 367 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 367 | ug/kg | 147 | 367 |
| 106-47-8 | 4-Chloroaniline | U | 367 | ug/kg | 110 | 367 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 367 | ug/kg | 110 | 367 |
| 100-02-7 | 4-Nitrophenol | U | 367 | ug/kg | 110 | 367 |
| 83-32-9 | Acenaphthene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 208-96-8 | Acenaphthylene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 62-53-3 | Aniline | U | 367 | ug/kg | 110 | 367 |
| 120-12-7 | Anthracene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 56-55-3 | Benzo(a)anthracene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 50-32-8 | Benzo(a)pyrene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 65-85-0 | Benzoic acid | U | 734 | ug/kg | 184 | 734 |
| 100-51-6 | Benzyl alcohol | U | 367 | ug/kg | 110 | 367 |
| 85-68-7 | Butylbenzylphthalate | U | 367 | ug/kg | 110 | 367 |
| 218-01-9 | Chrysene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 84-74-2 | Di-n-butylphthalate | U | 367 | ug/kg | 110 | 367 |
| 117-84-0 | Di-n-octylphthalate | U | 367 | ug/kg | 110 | 367 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306005** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84183** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 14:42** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1510.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 132-64-9 | Dibenzofuran | U | 367 | ug/kg | 110 | 367 |
| 84-66-2 | Diethylphthalate | U | 367 | ug/kg | 110 | 367 |
| 131-11-3 | Dimethylphthalate | U | 367 | ug/kg | 110 | 367 |
| 122-39-4 | Diphenylamine | U | 367 | ug/kg | 110 | 367 |
| 206-44-0 | Fluoranthene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 86-73-7 | Fluorene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 118-74-1 | Hexachlorobenzene | U | 367 | ug/kg | 110 | 367 |
| 87-68-3 | Hexachlorobutadiene | U | 367 | ug/kg | 110 | 367 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 367 | ug/kg | 110 | 367 |
| 67-72-1 | Hexachloroethane | U | 367 | ug/kg | 110 | 367 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 78-59-1 | Isophorone | U | 367 | ug/kg | 110 | 367 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 367 | ug/kg | 110 | 367 |
| 621-64-7 | N-Nitrosodipropylamine | U | 367 | ug/kg | 110 | 367 |
| 91-20-3 | Naphthalene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 98-95-3 | Nitrobenzene | U | 367 | ug/kg | 110 | 367 |
| 87-86-5 | Pentachlorophenol | U | 367 | ug/kg | 110 | 367 |
| 85-01-8 | Phenanthrene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 108-95-2 | Phenol | U | 367 | ug/kg | 110 | 367 |
| 129-00-0 | Pyrene | U | 36.7 | ug/kg | 11.0 | 36.7 |
| 110-86-1 | Pyridine | U | 367 | ug/kg | 110 | 367 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 367 | ug/kg | 110 | 367 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 367 | ug/kg | 110 | 367 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 367 | ug/kg | 110 | 367 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 367 | ug/kg | 110 | 367 |
| 65794-96-9 | m,p-Cresols | U | 367 | ug/kg | 110 | 367 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 367 | ug/kg | 110 | 367 |
| 95-48-7 | o-Cresol | U | 367 | ug/kg | 110 | 367 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 367 | ug/kg | 121 | 367 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 367 | ug/kg | 110 | 367 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.63 | 503 | ug/kg | 0 | J |
| | unknown | 3.825 | 7000 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306005** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84183** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 14:42** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1510.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.849 | 1920 | ug/kg | | AJ |
| 003856-25-5 | Copaene | 8.958 | 193 | ug/kg | 98 | NJ |
| 031983-22-9 | Naphthalene, 1,2,4a,5,6,8a-hexahyd | 9.787 | 520 | ug/kg | 98 | NJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.287 | 329 | ug/kg | 98 | NJ |
| | unknown | 12.759 | 148 | ug/kg | 0 | J |
| | unknown | 12.792 | 158 | ug/kg | 0 | J |
| | unknown | 12.982 | 178 | ug/kg | 0 | J |
| 017351-34-7 | 14-Pentadecenoic acid | 13.163 | 395 | ug/kg | 86 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.259 | 386 | ug/kg | 93 | NJ |
| 000483-65-8 | Phenanthrene, 1-methyl-7-(1-methyl | 13.749 | 236 | ug/kg | 94 | NJ |
| | unknown | 13.882 | 470 | ug/kg | 0 | J |
| | unknown | 14.273 | 682 | ug/kg | 0 | J |
| | unknown | 14.644 | 294 | ug/kg | 0 | J |
| | unknown | 14.792 | 273 | ug/kg | 0 | J |
| 1000282-98-2 | Dichloroacetic acid, heptadecyl es | 15.021 | 546 | ug/kg | 90 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306007** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84180** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 15:22** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1414.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 374 | ug/kg | 112 | 374 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 374 | ug/kg | 112 | 374 |
| 122-66-7 | Azobenzene | U | 374 | ug/kg | 112 | 374 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 374 | ug/kg | 112 | 374 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 374 | ug/kg | 112 | 374 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 374 | ug/kg | 112 | 374 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 374 | ug/kg | 112 | 374 |
| 120-83-2 | 2,4-Dichlorophenol | U | 374 | ug/kg | 112 | 374 |
| 105-67-9 | 2,4-Dimethylphenol | U | 374 | ug/kg | 112 | 374 |
| 51-28-5 | 2,4-Dinitrophenol | U | 747 | ug/kg | 112 | 747 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 374 | ug/kg | 112 | 374 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 374 | ug/kg | 112 | 374 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 95-57-8 | 2-Chlorophenol | U | 374 | ug/kg | 112 | 374 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 374 | ug/kg | 112 | 374 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 88-75-5 | 2-Nitrophenol | U | 374 | ug/kg | 112 | 374 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 374 | ug/kg | 112 | 374 |
| 101-55-3 | 4-Bromophenylphenylether | U | 374 | ug/kg | 112 | 374 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 374 | ug/kg | 149 | 374 |
| 106-47-8 | 4-Chloroaniline | U | 374 | ug/kg | 112 | 374 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 374 | ug/kg | 112 | 374 |
| 100-02-7 | 4-Nitrophenol | U | 374 | ug/kg | 112 | 374 |
| 83-32-9 | Acenaphthene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 208-96-8 | Acenaphthylene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 62-53-3 | Aniline | U | 374 | ug/kg | 112 | 374 |
| 120-12-7 | Anthracene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 56-55-3 | Benzo(a)anthracene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 50-32-8 | Benzo(a)pyrene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 65-85-0 | Benzoic acid | U | 747 | ug/kg | 187 | 747 |
| 100-51-6 | Benzyl alcohol | U | 374 | ug/kg | 112 | 374 |
| 85-68-7 | Butylbenzylphthalate | U | 374 | ug/kg | 112 | 374 |
| 218-01-9 | Chrysene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 84-74-2 | Di-n-butylphthalate | U | 374 | ug/kg | 112 | 374 |
| 117-84-0 | Di-n-octylphthalate | U | 374 | ug/kg | 112 | 374 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306007** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84180** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 15:22** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1414.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 132-64-9 | Dibenzofuran | U | 374 | ug/kg | 112 | 374 |
| 84-66-2 | Diethylphthalate | U | 374 | ug/kg | 112 | 374 |
| 131-11-3 | Dimethylphthalate | U | 374 | ug/kg | 112 | 374 |
| 122-39-4 | Diphenylamine | U | 374 | ug/kg | 112 | 374 |
| 206-44-0 | Fluoranthene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 86-73-7 | Fluorene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 118-74-1 | Hexachlorobenzene | U | 374 | ug/kg | 112 | 374 |
| 87-68-3 | Hexachlorobutadiene | U | 374 | ug/kg | 112 | 374 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 374 | ug/kg | 112 | 374 |
| 67-72-1 | Hexachloroethane | U | 374 | ug/kg | 112 | 374 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 78-59-1 | Isophorone | U | 374 | ug/kg | 112 | 374 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 374 | ug/kg | 112 | 374 |
| 621-64-7 | N-Nitrosodipropylamine | U | 374 | ug/kg | 112 | 374 |
| 91-20-3 | Naphthalene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 98-95-3 | Nitrobenzene | U | 374 | ug/kg | 112 | 374 |
| 87-86-5 | Pentachlorophenol | U | 374 | ug/kg | 112 | 374 |
| 85-01-8 | Phenanthrene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 108-95-2 | Phenol | U | 374 | ug/kg | 112 | 374 |
| 129-00-0 | Pyrene | U | 37.4 | ug/kg | 11.2 | 37.4 |
| 110-86-1 | Pyridine | U | 374 | ug/kg | 112 | 374 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 374 | ug/kg | 112 | 374 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 374 | ug/kg | 112 | 374 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 374 | ug/kg | 112 | 374 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 374 | ug/kg | 112 | 374 |
| 65794-96-9 | m,p-Cresols | U | 374 | ug/kg | 112 | 374 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 374 | ug/kg | 112 | 374 |
| 95-48-7 | o-Cresol | U | 374 | ug/kg | 112 | 374 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 374 | ug/kg | 123 | 374 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 374 | ug/kg | 112 | 374 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000064-19-7 | Acetic acid | 2.225 | 222 | ug/kg | 87 | NJ |
| | unknown | 3.668 | 510 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306007** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **10.9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84180** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 15:22** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1414.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.854 | 7770 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.892 | 3510 | ug/kg | | AJ |
| | unknown | 6.016 | 291 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.306 | 290 | ug/kg | 94 | NJ |
| 000544-76-3 | Hexadecane | 12.525 | 207 | ug/kg | 91 | NJ |
| | unknown | 13.011 | 158 | ug/kg | 0 | J |
| 000483-65-8 | Phenanthrene, 1-methyl-7-(1-methyl | 13.778 | 358 | ug/kg | 91 | NJ |
| | unknown | 14.292 | 154 | ug/kg | 0 | J |
| | unknown | 15.078 | 600 | ug/kg | 0 | J |
| | unknown | 15.701 | 151 | ug/kg | 0 | J |
| | unknown | 16.316 | 677 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306008** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84184** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 15:53** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1415.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 122-66-7 | Azobenzene | U | 355 | ug/kg | 107 | 355 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 120-83-2 | 2,4-Dichlorophenol | U | 355 | ug/kg | 107 | 355 |
| 105-67-9 | 2,4-Dimethylphenol | U | 355 | ug/kg | 107 | 355 |
| 51-28-5 | 2,4-Dinitrophenol | U | 710 | ug/kg | 107 | 710 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 355 | ug/kg | 107 | 355 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 355 | ug/kg | 107 | 355 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 95-57-8 | 2-Chlorophenol | U | 355 | ug/kg | 107 | 355 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 355 | ug/kg | 107 | 355 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 88-75-5 | 2-Nitrophenol | U | 355 | ug/kg | 107 | 355 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 355 | ug/kg | 107 | 355 |
| 101-55-3 | 4-Bromophenylphenylether | U | 355 | ug/kg | 107 | 355 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 355 | ug/kg | 142 | 355 |
| 106-47-8 | 4-Chloroaniline | U | 355 | ug/kg | 107 | 355 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 355 | ug/kg | 107 | 355 |
| 100-02-7 | 4-Nitrophenol | U | 355 | ug/kg | 107 | 355 |
| 83-32-9 | Acenaphthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 208-96-8 | Acenaphthylene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 62-53-3 | Aniline | U | 355 | ug/kg | 107 | 355 |
| 120-12-7 | Anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 56-55-3 | Benzo(a)anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 50-32-8 | Benzo(a)pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 65-85-0 | Benzoic acid | U | 710 | ug/kg | 178 | 710 |
| 100-51-6 | Benzyl alcohol | U | 355 | ug/kg | 107 | 355 |
| 85-68-7 | Butylbenzylphthalate | U | 355 | ug/kg | 107 | 355 |
| 218-01-9 | Chrysene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 84-74-2 | Di-n-butylphthalate | U | 355 | ug/kg | 107 | 355 |
| 117-84-0 | Di-n-octylphthalate | U | 355 | ug/kg | 107 | 355 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306008** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84184** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 15:53** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1415.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 132-64-9 | Dibenzofuran | U | 355 | ug/kg | 107 | 355 |
| 84-66-2 | Diethylphthalate | U | 355 | ug/kg | 107 | 355 |
| 131-11-3 | Dimethylphthalate | U | 355 | ug/kg | 107 | 355 |
| 122-39-4 | Diphenylamine | U | 355 | ug/kg | 107 | 355 |
| 206-44-0 | Fluoranthene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 86-73-7 | Fluorene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 118-74-1 | Hexachlorobenzene | U | 355 | ug/kg | 107 | 355 |
| 87-68-3 | Hexachlorobutadiene | U | 355 | ug/kg | 107 | 355 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 355 | ug/kg | 107 | 355 |
| 67-72-1 | Hexachloroethane | U | 355 | ug/kg | 107 | 355 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 78-59-1 | Isophorone | U | 355 | ug/kg | 107 | 355 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 355 | ug/kg | 107 | 355 |
| 621-64-7 | N-Nitrosodipropylamine | U | 355 | ug/kg | 107 | 355 |
| 91-20-3 | Naphthalene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 98-95-3 | Nitrobenzene | U | 355 | ug/kg | 107 | 355 |
| 87-86-5 | Pentachlorophenol | U | 355 | ug/kg | 107 | 355 |
| 85-01-8 | Phenanthrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 108-95-2 | Phenol | U | 355 | ug/kg | 107 | 355 |
| 129-00-0 | Pyrene | U | 35.5 | ug/kg | 10.7 | 35.5 |
| 110-86-1 | Pyridine | U | 355 | ug/kg | 107 | 355 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 355 | ug/kg | 107 | 355 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 355 | ug/kg | 107 | 355 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 355 | ug/kg | 107 | 355 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 355 | ug/kg | 107 | 355 |
| 65794-96-9 | m,p-Cresols | U | 355 | ug/kg | 107 | 355 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 355 | ug/kg | 107 | 355 |
| 95-48-7 | o-Cresol | U | 355 | ug/kg | 107 | 355 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 355 | ug/kg | 117 | 355 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 355 | ug/kg | 107 | 355 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.473 | 221 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.739 | 10200 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:55** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306008** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.3** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84184** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 15:53** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1415.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 12.306 | 189 | ug/kg | 0 | J |
| | unknown | 13.768 | 243 | ug/kg | 0 | J |
| 003452-07-1 | 1-Eicosene | 15.049 | 1130 | ug/kg | 97 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:35** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306009** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84188** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 16:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1416.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 122-66-7 | Azobenzene | U | 356 | ug/kg | 107 | 356 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 120-83-2 | 2,4-Dichlorophenol | U | 356 | ug/kg | 107 | 356 |
| 105-67-9 | 2,4-Dimethylphenol | U | 356 | ug/kg | 107 | 356 |
| 51-28-5 | 2,4-Dinitrophenol | U | 712 | ug/kg | 107 | 712 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 356 | ug/kg | 107 | 356 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 356 | ug/kg | 107 | 356 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 95-57-8 | 2-Chlorophenol | U | 356 | ug/kg | 107 | 356 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 356 | ug/kg | 107 | 356 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 88-75-5 | 2-Nitrophenol | U | 356 | ug/kg | 107 | 356 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 356 | ug/kg | 107 | 356 |
| 101-55-3 | 4-Bromophenylphenylether | U | 356 | ug/kg | 107 | 356 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 356 | ug/kg | 142 | 356 |
| 106-47-8 | 4-Chloroaniline | U | 356 | ug/kg | 107 | 356 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 356 | ug/kg | 107 | 356 |
| 100-02-7 | 4-Nitrophenol | U | 356 | ug/kg | 107 | 356 |
| 83-32-9 | Acenaphthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 208-96-8 | Acenaphthylene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 62-53-3 | Aniline | U | 356 | ug/kg | 107 | 356 |
| 120-12-7 | Anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 56-55-3 | Benzo(a)anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 50-32-8 | Benzo(a)pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 65-85-0 | Benzoic acid | U | 712 | ug/kg | 178 | 712 |
| 100-51-6 | Benzyl alcohol | U | 356 | ug/kg | 107 | 356 |
| 85-68-7 | Butylbenzylphthalate | U | 356 | ug/kg | 107 | 356 |
| 218-01-9 | Chrysene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 84-74-2 | Di-n-butylphthalate | U | 356 | ug/kg | 107 | 356 |
| 117-84-0 | Di-n-octylphthalate | U | 356 | ug/kg | 107 | 356 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:35** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306009** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84188** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 16:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1416.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 132-64-9 | Dibenzofuran | U | 356 | ug/kg | 107 | 356 |
| 84-66-2 | Diethylphthalate | U | 356 | ug/kg | 107 | 356 |
| 131-11-3 | Dimethylphthalate | U | 356 | ug/kg | 107 | 356 |
| 122-39-4 | Diphenylamine | U | 356 | ug/kg | 107 | 356 |
| 206-44-0 | Fluoranthene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 86-73-7 | Fluorene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 118-74-1 | Hexachlorobenzene | U | 356 | ug/kg | 107 | 356 |
| 87-68-3 | Hexachlorobutadiene | U | 356 | ug/kg | 107 | 356 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 356 | ug/kg | 107 | 356 |
| 67-72-1 | Hexachloroethane | U | 356 | ug/kg | 107 | 356 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 78-59-1 | Isophorone | U | 356 | ug/kg | 107 | 356 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 356 | ug/kg | 107 | 356 |
| 621-64-7 | N-Nitrosodipropylamine | U | 356 | ug/kg | 107 | 356 |
| 91-20-3 | Naphthalene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 98-95-3 | Nitrobenzene | U | 356 | ug/kg | 107 | 356 |
| 87-86-5 | Pentachlorophenol | U | 356 | ug/kg | 107 | 356 |
| 85-01-8 | Phenanthrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 108-95-2 | Phenol | U | 356 | ug/kg | 107 | 356 |
| 129-00-0 | Pyrene | U | 35.6 | ug/kg | 10.7 | 35.6 |
| 110-86-1 | Pyridine | U | 356 | ug/kg | 107 | 356 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 356 | ug/kg | 107 | 356 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 356 | ug/kg | 107 | 356 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 356 | ug/kg | 107 | 356 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 356 | ug/kg | 107 | 356 |
| 65794-96-9 | m,p-Cresols | U | 356 | ug/kg | 107 | 356 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 356 | ug/kg | 107 | 356 |
| 95-48-7 | o-Cresol | U | 356 | ug/kg | 107 | 356 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 356 | ug/kg | 117 | 356 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 356 | ug/kg | 107 | 356 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 3.458 | 292 | ug/kg | 0 | J |
| | Unknown Aldol Condensate | 3.735 | 10700 | ug/kg | | AJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:35** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306009** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **6.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84188** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 16:24** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1416.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 5.977 | 378 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.311 | 427 | ug/kg | 98 | NJ |
| 000301-00-8 | 9,12,15-Octadecatrienoic acid, met | 13.025 | 180 | ug/kg | 91 | NJ |
| | unknown | 13.192 | 564 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.287 | 200 | ug/kg | 90 | NJ |
| 000297-03-0 | Cyclotetracosane | 15.073 | 651 | ug/kg | 90 | NJ |
| | unknown | 16.325 | 289 | ug/kg | 0 | J |
| | unknown | 20.502 | 1420 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:16** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306010** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84181** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 16:55** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1417.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 376 | ug/kg | 113 | 376 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 376 | ug/kg | 113 | 376 |
| 122-66-7 | Azobenzene | U | 376 | ug/kg | 113 | 376 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 376 | ug/kg | 113 | 376 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 376 | ug/kg | 113 | 376 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 376 | ug/kg | 113 | 376 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 376 | ug/kg | 113 | 376 |
| 120-83-2 | 2,4-Dichlorophenol | U | 376 | ug/kg | 113 | 376 |
| 105-67-9 | 2,4-Dimethylphenol | U | 376 | ug/kg | 113 | 376 |
| 51-28-5 | 2,4-Dinitrophenol | U | 751 | ug/kg | 113 | 751 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 376 | ug/kg | 113 | 376 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 376 | ug/kg | 113 | 376 |
| 91-58-7 | 2-Chloronaphthalene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 95-57-8 | 2-Chlorophenol | U | 376 | ug/kg | 113 | 376 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 376 | ug/kg | 113 | 376 |
| 91-57-6 | 2-Methylnaphthalene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 88-75-5 | 2-Nitrophenol | U | 376 | ug/kg | 113 | 376 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 376 | ug/kg | 113 | 376 |
| 101-55-3 | 4-Bromophenylphenylether | U | 376 | ug/kg | 113 | 376 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 376 | ug/kg | 150 | 376 |
| 106-47-8 | 4-Chloroaniline | U | 376 | ug/kg | 113 | 376 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 376 | ug/kg | 113 | 376 |
| 100-02-7 | 4-Nitrophenol | U | 376 | ug/kg | 113 | 376 |
| 83-32-9 | Acenaphthene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 208-96-8 | Acenaphthylene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 62-53-3 | Aniline | U | 376 | ug/kg | 113 | 376 |
| 120-12-7 | Anthracene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 56-55-3 | Benzo(a)anthracene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 50-32-8 | Benzo(a)pyrene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 205-99-2 | Benzo(b)fluoranthene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 191-24-2 | Benzo(ghi)perylene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 207-08-9 | Benzo(k)fluoranthene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 65-85-0 | Benzoic acid | U | 751 | ug/kg | 188 | 751 |
| 100-51-6 | Benzyl alcohol | U | 376 | ug/kg | 113 | 376 |
| 85-68-7 | Butylbenzylphthalate | U | 376 | ug/kg | 113 | 376 |
| 218-01-9 | Chrysene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 84-74-2 | Di-n-butylphthalate | U | 376 | ug/kg | 113 | 376 |
| 117-84-0 | Di-n-octylphthalate | U | 376 | ug/kg | 113 | 376 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:16** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306010** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84181** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 16:55** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1417.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 132-64-9 | Dibenzofuran | U | 376 | ug/kg | 113 | 376 |
| 84-66-2 | Diethylphthalate | U | 376 | ug/kg | 113 | 376 |
| 131-11-3 | Dimethylphthalate | U | 376 | ug/kg | 113 | 376 |
| 122-39-4 | Diphenylamine | U | 376 | ug/kg | 113 | 376 |
| 206-44-0 | Fluoranthene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 86-73-7 | Fluorene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 118-74-1 | Hexachlorobenzene | U | 376 | ug/kg | 113 | 376 |
| 87-68-3 | Hexachlorobutadiene | U | 376 | ug/kg | 113 | 376 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 376 | ug/kg | 113 | 376 |
| 67-72-1 | Hexachloroethane | U | 376 | ug/kg | 113 | 376 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 78-59-1 | Isophorone | U | 376 | ug/kg | 113 | 376 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 376 | ug/kg | 113 | 376 |
| 621-64-7 | N-Nitrosodipropylamine | U | 376 | ug/kg | 113 | 376 |
| 91-20-3 | Naphthalene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 98-95-3 | Nitrobenzene | U | 376 | ug/kg | 113 | 376 |
| 87-86-5 | Pentachlorophenol | U | 376 | ug/kg | 113 | 376 |
| 85-01-8 | Phenanthrene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 108-95-2 | Phenol | U | 376 | ug/kg | 113 | 376 |
| 129-00-0 | Pyrene | U | 37.6 | ug/kg | 11.3 | 37.6 |
| 110-86-1 | Pyridine | U | 376 | ug/kg | 113 | 376 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 376 | ug/kg | 113 | 376 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 376 | ug/kg | 113 | 376 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 376 | ug/kg | 113 | 376 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 376 | ug/kg | 113 | 376 |
| 65794-96-9 | m,p-Cresols | U | 376 | ug/kg | 113 | 376 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 376 | ug/kg | 113 | 376 |
| 95-48-7 | o-Cresol | U | 376 | ug/kg | 113 | 376 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 376 | ug/kg | 124 | 376 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 376 | ug/kg | 113 | 376 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.011 | 653 | ug/kg | 0 | J |
| 000064-19-7 | Acetic acid | 2.482 | 239 | ug/kg | 86 | NJ |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:16** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306010** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **11.4** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84181** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 16:55** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.03 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1417.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.987 | 3160 | ug/kg | | AJ |
| | unknown | 6.035 | 199 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.306 | 152 | ug/kg | 90 | NJ |
| | unknown | 14.292 | 201 | ug/kg | 0 | J |
| | unknown | 18.14 | 345 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:31** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306011** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84185** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 15:14** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1511.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 366 | ug/kg | 110 | 366 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 366 | ug/kg | 110 | 366 |
| 122-66-7 | Azobenzene | U | 366 | ug/kg | 110 | 366 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 366 | ug/kg | 110 | 366 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 366 | ug/kg | 110 | 366 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 366 | ug/kg | 110 | 366 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 366 | ug/kg | 110 | 366 |
| 120-83-2 | 2,4-Dichlorophenol | U | 366 | ug/kg | 110 | 366 |
| 105-67-9 | 2,4-Dimethylphenol | U | 366 | ug/kg | 110 | 366 |
| 51-28-5 | 2,4-Dinitrophenol | U | 732 | ug/kg | 110 | 732 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 366 | ug/kg | 110 | 366 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 366 | ug/kg | 110 | 366 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 95-57-8 | 2-Chlorophenol | U | 366 | ug/kg | 110 | 366 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 366 | ug/kg | 110 | 366 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 88-75-5 | 2-Nitrophenol | U | 366 | ug/kg | 110 | 366 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 366 | ug/kg | 110 | 366 |
| 101-55-3 | 4-Bromophenylphenylether | U | 366 | ug/kg | 110 | 366 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 366 | ug/kg | 146 | 366 |
| 106-47-8 | 4-Chloroaniline | U | 366 | ug/kg | 110 | 366 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 366 | ug/kg | 110 | 366 |
| 100-02-7 | 4-Nitrophenol | U | 366 | ug/kg | 110 | 366 |
| 83-32-9 | Acenaphthene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 208-96-8 | Acenaphthylene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 62-53-3 | Aniline | U | 366 | ug/kg | 110 | 366 |
| 120-12-7 | Anthracene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 56-55-3 | Benzo(a)anthracene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 50-32-8 | Benzo(a)pyrene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 65-85-0 | Benzoic acid | U | 732 | ug/kg | 183 | 732 |
| 100-51-6 | Benzyl alcohol | U | 366 | ug/kg | 110 | 366 |
| 85-68-7 | Butylbenzylphthalate | U | 366 | ug/kg | 110 | 366 |
| 218-01-9 | Chrysene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 84-74-2 | Di-n-butylphthalate | U | 366 | ug/kg | 110 | 366 |
| 117-84-0 | Di-n-octylphthalate | U | 366 | ug/kg | 110 | 366 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:31** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306011** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84185** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 15:14** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1511.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 132-64-9 | Dibenzofuran | U | 366 | ug/kg | 110 | 366 |
| 84-66-2 | Diethylphthalate | U | 366 | ug/kg | 110 | 366 |
| 131-11-3 | Dimethylphthalate | U | 366 | ug/kg | 110 | 366 |
| 122-39-4 | Diphenylamine | U | 366 | ug/kg | 110 | 366 |
| 206-44-0 | Fluoranthene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 86-73-7 | Fluorene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 118-74-1 | Hexachlorobenzene | U | 366 | ug/kg | 110 | 366 |
| 87-68-3 | Hexachlorobutadiene | U | 366 | ug/kg | 110 | 366 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 366 | ug/kg | 110 | 366 |
| 67-72-1 | Hexachloroethane | U | 366 | ug/kg | 110 | 366 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 78-59-1 | Isophorone | U | 366 | ug/kg | 110 | 366 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 366 | ug/kg | 110 | 366 |
| 621-64-7 | N-Nitrosodipropylamine | U | 366 | ug/kg | 110 | 366 |
| 91-20-3 | Naphthalene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 98-95-3 | Nitrobenzene | U | 366 | ug/kg | 110 | 366 |
| 87-86-5 | Pentachlorophenol | U | 366 | ug/kg | 110 | 366 |
| 85-01-8 | Phenanthrene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 108-95-2 | Phenol | U | 366 | ug/kg | 110 | 366 |
| 129-00-0 | Pyrene | U | 36.6 | ug/kg | 11.0 | 36.6 |
| 110-86-1 | Pyridine | U | 366 | ug/kg | 110 | 366 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 366 | ug/kg | 110 | 366 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 366 | ug/kg | 110 | 366 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 366 | ug/kg | 110 | 366 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 366 | ug/kg | 110 | 366 |
| 65794-96-9 | m,p-Cresols | U | 366 | ug/kg | 110 | 366 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 366 | ug/kg | 110 | 366 |
| 95-48-7 | o-Cresol | U | 366 | ug/kg | 110 | 366 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 366 | ug/kg | 121 | 366 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 366 | ug/kg | 110 | 366 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| 000064-19-7 | Acetic acid | 2.006 | 229 | ug/kg | 86 | NJ |
| | unknown | 3.558 | 244 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:31** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306011** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84185** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 15:14** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1511.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.801 | 9560 | ug/kg | | AJ |
| | unknown | 5.968 | 228 | ug/kg | 0 | J |
| 000057-10-3 | n-Hexadecanoic acid | 12.282 | 258 | ug/kg | 92 | NJ |
| 000057-11-4 | Octadecanoic acid | 13.254 | 151 | ug/kg | 93 | NJ |
| 074685-33-9 | 3-Eicosene, (E)- | 15.044 | 482 | ug/kg | 93 | NJ |
| | unknown | 15.649 | 399 | ug/kg | 0 | J |
| | unknown | 17.106 | 184 | ug/kg | 0 | J |
| | unknown | 22.863 | 2170 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306012** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **7.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84189** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 17:57** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1419.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 358 | ug/kg | 108 | 358 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 358 | ug/kg | 108 | 358 |
| 122-66-7 | Azobenzene | U | 358 | ug/kg | 108 | 358 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 358 | ug/kg | 108 | 358 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 358 | ug/kg | 108 | 358 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 358 | ug/kg | 108 | 358 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 358 | ug/kg | 108 | 358 |
| 120-83-2 | 2,4-Dichlorophenol | U | 358 | ug/kg | 108 | 358 |
| 105-67-9 | 2,4-Dimethylphenol | U | 358 | ug/kg | 108 | 358 |
| 51-28-5 | 2,4-Dinitrophenol | U | 717 | ug/kg | 108 | 717 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 358 | ug/kg | 108 | 358 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 358 | ug/kg | 108 | 358 |
| 91-58-7 | 2-Chloronaphthalene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 95-57-8 | 2-Chlorophenol | U | 358 | ug/kg | 108 | 358 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 358 | ug/kg | 108 | 358 |
| 91-57-6 | 2-Methylnaphthalene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 88-75-5 | 2-Nitrophenol | U | 358 | ug/kg | 108 | 358 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 358 | ug/kg | 108 | 358 |
| 101-55-3 | 4-Bromophenylphenylether | U | 358 | ug/kg | 108 | 358 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 358 | ug/kg | 143 | 358 |
| 106-47-8 | 4-Chloroaniline | U | 358 | ug/kg | 108 | 358 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 358 | ug/kg | 108 | 358 |
| 100-02-7 | 4-Nitrophenol | U | 358 | ug/kg | 108 | 358 |
| 83-32-9 | Acenaphthene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 208-96-8 | Acenaphthylene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 62-53-3 | Aniline | U | 358 | ug/kg | 108 | 358 |
| 120-12-7 | Anthracene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 56-55-3 | Benzo(a)anthracene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 50-32-8 | Benzo(a)pyrene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 205-99-2 | Benzo(b)fluoranthene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 191-24-2 | Benzo(ghi)perylene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 207-08-9 | Benzo(k)fluoranthene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 65-85-0 | Benzoic acid | U | 717 | ug/kg | 179 | 717 |
| 100-51-6 | Benzyl alcohol | U | 358 | ug/kg | 108 | 358 |
| 85-68-7 | Butylbenzylphthalate | U | 358 | ug/kg | 108 | 358 |
| 218-01-9 | Chrysene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 84-74-2 | Di-n-butylphthalate | U | 358 | ug/kg | 108 | 358 |
| 117-84-0 | Di-n-octylphthalate | U | 358 | ug/kg | 108 | 358 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306012** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **7.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84189** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 17:57** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1419.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 132-64-9 | Dibenzofuran | U | 358 | ug/kg | 108 | 358 |
| 84-66-2 | Diethylphthalate | U | 358 | ug/kg | 108 | 358 |
| 131-11-3 | Dimethylphthalate | U | 358 | ug/kg | 108 | 358 |
| 122-39-4 | Diphenylamine | U | 358 | ug/kg | 108 | 358 |
| 206-44-0 | Fluoranthene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 86-73-7 | Fluorene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 118-74-1 | Hexachlorobenzene | U | 358 | ug/kg | 108 | 358 |
| 87-68-3 | Hexachlorobutadiene | U | 358 | ug/kg | 108 | 358 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 358 | ug/kg | 108 | 358 |
| 67-72-1 | Hexachloroethane | U | 358 | ug/kg | 108 | 358 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 78-59-1 | Isophorone | U | 358 | ug/kg | 108 | 358 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 358 | ug/kg | 108 | 358 |
| 621-64-7 | N-Nitrosodipropylamine | U | 358 | ug/kg | 108 | 358 |
| 91-20-3 | Naphthalene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 98-95-3 | Nitrobenzene | U | 358 | ug/kg | 108 | 358 |
| 87-86-5 | Pentachlorophenol | U | 358 | ug/kg | 108 | 358 |
| 85-01-8 | Phenanthrene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 108-95-2 | Phenol | U | 358 | ug/kg | 108 | 358 |
| 129-00-0 | Pyrene | U | 35.8 | ug/kg | 10.8 | 35.8 |
| 110-86-1 | Pyridine | U | 358 | ug/kg | 108 | 358 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 358 | ug/kg | 108 | 358 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 358 | ug/kg | 108 | 358 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 358 | ug/kg | 108 | 358 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 358 | ug/kg | 108 | 358 |
| 65794-96-9 | m,p-Cresols | U | 358 | ug/kg | 108 | 358 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 358 | ug/kg | 108 | 358 |
| 95-48-7 | o-Cresol | U | 358 | ug/kg | 108 | 358 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 358 | ug/kg | 118 | 358 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 358 | ug/kg | 108 | 358 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.073 | 195 | ug/kg | 0 | J |
| | unknown | 3.606 | 390 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 11:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306012** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **7.1** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84189** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 17:57** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.04 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1419.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.844 | 15600 | ug/kg | | AJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.306 | 151 | ug/kg | 90 | NJ |
| | unknown | 18.13 | 478 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306015** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84194** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 15:45** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1512.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 368 | ug/kg | 110 | 368 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 368 | ug/kg | 110 | 368 |
| 122-66-7 | Azobenzene | U | 368 | ug/kg | 110 | 368 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 368 | ug/kg | 110 | 368 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 368 | ug/kg | 110 | 368 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 368 | ug/kg | 110 | 368 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 368 | ug/kg | 110 | 368 |
| 120-83-2 | 2,4-Dichlorophenol | U | 368 | ug/kg | 110 | 368 |
| 105-67-9 | 2,4-Dimethylphenol | U | 368 | ug/kg | 110 | 368 |
| 51-28-5 | 2,4-Dinitrophenol | U | 735 | ug/kg | 110 | 735 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 368 | ug/kg | 110 | 368 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 368 | ug/kg | 110 | 368 |
| 91-58-7 | 2-Chloronaphthalene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 95-57-8 | 2-Chlorophenol | U | 368 | ug/kg | 110 | 368 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 368 | ug/kg | 110 | 368 |
| 91-57-6 | 2-Methylnaphthalene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 88-75-5 | 2-Nitrophenol | U | 368 | ug/kg | 110 | 368 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 368 | ug/kg | 110 | 368 |
| 101-55-3 | 4-Bromophenylphenylether | U | 368 | ug/kg | 110 | 368 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 368 | ug/kg | 147 | 368 |
| 106-47-8 | 4-Chloroaniline | U | 368 | ug/kg | 110 | 368 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 368 | ug/kg | 110 | 368 |
| 100-02-7 | 4-Nitrophenol | U | 368 | ug/kg | 110 | 368 |
| 83-32-9 | Acenaphthene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 208-96-8 | Acenaphthylene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 62-53-3 | Aniline | U | 368 | ug/kg | 110 | 368 |
| 120-12-7 | Anthracene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 56-55-3 | Benzo(a)anthracene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 50-32-8 | Benzo(a)pyrene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 205-99-2 | Benzo(b)fluoranthene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 191-24-2 | Benzo(ghi)perylene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 207-08-9 | Benzo(k)fluoranthene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 65-85-0 | Benzoic acid | U | 735 | ug/kg | 184 | 735 |
| 100-51-6 | Benzyl alcohol | U | 368 | ug/kg | 110 | 368 |
| 85-68-7 | Butylbenzylphthalate | U | 368 | ug/kg | 110 | 368 |
| 218-01-9 | Chrysene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 84-74-2 | Di-n-butylphthalate | U | 368 | ug/kg | 110 | 368 |
| 117-84-0 | Di-n-octylphthalate | U | 368 | ug/kg | 110 | 368 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306015** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84194** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 15:45** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1512.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 132-64-9 | Dibenzofuran | U | 368 | ug/kg | 110 | 368 |
| 84-66-2 | Diethylphthalate | U | 368 | ug/kg | 110 | 368 |
| 131-11-3 | Dimethylphthalate | U | 368 | ug/kg | 110 | 368 |
| 122-39-4 | Diphenylamine | U | 368 | ug/kg | 110 | 368 |
| 206-44-0 | Fluoranthene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 86-73-7 | Fluorene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 118-74-1 | Hexachlorobenzene | U | 368 | ug/kg | 110 | 368 |
| 87-68-3 | Hexachlorobutadiene | U | 368 | ug/kg | 110 | 368 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 368 | ug/kg | 110 | 368 |
| 67-72-1 | Hexachloroethane | U | 368 | ug/kg | 110 | 368 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 78-59-1 | Isophorone | U | 368 | ug/kg | 110 | 368 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 368 | ug/kg | 110 | 368 |
| 621-64-7 | N-Nitrosodipropylamine | U | 368 | ug/kg | 110 | 368 |
| 91-20-3 | Naphthalene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 98-95-3 | Nitrobenzene | U | 368 | ug/kg | 110 | 368 |
| 87-86-5 | Pentachlorophenol | U | 368 | ug/kg | 110 | 368 |
| 85-01-8 | Phenanthrene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 108-95-2 | Phenol | U | 368 | ug/kg | 110 | 368 |
| 129-00-0 | Pyrene | U | 36.8 | ug/kg | 11.0 | 36.8 |
| 110-86-1 | Pyridine | U | 368 | ug/kg | 110 | 368 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 368 | ug/kg | 110 | 368 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 368 | ug/kg | 110 | 368 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 368 | ug/kg | 110 | 368 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 368 | ug/kg | 110 | 368 |
| 65794-96-9 | m,p-Cresols | U | 368 | ug/kg | 110 | 368 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 368 | ug/kg | 110 | 368 |
| 95-48-7 | o-Cresol | U | 368 | ug/kg | 110 | 368 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 368 | ug/kg | 121 | 368 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 368 | ug/kg | 110 | 368 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.139 | 168 | ug/kg | 0 | J |
| | unknown | 3.592 | 612 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 13:20** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **352306015** | **Date Received:** | **07/10/2014 08:45** | **%Moisture:** | **9.5** |
| | | **Client:** | **ARSL004** | **Project:** | **LANL00114** |
| **Client ID:** | **RE57-14-84194** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/15/2014 15:45** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071514.b\s5G1512.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.811 | 16500 | ug/kg | | AJ |
| 017699-14-8 | .alpha.-Cubebene | 8.958 | 287 | ug/kg | 95 | NJ |
| 031983-22-9 | Naphthalene, 1,2,4a,5,6,8a-hexahyd | 9.787 | 632 | ug/kg | 99 | NJ |
| 000483-76-1 | Naphthalene, 1,2,3,5,6,8a-hexahydr | 9.906 | 192 | ug/kg | 93 | NJ |
| 000057-10-3 | n-Hexadecanoic acid | 12.287 | 409 | ug/kg | 97 | NJ |
| | unknown | 12.325 | 173 | ug/kg | 0 | J |
| | unknown | 12.501 | 192 | ug/kg | 0 | J |
| | unknown | 12.758 | 207 | ug/kg | 0 | J |
| | unknown | 13.163 | 533 | ug/kg | 0 | J |
| 000057-11-4 | Octadecanoic acid | 13.258 | 290 | ug/kg | 99 | NJ |
| 000483-65-8 | Phenanthrene, 1-methyl-7-(1-methyl | 13.749 | 211 | ug/kg | 95 | NJ |
| | unknown | 13.882 | 552 | ug/kg | 0 | J |
| | unknown | 14.277 | 855 | ug/kg | 0 | J |
| | unknown | 14.644 | 321 | ug/kg | 0 | J |
| 001740-19-8 | 1-Phenanthrenecarboxylic acid, 1,2 | 14.792 | 325 | ug/kg | 94 | NJ |
| 074685-33-9 | 3-Eicosene, (E)- | 14.982 | 1570 | ug/kg | 95 | NJ |
| | unknown | 15.325 | 330 | ug/kg | 0 | J |

# Quality Control Summary

**Semi-Volatile**

## Surrogate Recovery Report

**SDG Number: 2014-3701**

**Matrix Type: SOLID**

| Sample ID | Client ID | 2FP %REC | PHL %REC | NBZ %REC | FBP %REC | TBP %REC | TPH %REC |
|---|---|---|---|---|---|---|---|
| 1203125438 | MB for batch 1402563 | 87 | 81 | 77 | 71 | 56 | 79 |
| 1203125439 | LCS for batch 1402563 | 82 | 78 | 70 | 71 | 69 | 89 |
| 352306001 | RE57-14-84178 | 43 | 37 | 38 | 40 | 41 | 70 |
| 1203125440 | RE57-14-84178MS | 59 | 46 | 42 | 45 | 59 | 66 |
| 1203125441 | RE57-14-84178MSD | 44 | 31 | 42 | 44 | 52 | 74 |
| 352306002 | RE57-14-84182 | 75 | 58 | 61 | 62 | 65 | 87 |
| 352306003 | RE57-14-84186 | 67 | 67 | 61 | 66 | 62 | 111 |
| 352306004 | RE57-14-84179 | 72 | 69 | 62 | 66 | 60 | 101 |
| 352306007 | RE57-14-84180 | 68 | 69 | 56 | 61 | 59 | 92 |
| 352306008 | RE57-14-84184 | 70 | 68 | 64 | 69 | 66 | 115 |
| 352306009 | RE57-14-84188 | 70 | 70 | 64 | 67 | 70 | 111 |
| 352306010 | RE57-14-84181 | 59 | 51 | 50 | 53 | 52 | 97 |
| 352306012 | RE57-14-84189 | 66 | 67 | 56 | 59 | 49 | 97 |
| 352306005 | RE57-14-84183 | 59 | 60 | 46 | 53 | 54 | 72 |
| 352306011 | RE57-14-84185 | 61 | 60 | 48 | 50 | 60 | 62 |
| 352306015 | RE57-14-84194 | 71 | 75 | 58 | 59 | 64 | 88 |

| Surrogate | | Acceptance Limits |
|---|---|---|
| 2FP | = 2-Fluorophenol | (23%-107%) |
| PHL | = Phenol-d5 | (25%-108%) |
| NBZ | = Nitrobenzene-d5 | (21%-103%) |
| FBP | = 2-Fluorobiphenyl | (25%-100%) |
| TBP | = 2,4,6-Tribromophenol | (20%-122%) |
| TPH | = p-Terphenyl-d14 | (31%-124%) |

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **LCS for batch 1402563**
**Lab Sample ID** **1203125439**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/14/2014 11:04**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 62-75-9 | LCS | N-Methyl-N-nitrosomethylam | 1670 | 0.0 | 1150 | 69 | 31-84 |
| 110-86-1 | LCS | Pyridine | 1670 | 0.0 | 1140 | 69 | 29-85 |
| 62-53-3 | LCS | Aniline | 1670 | 0.0 | 1460 | 88 | 34-101 |
| 108-95-2 | LCS | Phenol | 1670 | 0.0 | 1410 | 85 | 38-98 |
| 111-44-4 | LCS | bis(2-Chloroethyl) ether | 1670 | 0.0 | 1230 | 74 | 35-96 |
| 95-57-8 | LCS | 2-Chlorophenol | 1670 | 0.0 | 1350 | 81 | 38-100 |
| 541-73-1 | LCS | 1,3-Dichlorobenzene | 1670 | 0.0 | 1080 | 65 | 39-110 |
| 106-46-7 | LCS | 1,4-Dichlorobenzene | 1670 | 0.0 | 1060 | 63 | 40-110 |
| 95-50-1 | LCS | 1,2-Dichlorobenzene | 1670 | 0.0 | 1150 | 69 | 39-93 |
| 108-60-1 | LCS | bis(2-Chloro-1-methylethyl)et | 1670 | 0.0 | 1030 | 62 | 27-109 |
| 100-51-6 | LCS | Benzyl alcohol | 1670 | 0.0 | 1260 | 76 | 35-95 |
| 95-48-7 | LCS | o-Cresol | 1670 | 0.0 | 1530 | 92 | 37-97 |
| 65794-96-9 | LCS | m,p-Cresols | 1670 | 0.0 | 1650 | 99 | 39-115 |
| 621-64-7 | LCS | N-Nitrosodipropylamine | 1670 | 0.0 | 1470 | 88 | 34-106 |
| 67-72-1 | LCS | Hexachloroethane | 1670 | 0.0 | 1230 | 74 | 34-98 |
| 98-95-3 | LCS | Nitrobenzene | 1670 | 0.0 | 1150 | 69 | 35-99 |
| 78-59-1 | LCS | Isophorone | 1670 | 0.0 | 1320 | 79 | 36-98 |
| 88-75-5 | LCS | 2-Nitrophenol | 1670 | 0.0 | 1100 | 66 | 35-106 |
| 105-67-9 | LCS | 2,4-Dimethylphenol | 1670 | 0.0 | 1150 | 69 | 35-102 |
| 111-91-1 | LCS | bis(2-Chloroethoxy)methane | 1670 | 0.0 | 1160 | 69 | 37-98 |
| 120-83-2 | LCS | 2,4-Dichlorophenol | 1670 | 0.0 | 1100 | 66 | 35-110 |
| 65-85-0 | LCS | Benzoic acid | 3330 | 0.0 | 1810 | 54 | 27-99 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **LCS for batch 1402563**
**Lab Sample ID** **1203125439**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/14/2014 11:04**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 106-47-8 | LCS | 4-Chloroaniline | 1670 | 0.0 | 1220 | 73 | 32-106 |
| 87-68-3 | LCS | Hexachlorobutadiene | 1670 | 0.0 | 1050 | 63 | 32-104 |
| 59-50-7 | LCS | 4-Chloro-3-methylphenol | 1670 | 0.0 | 1340 | 81 | 35-104 |
| 91-57-6 | LCS | 2-Methylnaphthalene | 1670 | 0.0 | 1080 | 65 | 36-107 |
| 91-20-3 | LCS | Naphthalene | 1670 | 0.0 | 1100 | 66 | 38-106 |
| 77-47-4 | LCS | Hexachlorocyclopentadiene | 1670 | 0.0 | 812 | 49 | 24-84 |
| 88-06-2 | LCS | 2,4,6-Trichlorophenol | 1670 | 0.0 | 1160 | 70 | 36-98 |
| 95-95-4 | LCS | 2,4,5-Trichlorophenol | 1670 | 0.0 | 1140 | 68 | 41-103 |
| 91-58-7 | LCS | 2-Chloronaphthalene | 1670 | 0.0 | 1100 | 66 | 39-101 |
| 88-74-4 | LCS | 2-Nitroaniline *o-Nitroaniline* | 1670 | 0.0 | 1160 | 69 | 34-116 |
| 99-09-2 | LCS | 3-Nitroaniline *m-Nitroaniline* | 1670 | 0.0 | 985 | 59 | 32-113 |
| 131-11-3 | LCS | Dimethylphthalate | 1670 | 0.0 | 1280 | 77 | 41-105 |
| 606-20-2 | LCS | 2,6-Dinitrotoluene | 1670 | 0.0 | 1260 | 76 | 41-103 |
| 121-14-2 | LCS | 2,4-Dinitrotoluene | 1670 | 0.0 | 1190 | 71 | 43-109 |
| 208-96-8 | LCS | Acenaphthylene | 1670 | 0.0 | 1180 | 71 | 38-103 |
| 83-32-9 | LCS | Acenaphthene | 1670 | 0.0 | 1110 | 67 | 36-105 |
| 51-28-5 | LCS | 2,4-Dinitrophenol | 1670 | 0.0 | 352 | 21 * | 22-83 |
| 132-64-9 | LCS | Dibenzofuran | 1670 | 0.0 | 1180 | 71 | 38-104 |
| 84-66-2 | LCS | Diethylphthalate | 1670 | 0.0 | 1270 | 76 | 42-109 |
| 100-02-7 | LCS | 4-Nitrophenol | 1670 | 0.0 | 707 | 42 | 23-114 |
| 86-73-7 | LCS | Fluorene | 1670 | 0.0 | 1150 | 69 | 39-102 |
| 7005-72-3 | LCS | 4-Chlorophenylphenylether | 1670 | 0.0 | 1270 | 76 | 41-104 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **LCS for batch 1402563**
**Lab Sample ID** **1203125439**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/14/2014 11:04**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 100-01-6 | LCS | 4-Nitroaniline<br>*p-Nitroaniline* | 1670 | 0.0 | 1020 | 61 | 35-150 |
| 534-52-1 | LCS | 2-Methyl-4,6-dinitrophenol | 1670 | 0.0 | 738 | 44 | 33-103 |
| 122-39-4 | LCS | Diphenylamine | 1670 | 0.0 | 1140 | 68 | 40-101 |
| 122-66-7 | LCS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1670 | 0.0 | 1240 | 75 | 33-102 |
| 101-55-3 | LCS | 4-Bromophenylphenylether | 1670 | 0.0 | 1190 | 71 | 42-110 |
| 118-74-1 | LCS | Hexachlorobenzene | 1670 | 0.0 | 1160 | 70 | 41-108 |
| 87-86-5 | LCS | Pentachlorophenol | 1670 | 0.0 | 847 | 51 | 31-93 |
| 85-01-8 | LCS | Phenanthrene | 1670 | 0.0 | 1130 | 68 | 43-105 |
| 120-12-7 | LCS | Anthracene | 1670 | 0.0 | 1130 | 68 | 43-104 |
| 84-74-2 | LCS | Di-n-butylphthalate | 1670 | 0.0 | 1290 | 78 | 46-112 |
| 206-44-0 | LCS | Fluoranthene | 1670 | 0.0 | 1070 | 64 | 44-106 |
| 129-00-0 | LCS | Pyrene | 1670 | 0.0 | 1360 | 82 | 33-99 |
| 85-68-7 | LCS | Butylbenzylphthalate | 1670 | 0.0 | 1410 | 85 | 37-107 |
| 117-81-7 | LCS | bis(2-Ethylhexyl)phthalate | 1670 | 0.0 | 1440 | 87 | 41-104 |
| 56-55-3 | LCS | Benzo(a)anthracene | 1670 | 0.0 | 1250 | 75 | 46-108 |
| 218-01-9 | LCS | Chrysene | 1670 | 0.0 | 1250 | 75 | 47-107 |
| 117-84-0 | LCS | Di-n-octylphthalate | 1670 | 0.0 | 1530 | 92 | 41-110 |
| 205-99-2 | LCS | Benzo(b)fluoranthene | 1670 | 0.0 | 1270 | 76 | 42-111 |
| 207-08-9 | LCS | Benzo(k)fluoranthene | 1670 | 0.0 | 1310 | 78 | 43-103 |
| 50-32-8 | LCS | Benzo(a)pyrene | 1670 | 0.0 | 1260 | 76 | 45-109 |
| 193-39-5 | LCS | Indeno(1,2,3-cd)pyrene | 1670 | 0.0 | 956 | 57 | 45-115 |
| 53-70-3 | LCS | Dibenzo(a,h)anthracene | 1670 | 0.0 | 1140 | 68 | 39-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **LCS for batch 1402563**
**Lab Sample ID** **1203125439**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Laboratory Control Sample**
**Matrix:** **SOIL**
**Analysis Date:** **07/14/2014 11:04**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|
| 191-24-2 | LCS | Benzo(ghi)perylene | 1670 | 0.0 | 942 | 57 | 43-115 |
| 91-94-1 | LCS | 3,3'-Dichlorobenzidine | 1670 | 0.0 | 1120 | 67 | 32-111 |
| 120-82-1 | LCS | 1,2,4-Trichlorobenzene | 1670 | 0.0 | 1080 | 65 | 37-98 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178MS**
**Lab Sample ID** **1203125440**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/14/2014 12:14**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MS | N-Methyl-N-nitrosomethylam | 1870 | 0.00 | U | 122 | 7 * | 24-86 |
| 110-86-1 | MS | Pyridine | 1870 | 0.00 | U | 175 | 9 * | 24-87 |
| 62-53-3 | MS | Aniline | 1870 | 0.00 | U | 152 | 8 * | 28-91 |
| 108-95-2 | MS | Phenol | 1870 | 0.00 | U | 533 | 29 | 28-108 |
| 111-44-4 | MS | bis(2-Chloroethyl) ether | 1870 | 0.00 | U | 906 | 49 | 25-102 |
| 95-57-8 | MS | 2-Chlorophenol | 1870 | 0.00 | U | 686 | 37 | 28-108 |
| 541-73-1 | MS | 1,3-Dichlorobenzene | 1870 | 0.00 | U | 512 | 27 | 24-96 |
| 106-46-7 | MS | 1,4-Dichlorobenzene | 1870 | 0.00 | U | 571 | 31 | 24-97 |
| 95-50-1 | MS | 1,2-Dichlorobenzene | 1870 | 0.00 | U | 690 | 37 | 25-99 |
| 108-60-1 | MS | bis(2-Chloro-1-methylethyl)et | 1870 | 0.00 | U | 828 | 44 | 25-105 |
| 100-51-6 | MS | Benzyl alcohol | 1870 | 0.00 | U | 301 | 16 * | 21-109 |
| 95-48-7 | MS | o-Cresol | 1870 | 0.00 | U | 1050 | 56 | 27-105 |
| 65794-96-9 | MS | m,p-Cresols | 1870 | 0.00 | U | 816 | 44 | 32-123 |
| 621-64-7 | MS | N-Nitrosodipropylamine | 1870 | 0.00 | U | 1420 | 76 | 23-117 |
| 67-72-1 | MS | Hexachloroethane | 1870 | 0.00 | U | 616 | 33 | 24-102 |
| 98-95-3 | MS | Nitrobenzene | 1870 | 0.00 | U | 857 | 46 | 25-104 |
| 78-59-1 | MS | Isophorone | 1870 | 0.00 | U | 1180 | 63 | 24-108 |
| 88-75-5 | MS | 2-Nitrophenol | 1870 | 0.00 | U | 854 | 46 | 24-106 |
| 105-67-9 | MS | 2,4-Dimethylphenol | 1870 | 0.00 | U | 788 | 42 | 30-109 |
| 111-91-1 | MS | bis(2-Chloroethoxy)methane | 1870 | 0.00 | U | 970 | 52 | 27-104 |
| 120-83-2 | MS | 2,4-Dichlorophenol | 1870 | 0.00 | U | 986 | 53 | 31-103 |
| 65-85-0 | MS | Benzoic acid | 3730 | 0.00 | U | 1680 | 45 | 15-115 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178MS**
**Lab Sample ID** **1203125440**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/14/2014 12:14**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MS | 4-Chloroaniline | 1870 | 0.00 | U | 814 | 44 | 27-100 |
| 87-68-3 | MS | Hexachlorobutadiene | 1870 | 0.00 | U | 530 | 28 | 24-105 |
| 59-50-7 | MS | 4-Chloro-3-methylphenol | 1870 | 0.00 | U | 1220 | 65 | 32-112 |
| 91-57-6 | MS | 2-Methylnaphthalene | 1870 | 0.00 | U | 836 | 45 | 23-107 |
| 91-20-3 | MS | Naphthalene | 1870 | 0.00 | U | 749 | 40 | 21-107 |
| 77-47-4 | MS | Hexachlorocyclopentadiene | 1870 | 0.00 | U | 354 | 19 | 12-106 |
| 88-06-2 | MS | 2,4,6-Trichlorophenol | 1870 | 0.00 | U | 1120 | 60 | 32-103 |
| 95-95-4 | MS | 2,4,5-Trichlorophenol | 1870 | 0.00 | U | 999 | 54 | 38-109 |
| 91-58-7 | MS | 2-Chloronaphthalene | 1870 | 0.00 | U | 821 | 44 | 27-109 |
| 88-74-4 | MS | 2-Nitroaniline<br>*o-Nitroaniline* | 1870 | 0.00 | U | 967 | 52 | 37-114 |
| 99-09-2 | MS | 3-Nitroaniline<br>*m-Nitroaniline* | 1870 | 0.00 | U | 990 | 53 | 31-110 |
| 131-11-3 | MS | Dimethylphthalate | 1870 | 0.00 | U | 1120 | 60 | 38-110 |
| 606-20-2 | MS | 2,6-Dinitrotoluene | 1870 | 0.00 | U | 1110 | 59 | 36-107 |
| 121-14-2 | MS | 2,4-Dinitrotoluene | 1870 | 0.00 | U | 1230 | 66 | 36-115 |
| 208-96-8 | MS | Acenaphthylene | 1870 | 0.00 | U | 982 | 53 | 32-103 |
| 83-32-9 | MS | Acenaphthene | 1870 | 0.00 | U | 925 | 50 | 28-102 |
| 51-28-5 | MS | 2,4-Dinitrophenol | 1870 | 0.00 | U | 690 | 37 | 19-101 |
| 132-64-9 | MS | Dibenzofuran | 1870 | 0.00 | U | 991 | 53 | 28-117 |
| 84-66-2 | MS | Diethylphthalate | 1870 | 0.00 | U | 1330 | 71 | 40-113 |
| 100-02-7 | MS | 4-Nitrophenol | 1870 | 0.00 | U | 1060 | 57 | 12-128 |
| 86-73-7 | MS | Fluorene | 1870 | 0.00 | U | 1020 | 54 | 30-115 |
| 7005-72-3 | MS | 4-Chlorophenylphenylether | 1870 | 0.00 | U | 1080 | 58 | 37-110 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178MS**
**Lab Sample ID** **1203125440**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/14/2014 12:14**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MS | 4-Nitroaniline<br>*p-Nitroaniline* | 1870 | 0.00 | U | 1330 | 71 | 36-141 |
| 534-52-1 | MS | 2-Methyl-4,6-dinitrophenol | 1870 | 0.00 | U | 861 | 46 | 14-116 |
| 122-39-4 | MS | Diphenylamine | 1870 | 0.00 | U | 1060 | 57 | 34-111 |
| 122-66-7 | MS | Azobenzene<br>*1,2-Diphenylhydrazine* | 1870 | 0.00 | U | 1010 | 54 | 35-105 |
| 101-55-3 | MS | 4-Bromophenylphenylether | 1870 | 0.00 | U | 1020 | 55 | 37-112 |
| 118-74-1 | MS | Hexachlorobenzene | 1870 | 0.00 | U | 967 | 52 | 34-111 |
| 87-86-5 | MS | Pentachlorophenol | 1870 | 0.00 | U | 1090 | 59 | 22-108 |
| 85-01-8 | MS | Phenanthrene | 1870 | 0.00 | U | 1100 | 59 | 28-119 |
| 120-12-7 | MS | Anthracene | 1870 | 0.00 | U | 1110 | 59 | 36-104 |
| 84-74-2 | MS | Di-n-butylphthalate | 1870 | 0.00 | U | 1410 | 76 | 42-119 |
| 206-44-0 | MS | Fluoranthene | 1870 | 0.00 | U | 1290 | 69 | 32-115 |
| 129-00-0 | MS | Pyrene | 1870 | 0.00 | U | 1170 | 63 | 25-119 |
| 85-68-7 | MS | Butylbenzylphthalate | 1870 | 0.00 | U | 1490 | 80 | 33-121 |
| 117-81-7 | MS | bis(2-Ethylhexyl)phthalate | 1870 | 0.00 | U | 1460 | 78 | 33-124 |
| 56-55-3 | MS | Benzo(a)anthracene | 1870 | 0.00 | U | 1260 | 67 | 27-120 |
| 218-01-9 | MS | Chrysene | 1870 | 0.00 | U | 1270 | 68 | 33-114 |
| 117-84-0 | MS | Di-n-octylphthalate | 1870 | 0.00 | U | 1430 | 76 | 36-115 |
| 205-99-2 | MS | Benzo(b)fluoranthene | 1870 | 0.00 | U | 1500 | 80 | 30-119 |
| 207-08-9 | MS | Benzo(k)fluoranthene | 1870 | 0.00 | U | 1520 | 82 | 31-125 |
| 50-32-8 | MS | Benzo(a)pyrene | 1870 | 0.00 | U | 1310 | 70 | 31-116 |
| 193-39-5 | MS | Indeno(1,2,3-cd)pyrene | 1870 | 0.00 | U | 752 | 40 | 29-117 |
| 53-70-3 | MS | Dibenzo(a,h)anthracene | 1870 | 0.00 | U | 887 | 48 | 26-128 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

| | | | |
|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Sample Type:** | **Matrix Spike** |
| **Client ID:** | **RE57-14-84178MS** | **Matrix:** | **SO** |
| **Lab Sample ID** | **1203125440** | **%Moisture:** | **10.7** |
| **Instrument:** | **MSD5.I** | **Analysis Date:** | **07/14/2014 12:14** |
| **Analyst:** | **RMB** | **Prep Batch ID:** | **1402563** |
| **Inj. Vol:** | **1 uL** | **Batch ID:** | **1402564** |

**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MS | Benzo(ghi)perylene | 1870 | 0.00 | U | 765 | 41 | 30-109 |
| 91-94-1 | MS | 3,3'-Dichlorobenzidine | 1870 | 0.00 | U | 929 | 50 | 28-105 |
| 120-82-1 | MS | 1,2,4-Trichlorobenzene | 1870 | 0.00 | U | 667 | 36 | 25-102 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178MSD**
**Lab Sample ID** **1203125441**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/14/2014 12:46**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**
**Dilution: 1**

| CAS No | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 62-75-9 | MSD N-Methyl-N-nitrosomethylam | 1870 | 0.00 U | 0.00 | 0 * | 24-86 | 200 * | 0-30 |
| 110-86-1 | MSD Pyridine | 1870 | 0.00 U | 583 | 31 | 24-87 | 108 * | 0-30 |
| 62-53-3 | MSD Aniline | 1870 | 0.00 U | 697 | 37 | 28-91 | 128 * | 0-30 |
| 108-95-2 | MSD Phenol | 1870 | 0.00 U | 626 | 34 | 28-108 | 16 | 0-30 |
| 111-44-4 | MSD bis(2-Chloroethyl) ether | 1870 | 0.00 U | 773 | 41 | 25-102 | 16 | 0-30 |
| 95-57-8 | MSD 2-Chlorophenol | 1870 | 0.00 U | 959 | 51 | 28-108 | 33 * | 0-30 |
| 541-73-1 | MSD 1,3-Dichlorobenzene | 1870 | 0.00 U | 457 | 24 | 24-96 | 11 | 0-30 |
| 106-46-7 | MSD 1,4-Dichlorobenzene | 1870 | 0.00 U | 469 | 25 | 24-97 | 20 | 0-30 |
| 95-50-1 | MSD 1,2-Dichlorobenzene | 1870 | 0.00 U | 614 | 33 | 25-99 | 12 | 0-30 |
| 108-60-1 | MSD bis(2-Chloro-1-methylethyl)et | 1870 | 0.00 U | 731 | 39 | 25-105 | 13 | 0-30 |
| 100-51-6 | MSD Benzyl alcohol | 1870 | 0.00 U | 171 | 9 * | 21-109 | 55 * | 0-30 |
| 95-48-7 | MSD o-Cresol | 1870 | 0.00 U | 775 | 42 | 27-105 | 30 | 0-30 |
| 65794-96-9 | MSD m,p-Cresols | 1870 | 0.00 U | 735 | 39 | 32-123 | 11 | 0-30 |
| 621-64-7 | MSD N-Nitrosodipropylamine | 1870 | 0.00 U | 1190 | 64 | 23-117 | 18 | 0-30 |
| 67-72-1 | MSD Hexachloroethane | 1870 | 0.00 U | 528 | 28 | 24-102 | 15 | 0-30 |
| 98-95-3 | MSD Nitrobenzene | 1870 | 0.00 U | 860 | 46 | 25-104 | 0 | 0-30 |
| 78-59-1 | MSD Isophorone | 1870 | 0.00 U | 1020 | 55 | 24-108 | 14 | 0-30 |
| 88-75-5 | MSD 2-Nitrophenol | 1870 | 0.00 U | 846 | 45 | 24-106 | 1 | 0-30 |
| 105-67-9 | MSD 2,4-Dimethylphenol | 1870 | 0.00 U | 683 | 37 | 30-109 | 14 | 0-30 |
| 111-91-1 | MSD bis(2-Chloroethoxy)methane | 1870 | 0.00 U | 915 | 49 | 27-104 | 6 | 0-30 |
| 120-83-2 | MSD 2,4-Dichlorophenol | 1870 | 0.00 U | 851 | 46 | 31-103 | 15 | 0-30 |
| 65-85-0 | MSD Benzoic acid | 3730 | 0.00 U | 1240 | 33 | 15-115 | 30 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178MSD**
**Lab Sample ID** **1203125441**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/14/2014 12:46**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 106-47-8 | MSD | 4-Chloroaniline | 1870 | 0.00 | U | 759 | 41 | 27-100 | 7 | 0-30 |
| 87-68-3 | MSD | Hexachlorobutadiene | 1870 | 0.00 | U | 474 | 25 | 24-105 | 11 | 0-30 |
| 59-50-7 | MSD | 4-Chloro-3-methylphenol | 1870 | 0.00 | U | 1090 | 58 | 32-112 | 12 | 0-30 |
| 91-57-6 | MSD | 2-Methylnaphthalene | 1870 | 0.00 | U | 782 | 42 | 23-107 | 7 | 0-30 |
| 91-20-3 | MSD | Naphthalene | 1870 | 0.00 | U | 746 | 40 | 21-107 | 0 | 0-30 |
| 77-47-4 | MSD | Hexachlorocyclopentadiene | 1870 | 0.00 | U | 399 | 21 | 12-106 | 12 | 0-30 |
| 88-06-2 | MSD | 2,4,6-Trichlorophenol | 1870 | 0.00 | U | 1050 | 56 | 32-103 | 7 | 0-30 |
| 95-95-4 | MSD | 2,4,5-Trichlorophenol | 1870 | 0.00 | U | 1040 | 56 | 38-109 | 4 | 0-30 |
| 91-58-7 | MSD | 2-Chloronaphthalene | 1870 | 0.00 | U | 833 | 45 | 27-109 | 1 | 0-30 |
| 88-74-4 | MSD | 2-Nitroaniline<br>*o-Nitroaniline* | 1870 | 0.00 | U | 944 | 51 | 37-114 | 2 | 0-30 |
| 99-09-2 | MSD | 3-Nitroaniline<br>*m-Nitroaniline* | 1870 | 0.00 | U | 859 | 46 | 31-110 | 14 | 0-30 |
| 131-11-3 | MSD | Dimethylphthalate | 1870 | 0.00 | U | 1050 | 56 | 38-110 | 6 | 0-30 |
| 606-20-2 | MSD | 2,6-Dinitrotoluene | 1870 | 0.00 | U | 1070 | 58 | 36-107 | 3 | 0-30 |
| 121-14-2 | MSD | 2,4-Dinitrotoluene | 1870 | 0.00 | U | 1140 | 61 | 36-115 | 8 | 0-30 |
| 208-96-8 | MSD | Acenaphthylene | 1870 | 0.00 | U | 965 | 52 | 32-103 | 2 | 0-30 |
| 83-32-9 | MSD | Acenaphthene | 1870 | 0.00 | U | 899 | 48 | 28-102 | 3 | 0-30 |
| 51-28-5 | MSD | 2,4-Dinitrophenol | 1870 | 0.00 | U | 452 | 24 | 19-101 | 42 * | 0-30 |
| 132-64-9 | MSD | Dibenzofuran | 1870 | 0.00 | U | 1020 | 55 | 28-117 | 3 | 0-30 |
| 84-66-2 | MSD | Diethylphthalate | 1870 | 0.00 | U | 1210 | 65 | 40-113 | 9 | 0-30 |
| 100-02-7 | MSD | 4-Nitrophenol | 1870 | 0.00 | U | 790 | 42 | 12-128 | 29 | 0-30 |
| 86-73-7 | MSD | Fluorene | 1870 | 0.00 | U | 995 | 53 | 30-115 | 2 | 0-30 |
| 7005-72-3 | MSD | 4-Chlorophenylphenylether | 1870 | 0.00 | U | 1080 | 58 | 37-110 | 0 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178MSD**
**Lab Sample ID** **1203125441**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/14/2014 12:46**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**
**Dilution: 1**

| CAS No | | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|---|---|
| 100-01-6 | MSD | 4-Nitroaniline<br>*p-Nitroaniline* | 1870 | 0.00 | U | 1060 | 57 | 36-141 | 23 | 0-30 |
| 534-52-1 | MSD | 2-Methyl-4,6-dinitrophenol | 1870 | 0.00 | U | 700 | 38 | 14-116 | 21 | 0-30 |
| 122-39-4 | MSD | Diphenylamine | 1870 | 0.00 | U | 981 | 53 | 34-111 | 7 | 0-30 |
| 122-66-7 | MSD | Azobenzene<br>*1,2-Diphenylhydrazine* | 1870 | 0.00 | U | 1040 | 56 | 35-105 | 3 | 0-30 |
| 101-55-3 | MSD | 4-Bromophenylphenylether | 1870 | 0.00 | U | 1010 | 54 | 37-112 | 1 | 0-30 |
| 118-74-1 | MSD | Hexachlorobenzene | 1870 | 0.00 | U | 978 | 52 | 34-111 | 1 | 0-30 |
| 87-86-5 | MSD | Pentachlorophenol | 1870 | 0.00 | U | 887 | 48 | 22-108 | 21 | 0-30 |
| 85-01-8 | MSD | Phenanthrene | 1870 | 0.00 | U | 1040 | 56 | 28-119 | 6 | 0-30 |
| 120-12-7 | MSD | Anthracene | 1870 | 0.00 | U | 1050 | 56 | 36-104 | 6 | 0-30 |
| 84-74-2 | MSD | Di-n-butylphthalate | 1870 | 0.00 | U | 1300 | 70 | 42-119 | 9 | 0-30 |
| 206-44-0 | MSD | Fluoranthene | 1870 | 0.00 | U | 1060 | 57 | 32-115 | 20 | 0-30 |
| 129-00-0 | MSD | Pyrene | 1870 | 0.00 | U | 1290 | 69 | 25-119 | 10 | 0-30 |
| 85-68-7 | MSD | Butylbenzylphthalate | 1870 | 0.00 | U | 1450 | 78 | 33-121 | 3 | 0-30 |
| 117-81-7 | MSD | bis(2-Ethylhexyl)phthalate | 1870 | 0.00 | U | 1500 | 80 | 33-124 | 3 | 0-30 |
| 56-55-3 | MSD | Benzo(a)anthracene | 1870 | 0.00 | U | 1210 | 65 | 27-120 | 4 | 0-30 |
| 218-01-9 | MSD | Chrysene | 1870 | 0.00 | U | 1200 | 64 | 33-114 | 5 | 0-30 |
| 117-84-0 | MSD | Di-n-octylphthalate | 1870 | 0.00 | U | 1390 | 74 | 36-115 | 3 | 0-30 |
| 205-99-2 | MSD | Benzo(b)fluoranthene | 1870 | 0.00 | U | 1400 | 75 | 30-119 | 7 | 0-30 |
| 207-08-9 | MSD | Benzo(k)fluoranthene | 1870 | 0.00 | U | 1420 | 76 | 31-125 | 7 | 0-30 |
| 50-32-8 | MSD | Benzo(a)pyrene | 1870 | 0.00 | U | 1200 | 64 | 31-116 | 9 | 0-30 |
| 193-39-5 | MSD | Indeno(1,2,3-cd)pyrene | 1870 | 0.00 | U | 728 | 39 | 29-117 | 3 | 0-30 |
| 53-70-3 | MSD | Dibenzo(a,h)anthracene | 1870 | 0.00 | U | 889 | 48 | 26-128 | 0 | 0-30 |

**Semi-Volatile**

**Quality Control Summary**
**Spike Recovery Report**

**SDG Number:** **2014-3701**
**Client ID:** **RE57-14-84178MSD**
**Lab Sample ID** **1203125441**
**Instrument:** **MSD5.I**
**Analyst:** **RMB**
**Inj. Vol:** **1 uL**

**Sample Type:** **Matrix Spike Duplicate**
**Matrix:** **SO**
**%Moisture:** **10.7**
**Analysis Date:** **07/14/2014 12:46**
**Prep Batch ID:** **1402563**
**Batch ID:** **1402564**
**Dilution: 1**

| CAS No | Parmname | Amount Added ug/kg | Sample Conc. ug/kg | Spike Conc. ug/kg | Recovery % | Acceptance Limits | RPD % | Acceptance Limits |
|---|---|---|---|---|---|---|---|---|
| 191-24-2 | MSD Benzo(ghi)perylene | 1870 | 0.00 U | 758 | 41 | 30-109 | 1 | 0-30 |
| 91-94-1 | MSD 3,3'-Dichlorobenzidine | 1870 | 0.00 U | 773 | 41 | 28-105 | 18 | 0-30 |
| 120-82-1 | MSD 1,2,4-Trichlorobenzene | 1870 | 0.00 U | 611 | 33 | 25-102 | 9 | 0-30 |

# Method Blank Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Client:** | **ARSL004** | **Matrix:** | **SOIL** |
| **Client ID:** | **MB for batch 1402563** | **Instrument ID:** | **MSD5.I** | **Data File:** | **s071414.b\s5G1405.D** |
| **Lab Sample ID:** | **1203125438** | **Prep Date:** | **07/11/2014 18:23** | **Analyzed:** | **07/14/14 10:32** |
| **Column:** | **DB-5ms** | | | | |

**This method blank applies to the following samples and quality control samples:**

| | Client Sample ID | Lab Sample ID | File ID | Date Analyzed | Time Analyzed |
|---|---|---|---|---|---|
| 01 | LCS for batch 1402563 | 1203125439 | s071414.b\s5G1406.D | 07/14/14 | 1104 |
| 02 | RE57-14-84178 | 352306001 | s071414.b\s5G1407.D | 07/14/14 | 1142 |
| 03 | RE57-14-84178MS | 1203125440 | s071414.b\s5G1408.D | 07/14/14 | 1214 |
| 04 | RE57-14-84178MSD | 1203125441 | s071414.b\s5G1409.D | 07/14/14 | 1246 |
| 05 | RE57-14-84182 | 352306002 | s071414.b\s5G1410.D | 07/14/14 | 1317 |
| 06 | RE57-14-84186 | 352306003 | s071414.b\s5G1411.D | 07/14/14 | 1349 |
| 07 | RE57-14-84179 | 352306004 | s071414.b\s5G1412.D | 07/14/14 | 1420 |
| 08 | RE57-14-84180 | 352306007 | s071414.b\s5G1414.D | 07/14/14 | 1522 |
| 09 | RE57-14-84184 | 352306008 | s071414.b\s5G1415.D | 07/14/14 | 1553 |
| 10 | RE57-14-84188 | 352306009 | s071414.b\s5G1416.D | 07/14/14 | 1624 |
| 11 | RE57-14-84181 | 352306010 | s071414.b\s5G1417.D | 07/14/14 | 1655 |
| 12 | RE57-14-84189 | 352306012 | s071414.b\s5G1419.D | 07/14/14 | 1757 |
| 13 | RE57-14-84183 | 352306005 | s071514.b\s5G1510.D | 07/15/14 | 1442 |
| 14 | RE57-14-84185 | 352306011 | s071514.b\s5G1511.D | 07/15/14 | 1514 |
| 15 | RE57-14-84194 | 352306015 | s071514.b\s5G1512.D | 07/15/14 | 1545 |

# Quality Control Data

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203125438** | | | | |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1402563** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 10:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1405.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | U | 333 | ug/kg | 99.8 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 333 | ug/kg | 99.8 | 333 |
| 122-66-7 | Azobenzene | U | 333 | ug/kg | 99.8 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | U | 333 | ug/kg | 99.8 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | U | 333 | ug/kg | 99.8 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | U | 333 | ug/kg | 99.8 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | U | 333 | ug/kg | 99.8 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | U | 333 | ug/kg | 99.8 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | U | 333 | ug/kg | 99.8 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | U | 666 | ug/kg | 99.8 | 666 |
| 121-14-2 | 2,4-Dinitrotoluene | U | 333 | ug/kg | 99.8 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | U | 333 | ug/kg | 99.8 | 333 |
| 91-58-7 | 2-Chloronaphthalene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 95-57-8 | 2-Chlorophenol | U | 333 | ug/kg | 99.8 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | U | 333 | ug/kg | 99.8 | 333 |
| 91-57-6 | 2-Methylnaphthalene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 88-75-5 | 2-Nitrophenol | U | 333 | ug/kg | 99.8 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | U | 333 | ug/kg | 99.8 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | U | 333 | ug/kg | 99.8 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | U | 333 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | U | 333 | ug/kg | 99.8 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | U | 333 | ug/kg | 99.8 | 333 |
| 100-02-7 | 4-Nitrophenol | U | 333 | ug/kg | 99.8 | 333 |
| 83-32-9 | Acenaphthene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 208-96-8 | Acenaphthylene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 62-53-3 | Aniline | U | 333 | ug/kg | 99.8 | 333 |
| 120-12-7 | Anthracene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 65-85-0 | Benzoic acid | U | 666 | ug/kg | 166 | 666 |
| 100-51-6 | Benzyl alcohol | U | 333 | ug/kg | 99.8 | 333 |
| 85-68-7 | Butylbenzylphthalate | U | 333 | ug/kg | 99.8 | 333 |
| 218-01-9 | Chrysene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | U | 333 | ug/kg | 99.8 | 333 |
| 117-84-0 | Di-n-octylphthalate | U | 333 | ug/kg | 99.8 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203125438** | | | | |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1402563** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 10:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1405.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 132-64-9 | Dibenzofuran | U | 333 | ug/kg | 99.8 | 333 |
| 84-66-2 | Diethylphthalate | U | 333 | ug/kg | 99.8 | 333 |
| 131-11-3 | Dimethylphthalate | U | 333 | ug/kg | 99.8 | 333 |
| 122-39-4 | Diphenylamine | U | 333 | ug/kg | 99.8 | 333 |
| 206-44-0 | Fluoranthene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 86-73-7 | Fluorene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 118-74-1 | Hexachlorobenzene | U | 333 | ug/kg | 99.8 | 333 |
| 87-68-3 | Hexachlorobutadiene | U | 333 | ug/kg | 99.8 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | U | 333 | ug/kg | 99.8 | 333 |
| 67-72-1 | Hexachloroethane | U | 333 | ug/kg | 99.8 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 78-59-1 | Isophorone | U | 333 | ug/kg | 99.8 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 333 | ug/kg | 99.8 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | U | 333 | ug/kg | 99.8 | 333 |
| 91-20-3 | Naphthalene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 98-95-3 | Nitrobenzene | U | 333 | ug/kg | 99.8 | 333 |
| 87-86-5 | Pentachlorophenol | U | 333 | ug/kg | 99.8 | 333 |
| 85-01-8 | Phenanthrene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 108-95-2 | Phenol | U | 333 | ug/kg | 99.8 | 333 |
| 129-00-0 | Pyrene | U | 33.3 | ug/kg | 9.98 | 33.3 |
| 110-86-1 | Pyridine | U | 333 | ug/kg | 99.8 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | U | 333 | ug/kg | 99.8 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | U | 333 | ug/kg | 99.8 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | U | 333 | ug/kg | 99.8 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | U | 333 | ug/kg | 99.8 | 333 |
| 65794-96-9 | m,p-Cresols | U | 333 | ug/kg | 99.8 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | U | 333 | ug/kg | 99.8 | 333 |
| 95-48-7 | o-Cresol | U | 333 | ug/kg | 99.8 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | U | 333 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | U | 333 | ug/kg | 99.8 | 333 |

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | unknown | 2.23 | 171 | ug/kg | 0 | J |
| | unknown | 3.635 | 339 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203125438** | | | | |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **MB for batch 1402563** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 10:32** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.05 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1405.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|

**Tentatively Identified Compound Summary**

| CAS No. | Tentatively Identified Compound (TIC) | RT | Estimated | Units | Fit | Qual |
|---|---|---|---|---|---|---|
| | Unknown Aldol Condensate | 3.835 | 11800 | ug/kg | | AJ |
| | unknown | 19.249 | 144 | ug/kg | 0 | J |
| | unknown | 22.935 | 1300 | ug/kg | 0 | J |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203125439** | | | | |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1402563** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 11:04** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1406.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 1080 | ug/kg | 100 | 333 |
| 95-50-1 | 1,2-Dichlorobenzene | | 1150 | ug/kg | 100 | 333 |
| 122-66-7 | Azobenzene | | 1240 | ug/kg | 100 | 333 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 1080 | ug/kg | 100 | 333 |
| 106-46-7 | 1,4-Dichlorobenzene | | 1060 | ug/kg | 100 | 333 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1140 | ug/kg | 100 | 333 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1160 | ug/kg | 100 | 333 |
| 120-83-2 | 2,4-Dichlorophenol | | 1100 | ug/kg | 100 | 333 |
| 105-67-9 | 2,4-Dimethylphenol | | 1150 | ug/kg | 100 | 333 |
| 51-28-5 | 2,4-Dinitrophenol | J | 352 | ug/kg | 100 | 667 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1190 | ug/kg | 100 | 333 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1260 | ug/kg | 100 | 333 |
| 91-58-7 | 2-Chloronaphthalene | | 1100 | ug/kg | 10.0 | 33.3 |
| 95-57-8 | 2-Chlorophenol | | 1350 | ug/kg | 100 | 333 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 738 | ug/kg | 100 | 333 |
| 91-57-6 | 2-Methylnaphthalene | | 1080 | ug/kg | 10.0 | 33.3 |
| 88-75-5 | 2-Nitrophenol | | 1100 | ug/kg | 100 | 333 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1120 | ug/kg | 100 | 333 |
| 101-55-3 | 4-Bromophenylphenylether | | 1190 | ug/kg | 100 | 333 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1340 | ug/kg | 133 | 333 |
| 106-47-8 | 4-Chloroaniline | | 1220 | ug/kg | 100 | 333 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1270 | ug/kg | 100 | 333 |
| 100-02-7 | 4-Nitrophenol | | 707 | ug/kg | 100 | 333 |
| 83-32-9 | Acenaphthene | | 1110 | ug/kg | 10.0 | 33.3 |
| 208-96-8 | Acenaphthylene | | 1180 | ug/kg | 10.0 | 33.3 |
| 62-53-3 | Aniline | | 1460 | ug/kg | 100 | 333 |
| 120-12-7 | Anthracene | | 1130 | ug/kg | 10.0 | 33.3 |
| 56-55-3 | Benzo(a)anthracene | | 1250 | ug/kg | 10.0 | 33.3 |
| 50-32-8 | Benzo(a)pyrene | | 1260 | ug/kg | 10.0 | 33.3 |
| 205-99-2 | Benzo(b)fluoranthene | | 1270 | ug/kg | 10.0 | 33.3 |
| 191-24-2 | Benzo(ghi)perylene | | 942 | ug/kg | 10.0 | 33.3 |
| 207-08-9 | Benzo(k)fluoranthene | | 1310 | ug/kg | 10.0 | 33.3 |
| 65-85-0 | Benzoic acid | | 1810 | ug/kg | 167 | 667 |
| 100-51-6 | Benzyl alcohol | | 1260 | ug/kg | 100 | 333 |
| 85-68-7 | Butylbenzylphthalate | | 1410 | ug/kg | 100 | 333 |
| 218-01-9 | Chrysene | | 1250 | ug/kg | 10.0 | 33.3 |
| 84-74-2 | Di-n-butylphthalate | | 1290 | ug/kg | 100 | 333 |
| 117-84-0 | Di-n-octylphthalate | | 1530 | ug/kg | 100 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | | | **Matrix:** | **SOIL** |
| **Lab Sample ID:** | **1203125439** | | | | |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **LCS for batch 1402563** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 11:04** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1406.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 1140 | ug/kg | 10.0 | 33.3 |
| 132-64-9 | Dibenzofuran | | 1180 | ug/kg | 100 | 333 |
| 84-66-2 | Diethylphthalate | | 1270 | ug/kg | 100 | 333 |
| 131-11-3 | Dimethylphthalate | | 1280 | ug/kg | 100 | 333 |
| 122-39-4 | Diphenylamine | | 1140 | ug/kg | 100 | 333 |
| 206-44-0 | Fluoranthene | | 1070 | ug/kg | 10.0 | 33.3 |
| 86-73-7 | Fluorene | | 1150 | ug/kg | 10.0 | 33.3 |
| 118-74-1 | Hexachlorobenzene | | 1160 | ug/kg | 100 | 333 |
| 87-68-3 | Hexachlorobutadiene | | 1050 | ug/kg | 100 | 333 |
| 77-47-4 | Hexachlorocyclopentadiene | | 812 | ug/kg | 100 | 333 |
| 67-72-1 | Hexachloroethane | | 1230 | ug/kg | 100 | 333 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 956 | ug/kg | 10.0 | 33.3 |
| 78-59-1 | Isophorone | | 1320 | ug/kg | 100 | 333 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | | 1150 | ug/kg | 100 | 333 |
| 621-64-7 | N-Nitrosodipropylamine | | 1470 | ug/kg | 100 | 333 |
| 91-20-3 | Naphthalene | | 1100 | ug/kg | 10.0 | 33.3 |
| 98-95-3 | Nitrobenzene | | 1150 | ug/kg | 100 | 333 |
| 87-86-5 | Pentachlorophenol | | 847 | ug/kg | 100 | 333 |
| 85-01-8 | Phenanthrene | | 1130 | ug/kg | 10.0 | 33.3 |
| 108-95-2 | Phenol | | 1410 | ug/kg | 100 | 333 |
| 129-00-0 | Pyrene | | 1360 | ug/kg | 10.0 | 33.3 |
| 110-86-1 | Pyridine | | 1140 | ug/kg | 100 | 333 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 1030 | ug/kg | 100 | 333 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 1160 | ug/kg | 100 | 333 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 1230 | ug/kg | 100 | 333 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1440 | ug/kg | 100 | 333 |
| 65794-96-9 | m,p-Cresols | | 1650 | ug/kg | 100 | 333 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 985 | ug/kg | 100 | 333 |
| 95-48-7 | o-Cresol | | 1530 | ug/kg | 100 | 333 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 1160 | ug/kg | 110 | 333 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1020 | ug/kg | 100 | 333 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203125440** | **Date Received:** | **07/10/2014 09:00** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 12:14** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1408.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 667 | ug/kg | 112 | 373 |
| 95-50-1 | 1,2-Dichlorobenzene | | 690 | ug/kg | 112 | 373 |
| 122-66-7 | Azobenzene | | 1010 | ug/kg | 112 | 373 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 512 | ug/kg | 112 | 373 |
| 106-46-7 | 1,4-Dichlorobenzene | | 571 | ug/kg | 112 | 373 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 999 | ug/kg | 112 | 373 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1120 | ug/kg | 112 | 373 |
| 120-83-2 | 2,4-Dichlorophenol | | 986 | ug/kg | 112 | 373 |
| 105-67-9 | 2,4-Dimethylphenol | | 788 | ug/kg | 112 | 373 |
| 51-28-5 | 2,4-Dinitrophenol | J | 690 | ug/kg | 112 | 746 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1230 | ug/kg | 112 | 373 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1110 | ug/kg | 112 | 373 |
| 91-58-7 | 2-Chloronaphthalene | | 821 | ug/kg | 11.2 | 37.3 |
| 95-57-8 | 2-Chlorophenol | | 686 | ug/kg | 112 | 373 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 861 | ug/kg | 112 | 373 |
| 91-57-6 | 2-Methylnaphthalene | | 836 | ug/kg | 11.2 | 37.3 |
| 88-75-5 | 2-Nitrophenol | | 854 | ug/kg | 112 | 373 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 929 | ug/kg | 112 | 373 |
| 101-55-3 | 4-Bromophenylphenylether | | 1020 | ug/kg | 112 | 373 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1220 | ug/kg | 149 | 373 |
| 106-47-8 | 4-Chloroaniline | | 814 | ug/kg | 112 | 373 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1080 | ug/kg | 112 | 373 |
| 100-02-7 | 4-Nitrophenol | | 1060 | ug/kg | 112 | 373 |
| 83-32-9 | Acenaphthene | | 925 | ug/kg | 11.2 | 37.3 |
| 208-96-8 | Acenaphthylene | | 982 | ug/kg | 11.2 | 37.3 |
| 62-53-3 | Aniline | J | 152 | ug/kg | 112 | 373 |
| 120-12-7 | Anthracene | | 1110 | ug/kg | 11.2 | 37.3 |
| 56-55-3 | Benzo(a)anthracene | | 1260 | ug/kg | 11.2 | 37.3 |
| 50-32-8 | Benzo(a)pyrene | | 1310 | ug/kg | 11.2 | 37.3 |
| 205-99-2 | Benzo(b)fluoranthene | | 1500 | ug/kg | 11.2 | 37.3 |
| 191-24-2 | Benzo(ghi)perylene | | 765 | ug/kg | 11.2 | 37.3 |
| 207-08-9 | Benzo(k)fluoranthene | | 1520 | ug/kg | 11.2 | 37.3 |
| 65-85-0 | Benzoic acid | | 1680 | ug/kg | 187 | 746 |
| 100-51-6 | Benzyl alcohol | J | 301 | ug/kg | 112 | 373 |
| 85-68-7 | Butylbenzylphthalate | | 1490 | ug/kg | 112 | 373 |
| 218-01-9 | Chrysene | | 1270 | ug/kg | 11.2 | 37.3 |
| 84-74-2 | Di-n-butylphthalate | | 1410 | ug/kg | 112 | 373 |
| 117-84-0 | Di-n-octylphthalate | | 1430 | ug/kg | 112 | 373 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203125440** | **Date Received:** | **07/10/2014 09:00** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178MS** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 12:14** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.02 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1408.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 887 | ug/kg | 11.2 | 37.3 |
| 132-64-9 | Dibenzofuran | | 991 | ug/kg | 112 | 373 |
| 84-66-2 | Diethylphthalate | | 1330 | ug/kg | 112 | 373 |
| 131-11-3 | Dimethylphthalate | | 1120 | ug/kg | 112 | 373 |
| 122-39-4 | Diphenylamine | | 1060 | ug/kg | 112 | 373 |
| 206-44-0 | Fluoranthene | | 1290 | ug/kg | 11.2 | 37.3 |
| 86-73-7 | Fluorene | | 1020 | ug/kg | 11.2 | 37.3 |
| 118-74-1 | Hexachlorobenzene | | 967 | ug/kg | 112 | 373 |
| 87-68-3 | Hexachlorobutadiene | | 530 | ug/kg | 112 | 373 |
| 77-47-4 | Hexachlorocyclopentadiene | J | 354 | ug/kg | 112 | 373 |
| 67-72-1 | Hexachloroethane | | 616 | ug/kg | 112 | 373 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 752 | ug/kg | 11.2 | 37.3 |
| 78-59-1 | Isophorone | | 1180 | ug/kg | 112 | 373 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | J | 122 | ug/kg | 112 | 373 |
| 621-64-7 | N-Nitrosodipropylamine | | 1420 | ug/kg | 112 | 373 |
| 91-20-3 | Naphthalene | | 749 | ug/kg | 11.2 | 37.3 |
| 98-95-3 | Nitrobenzene | | 857 | ug/kg | 112 | 373 |
| 87-86-5 | Pentachlorophenol | | 1090 | ug/kg | 112 | 373 |
| 85-01-8 | Phenanthrene | | 1100 | ug/kg | 11.2 | 37.3 |
| 108-95-2 | Phenol | | 533 | ug/kg | 112 | 373 |
| 129-00-0 | Pyrene | | 1170 | ug/kg | 11.2 | 37.3 |
| 110-86-1 | Pyridine | J | 175 | ug/kg | 112 | 373 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 828 | ug/kg | 112 | 373 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 970 | ug/kg | 112 | 373 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 906 | ug/kg | 112 | 373 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1460 | ug/kg | 112 | 373 |
| 65794-96-9 | m,p-Cresols | | 816 | ug/kg | 112 | 373 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 990 | ug/kg | 112 | 373 |
| 95-48-7 | o-Cresol | | 1050 | ug/kg | 112 | 373 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 967 | ug/kg | 123 | 373 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1330 | ug/kg | 112 | 373 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203125441** | **Date Received:** | **07/10/2014 09:00** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 12:46** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1409.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 120-82-1 | 1,2,4-Trichlorobenzene | | 611 | ug/kg | 112 | 373 |
| 95-50-1 | 1,2-Dichlorobenzene | | 614 | ug/kg | 112 | 373 |
| 122-66-7 | Azobenzene | | 1040 | ug/kg | 112 | 373 |
| | *1,2-Diphenylhydrazine* | | | | | |
| 541-73-1 | 1,3-Dichlorobenzene | | 457 | ug/kg | 112 | 373 |
| 106-46-7 | 1,4-Dichlorobenzene | | 469 | ug/kg | 112 | 373 |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1040 | ug/kg | 112 | 373 |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1050 | ug/kg | 112 | 373 |
| 120-83-2 | 2,4-Dichlorophenol | | 851 | ug/kg | 112 | 373 |
| 105-67-9 | 2,4-Dimethylphenol | | 683 | ug/kg | 112 | 373 |
| 51-28-5 | 2,4-Dinitrophenol | J | 452 | ug/kg | 112 | 747 |
| 121-14-2 | 2,4-Dinitrotoluene | | 1140 | ug/kg | 112 | 373 |
| 606-20-2 | 2,6-Dinitrotoluene | | 1070 | ug/kg | 112 | 373 |
| 91-58-7 | 2-Chloronaphthalene | | 833 | ug/kg | 11.2 | 37.3 |
| 95-57-8 | 2-Chlorophenol | | 959 | ug/kg | 112 | 373 |
| 534-52-1 | 2-Methyl-4,6-dinitrophenol | | 700 | ug/kg | 112 | 373 |
| 91-57-6 | 2-Methylnaphthalene | | 782 | ug/kg | 11.2 | 37.3 |
| 88-75-5 | 2-Nitrophenol | | 846 | ug/kg | 112 | 373 |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 773 | ug/kg | 112 | 373 |
| 101-55-3 | 4-Bromophenylphenylether | | 1010 | ug/kg | 112 | 373 |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1090 | ug/kg | 149 | 373 |
| 106-47-8 | 4-Chloroaniline | | 759 | ug/kg | 112 | 373 |
| 7005-72-3 | 4-Chlorophenylphenylether | | 1080 | ug/kg | 112 | 373 |
| 100-02-7 | 4-Nitrophenol | | 790 | ug/kg | 112 | 373 |
| 83-32-9 | Acenaphthene | | 899 | ug/kg | 11.2 | 37.3 |
| 208-96-8 | Acenaphthylene | | 965 | ug/kg | 11.2 | 37.3 |
| 62-53-3 | Aniline | | 697 | ug/kg | 112 | 373 |
| 120-12-7 | Anthracene | | 1050 | ug/kg | 11.2 | 37.3 |
| 56-55-3 | Benzo(a)anthracene | | 1210 | ug/kg | 11.2 | 37.3 |
| 50-32-8 | Benzo(a)pyrene | | 1200 | ug/kg | 11.2 | 37.3 |
| 205-99-2 | Benzo(b)fluoranthene | | 1400 | ug/kg | 11.2 | 37.3 |
| 191-24-2 | Benzo(ghi)perylene | | 758 | ug/kg | 11.2 | 37.3 |
| 207-08-9 | Benzo(k)fluoranthene | | 1420 | ug/kg | 11.2 | 37.3 |
| 65-85-0 | Benzoic acid | | 1240 | ug/kg | 187 | 747 |
| 100-51-6 | Benzyl alcohol | J | 171 | ug/kg | 112 | 373 |
| 85-68-7 | Butylbenzylphthalate | | 1450 | ug/kg | 112 | 373 |
| 218-01-9 | Chrysene | | 1200 | ug/kg | 11.2 | 37.3 |
| 84-74-2 | Di-n-butylphthalate | | 1300 | ug/kg | 112 | 373 |
| 117-84-0 | Di-n-octylphthalate | | 1390 | ug/kg | 112 | 373 |

# Semi-Volatile
# Certificate of Analysis
# Sample Summary

| | | | | | |
|---|---|---|---|---|---|
| **SDG Number:** | **2014-3701** | **Date Collected:** | **07/08/2014 08:30** | **Matrix:** | **SO** |
| **Lab Sample ID:** | **1203125441** | **Date Received:** | **07/10/2014 09:00** | **%Moisture:** | **10.7** |
| **Client Sample:** | **QC for batch 1402563** | **Client:** | **ARSL004** | **Project:** | **QC** |
| **Client ID:** | **RE57-14-84178MSD** | **Method:** | **SW846 3541/8270D** | **SOP Ref:** | **GL-OA-E-009** |
| **Batch ID:** | **1402564** | **Inst:** | **MSD5.I** | **Dilution:** | **1** |
| **Run Date:** | **07/14/2014 12:46** | **Analyst:** | **RMB** | **Inj. Vol:** | **1 uL** |
| **Prep Date:** | **07/11/2014 18:23** | **Aliquot:** | **30.01 g** | **Final Volume:** | **1 mL** |
| **Data File:** | **s071414.b\s5G1409.D** | **Column:** | **DB-5ms** | | |

| CAS No. | Parmname | Qualifier | Result | Units | MDL/LOD | PQL/LOQ |
|---|---|---|---|---|---|---|
| 53-70-3 | Dibenzo(a,h)anthracene | | 889 | ug/kg | 11.2 | 37.3 |
| 132-64-9 | Dibenzofuran | | 1020 | ug/kg | 112 | 373 |
| 84-66-2 | Diethylphthalate | | 1210 | ug/kg | 112 | 373 |
| 131-11-3 | Dimethylphthalate | | 1050 | ug/kg | 112 | 373 |
| 122-39-4 | Diphenylamine | | 981 | ug/kg | 112 | 373 |
| 206-44-0 | Fluoranthene | | 1060 | ug/kg | 11.2 | 37.3 |
| 86-73-7 | Fluorene | | 995 | ug/kg | 11.2 | 37.3 |
| 118-74-1 | Hexachlorobenzene | | 978 | ug/kg | 112 | 373 |
| 87-68-3 | Hexachlorobutadiene | | 474 | ug/kg | 112 | 373 |
| 77-47-4 | Hexachlorocyclopentadiene | | 399 | ug/kg | 112 | 373 |
| 67-72-1 | Hexachloroethane | | 528 | ug/kg | 112 | 373 |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 728 | ug/kg | 11.2 | 37.3 |
| 78-59-1 | Isophorone | | 1020 | ug/kg | 112 | 373 |
| 62-75-9 | N-Methyl-N-nitrosomethylamine | U | 373 | ug/kg | 112 | 373 |
| 621-64-7 | N-Nitrosodipropylamine | | 1190 | ug/kg | 112 | 373 |
| 91-20-3 | Naphthalene | | 746 | ug/kg | 11.2 | 37.3 |
| 98-95-3 | Nitrobenzene | | 860 | ug/kg | 112 | 373 |
| 87-86-5 | Pentachlorophenol | | 887 | ug/kg | 112 | 373 |
| 85-01-8 | Phenanthrene | | 1040 | ug/kg | 11.2 | 37.3 |
| 108-95-2 | Phenol | | 626 | ug/kg | 112 | 373 |
| 129-00-0 | Pyrene | | 1290 | ug/kg | 11.2 | 37.3 |
| 110-86-1 | Pyridine | | 583 | ug/kg | 112 | 373 |
| 108-60-1 | bis(2-Chloro-1-methylethyl)ether | | 731 | ug/kg | 112 | 373 |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 915 | ug/kg | 112 | 373 |
| 111-44-4 | bis(2-Chloroethyl) ether | | 773 | ug/kg | 112 | 373 |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | | 1500 | ug/kg | 112 | 373 |
| 65794-96-9 | m,p-Cresols | | 735 | ug/kg | 112 | 373 |
| 99-09-2 | 3-Nitroaniline<br>*m-Nitroaniline* | | 859 | ug/kg | 112 | 373 |
| 95-48-7 | o-Cresol | | 775 | ug/kg | 112 | 373 |
| 88-74-4 | 2-Nitroaniline<br>*o-Nitroaniline* | | 944 | ug/kg | 123 | 373 |
| 100-01-6 | 4-Nitroaniline<br>*p-Nitroaniline* | | 1060 | ug/kg | 112 | 373 |

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 16-JUL-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| SEMIVOA GC/MS | SW846 3541/8270D | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1402564 | See Below | | |

**Potentially affected work order(s)(SDG): 352306(2014-3701)**

**Application Issues:**

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Failed Recovery for LCS/LCSD

Failed Recovery for MSD/PSD

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. The LCS(1203125439) recovered 2,4-Dinitrophenol at 21%. The limits are 22%-83%. | 1. The 2,4-Dinitrophenol failure represents less than 5% of the total requested spike analyte list. That satisfied the acceptance criteria for the client and the data were reported. |
| 2. The MS(1203125440) and MSD(1203125441) recovered spike analytes outside of the acceptance limits. Please see the QC Summary report for specific failures. | 2. Since the MS and MSD displayed similar spike recoveries, the failures were attributed to sample matrix interference and the data were reported. |
| 3. The MS(1203125440)/MSD(1203125441) pair displayed RPD values outside of the acceptance limits. Please see the QC Summary report for specific failures. | 3. The RPD failures were attributed to sample matrix interference and the data were reported. |

**Originator's Name:**

Richard Bomar 16-JUL-14

**Data Validator/Group Leader:**

Barbara Bailey 16-JUL-14

# Perchlorates by LCMSMS Analysis

# Case Narrative

**Perchlorate by LC-MS/MS**
**ARS International, LLC (ARSL)**
**SDG 2014-3701**

## Method/Analysis Information

| | |
|---|---|
| **Procedure:** | **Definitive Low Level Perchlorate Analysis Utilizing Liquid Chromatography-Mass Spectrometry/Mass Spectrometry (LC-MS/MS) by EPA Method 6850 Modified (6850M)** |
| Analytical Method: | SW846 6850 Modified |
| Prep Method: | SW846 6850 Modified |
| Analytical Batch Number: | 1402579 |
| Prep Batch Number: | 1402578 |

## Sample Analysis

| Sample ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306015 | RE57-14-84194 |
| 1203125478 | Interference Check Sample (ICS) |
| 1203125474 | Method Blank (MB) |
| 1203125475 | Laboratory Control Sample (LCS) |
| 1203125476 | 352306003(RE57-14-84186) Matrix Spike (MS) |
| 1203125477 | 352306003(RE57-14-84186) Matrix Spike Duplicate (MSD) |

The samples in this SDG were analyzed on a "dry weight" basis.

## Preparation/Analytical Method Verification

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP).

The data discussed in this narrative has been analyzed in accordance with GL-OA-E-067 REV# 11.

## Calibration Information

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

Due to software constraints, all Initial Calibration Blanks must be designated as IPB001.

**ICV Requirements**
The initial calibration verification standard (ICV) met the acceptance criteria.

**CCB Requirements**
All continuing calibration blanks (CCB) bracketing the analyses associated with this batch were within acceptance criteria.

**CCV Requirements**
All continuing calibration checks (CCV) requirements were met by all bracketing CCV standards.

**Low Level Standard (CRI) Requirements**
All low level calibration verification (CRI) requirements were met by all bracketing CRI standards.

## Quality Control (QC) Information

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Interference Check Sample (ICS)**
The ICS spike recoveries met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**QC Sample Designation**
Client sample 352306003 (RE57-14-84186) was chosen for matrix spike and matrix spike duplicate analysis.

**Matrix Spike (MS) Recovery Statement**
The MS recoveries were within the established acceptance limits.

**Matrix Spike Duplicate (MSD) Recovery Statement**
The MSD recoveries were within the established acceptance limits.

**MS/MSD Relative Percent Difference (RPD) Statement**
The RPDs between the MS and MSD met the acceptance limits.

**Retention Time Standard Area Acceptance**
The retention time standard areas were within the required acceptance criteria for all samples and QC.

**Retention Time**
During the analysis of Perchlorate by LC/MS/MS, retention time shifts are commonly observed. These retention time shifts, which are caused by fouling of the column by the sample matrices, are problematic when the retention time is used as one of the criterion for confirmation. To overcome this problem, a known amount of O(18) labeled Perchlorate was added to each sample as a retention time standard.

The presence of Perchlorate was confirmed by the relative retention time (RRT) of the Perchlorate peak and the O(18) standard. A RRT window of 0.98 to 1.02, as required by Method 332.0, has been used.

In addition to the isotopic ratio, the presence of Perchlorate in the samples associated with this data package have been confirmed using the relative retention criteria stated above, not the absolute retention time.

## Technical Information

**Holding Time Specifications**
All samples in this SDG in this analytical batch met the specified holding time. GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-extraction/Re-analysis**
Re-extractions or re-analyses were not required in this SDG.

## Miscellaneous Information

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents.

A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
Some initial calibration standards, continuing calibration standards, and/or samples may require manual integrations due to software limitations.

**Method Comments**
The samples in this SDG were not originally analyzed using EPA Method 314.0.

**Additional Comments**
The Perchlorate Isotope Ratio on the Form I may differ slightly from the ratio on the corresponding raw data due to rounding rules and/or significant figures or due to software limitations when there are manual integrations, dilutions or other factors. The ratio value of the Form I is the correct value.

The retention time marker, Perchlorate-O (18), is added to all samples, instrument blanks, and standards prior to injection. It is used to verify the retention time of Perchlorate and Perchlorate-101 and to insure an accurate injection occurred.

Due to various anions affecting the recovery of Perchlorate-O (18) and not Perchlorate and Perchlorate-101, the calibration curves of Perchlorate and Perchlorate-101 are not internally corrected for using Perchlorate-O (18). They are external calibrations.

**Perchlorate Isotope Ratio**
The Perchlorate isotope ratio met acceptance criteria for all samples and QC samples.

Please see the isotope ratio criteria in the Miscellaneous Section.

## System Configuration

The laboratory utilizes a Waters LC 2795 liquid chromatography instrument for Perchlorate analysis. It is coupled with either a Micromass Quattro Micro Mass Spectrometer/ Mass Spectrometer, or a Micromass Quattro Ultima Mass Spectrometer/ Mass Spectrometer. Each being designated as LCMSMS #1 and LCMSMS #2, respectively. It is fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

The laboratory may also utilize an Agilent 1100 liquid chromatography instrument for Perchlorate analysis. It is coupled with an Applied Biosystems 4000 Mass Spectrometer/ Mass Spectrometer, designated as LCMSMS #3 or LCMSMS #4. It is also fitted with an electrospray probe that is operated in the negative electrospray ionization mode for Perchlorate analysis.

**Electronic Packaging Comment**

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package.

Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

## Chromatographic Columns

Chromatographic separation of Perchlorate is accomplished through analysis on the following anion column:

Dionex: IonPac AG-16 2 x 50 mm.

## Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3701  GEL Work Order: 352306

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a surrogate compound

J  Value is estimated

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

DL  Indicates that sample is diluted.
RA  Indicates that sample is re-analyzed without re-extraction.
RE  Indicates that sample is re-extracted.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** Michael A. Penny Jr.  **Name: Michael Penny**

**Date: 17 JUL 2014**  **Title: Group Leader**

# Sample Data Summary

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84178

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306001

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 89

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .56 | 2.24 | 2.24 | ug/kg | U | 1 | 14-JUL-14 14:55 | per0714018a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 14:55 | per0714018a |
| 14797-73-0 | Perchlorate-101 | .56 | 2.24 | 2.24 | ug/kg | U | 1 | 14-JUL-14 14:55 | per0714018a |
| | Perchlorate-O(18) | | | 5.61 | ug/kg | | 1 | 14-JUL-14 14:55 | per0714018a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84182

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306002

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 91.4

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .545 | 2.18 | 2.18 | ug/kg | U | 1 | 14-JUL-14 15:04 | per0714019a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 15:04 | per0714019a |
| 14797-73-0 | Perchlorate-101 | .545 | 2.18 | 2.18 | ug/kg | U | 1 | 14-JUL-14 15:04 | per0714019a |
| | Perchlorate-O(18) | | | 5.41 | ug/kg | | 1 | 14-JUL-14 15:04 | per0714019a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84186

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306003

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 87

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .573 | 2.29 | 2.29 | ug/kg | U | 1 | 14-JUL-14 15:40 | per0714023a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 15:40 | per0714023a |
| 14797-73-0 | Perchlorate-101 | .573 | 2.29 | 2.29 | ug/kg | U | 1 | 14-JUL-14 15:40 | per0714023a |
| | Perchlorate-O(18) | | | 5.74 | ug/kg | | 1 | 14-JUL-14 15:40 | per0714023a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84179

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306004

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 88

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .56 | 2.24 | 2.24 | ug/kg | U | 1 | 14-JUL-14 16:07 | per0714026a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 16:07 | per0714026a |
| 14797-73-0 | Perchlorate-101 | .56 | 2.24 | 2.24 | ug/kg | U | 1 | 14-JUL-14 16:07 | per0714026a |
| | Perchlorate-O(18) | | | 5.46 | ug/kg | | 1 | 14-JUL-14 16:07 | per0714026a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84183

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306005

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 90.7

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .549 | 2.2 | 2.20 | ug/kg | U | 1 | 14-JUL-14 16:16 | per0714027a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 16:16 | per0714027a |
| 14797-73-0 | Perchlorate-101 | .549 | 2.2 | 2.20 | ug/kg | U | 1 | 14-JUL-14 16:16 | per0714027a |
| | Perchlorate-O(18) | | | 5.47 | ug/kg | | 1 | 14-JUL-14 16:16 | per0714027a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.01 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84180

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306007

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 89

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .558 | 2.23 | 2.23 | ug/kg | U | 1 | 14-JUL-14 16:24 | per0714028a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 16:24 | per0714028a |
| 14797-73-0 | Perchlorate-101 | .558 | 2.23 | 2.23 | ug/kg | U | 1 | 14-JUL-14 16:24 | per0714028a |
| | Perchlorate-O(18) | | | 5.46 | ug/kg | | 1 | 14-JUL-14 16:24 | per0714028a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84184

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306008

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.7

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .528 | 2.11 | 2.11 | ug/kg | U | 1 | 14-JUL-14 16:33 | per0714029a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 16:33 | per0714029a |
| 14797-73-0 | Perchlorate-101 | .528 | 2.11 | 2.11 | ug/kg | U | 1 | 14-JUL-14 16:33 | per0714029a |
| | Perchlorate-O(18) | | | 5.16 | ug/kg | | 1 | 14-JUL-14 16:33 | per0714029a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84188

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306009

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 93.6

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .529 | 2.12 | 2.12 | ug/kg | U | 1 | 14-JUL-14 16:42 | per0714030a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 16:42 | per0714030a |
| 14797-73-0 | Perchlorate-101 | .529 | 2.12 | 2.12 | ug/kg | U | 1 | 14-JUL-14 16:42 | per0714030a |
| | Perchlorate-O(18) | | | 5.18 | ug/kg | | 1 | 14-JUL-14 16:42 | per0714030a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84181

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306010

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 89

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .559 | 2.23 | 2.23 | ug/kg | U | 1 | 14-JUL-14 16:51 | per0714031a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 16:51 | per0714031a |
| 14797-73-0 | Perchlorate-101 | .559 | 2.23 | 2.23 | ug/kg | U | 1 | 14-JUL-14 16:51 | per0714031a |
| | Perchlorate-O(18) | | | 5.54 | ug/kg | | 1 | 14-JUL-14 16:51 | per0714031a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84185

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306011

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 91

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .544 | 2.18 | 2.18 | ug/kg | U | 1 | 14-JUL-14 17:00 | per0714032a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 17:00 | per0714032a |
| 14797-73-0 | Perchlorate-101 | .544 | 2.18 | 2.18 | ug/kg | U | 1 | 14-JUL-14 17:00 | per0714032a |
| | Perchlorate-O(18) | | | 5.44 | ug/kg | | 1 | 14-JUL-14 17:00 | per0714032a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84189

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306012

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 92.9

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .53 | 2.12 | 2.12 | ug/kg | U | 1 | 14-JUL-14 17:36 | per0714036a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 17:36 | per0714036a |
| 14797-73-0 | Perchlorate-101 | .53 | 2.12 | 2.12 | ug/kg | U | 1 | 14-JUL-14 17:36 | per0714036a |
| | Perchlorate-O(18) | | | 5.21 | ug/kg | | 1 | 14-JUL-14 17:36 | per0714036a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84194

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 352306015

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 90.5

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .544 | 2.18 | 2.18 | ug/kg | U | 1 | 14-JUL-14 17:45 | per0714037a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 17:45 | per0714037a |
| 14797-73-0 | Perchlorate-101 | .544 | 2.18 | 2.18 | ug/kg | U | 1 | 14-JUL-14 17:45 | per0714037a |
| | Perchlorate-O(18) | | | 5.39 | ug/kg | | 1 | 14-JUL-14 17:45 | per0714037a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Quality Control Summary

## Perchlorate Laboratory Control Sample

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No. (SDG):** 2014-3701

**Extract Batch Code:** 1402578

**Date Filtered:** 11-JUL-14

**Matrix:** SOIL

**Sample ID:** 1203125475

| Analyte^ | True | Found | Units | %Rec | Q | Control Limits |
|---|---|---|---|---|---|---|
| Perchlorate | 1.97 | 1.92 | ug/kg | 97.3 | | 70 - 130 |
| Perchlorate Isotope Ratio | | 3.17 | | | | - |
| Perchlorate-101 | 1.97 | 1.91 | ug/kg | 96.8 | | 70 - 130 |
| Perchlorate-O(18) | | 4.84 | ug/kg | | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

## Perchlorate Spike/Spike Duplicate Summary

**Lab Name:** General Engineering Laboratories

**Lab Code:** GEL

**GEL Job No (SDG):** 2014-3701

**Extract Batch Code:** 1402578

**Date Extracted:** 11-JUL-14

**GEL MS/PS ID:** 1203125476

**Client ID:** RE57-14-84186

**GEL MSD/PSD ID:** 1203125477

**QC Type:** MS

| Compound^ | Spike Added | Sample Conc | Units | MS Conc | MS Rec # | MSD Conc | MSD Rec # | RPD # | RPD Limit | Recovery Limit |
|---|---|---|---|---|---|---|---|---|---|---|
| Perchlorate | 2.27 | 0.316 | ug/kg | 2.43 | 93.1 | 2.35 | 88.4 | 3.22 | 30 | 75 - 125 |
| Perchlorate Isotope Ratio | 0 | 3.26 | | 3.2 | | 3.12 | | 2.57 | | - |
| Perchlorate-101 | 2.27 | 0.306 | ug/kg | 2.40 | 92.1 | 2.38 | 90.1 | .642 | 30 | 75 - 125 |
| Perchlorate-O(18) | 0 | 5.74 | ug/kg | 5.74 | | 5.72 | | .287 | | - |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

# Quality Control Data

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
MB

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 1203125474

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .5 | 2 | 2.00 | ug/kg | U | 1 | 14-JUL-14 14:28 | per0714015a |
| | Perchlorate Isotope Ratio | | | | | | 1 | 14-JUL-14 14:28 | per0714015a |
| 14797-73-0 | Perchlorate-101 | .5 | 2 | 2.00 | ug/kg | U | 1 | 14-JUL-14 14:28 | per0714015a |
| | Perchlorate-O(18) | | | 4.99 | ug/kg | | 1 | 14-JUL-14 14:28 | per0714015a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** EPA 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
LCS

**Date Received:** 11-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 1203125475

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .493 | 1.97 | 1.92 | ug/kg | J | 1 | 14-JUL-14 14:37 | per0714016a |
| | Perchlorate Isotope Ratio | | | 3.17 | | | 1 | 14-JUL-14 14:37 | per0714016a |
| 14797-73-0 | Perchlorate-101 | .493 | 1.97 | 1.91 | ug/kg | J | 1 | 14-JUL-14 14:37 | per0714016a |
| | Perchlorate-O(18) | | | 4.84 | ug/kg | | 1 | 14-JUL-14 14:37 | per0714016a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.02 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
ICS

**Date Received:**

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 1203125478

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 100

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .495 | 1.98 | 1.92 | ug/kg | J | 1 | 14-JUL-14 14:46 | per0714017a |
| | Perchlorate Isotope Ratio | | | 3.11 | | | 1 | 14-JUL-14 14:46 | per0714017a |
| 14797-73-0 | Perchlorate-101 | .495 | 1.98 | 1.95 | ug/kg | J | 1 | 14-JUL-14 14:46 | per0714017a |
| | Perchlorate-O(18) | | | 4.88 | ug/kg | | 1 | 14-JUL-14 14:46 | per0714017a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.03 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84186MS

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 1203125476

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 87

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .568 | 2.27 | 2.43 | ug/kg | | 1 | 14-JUL-14 15:49 | per0714024a |
| | Perchlorate Isotope Ratio | | | 3.2 | | | 1 | 14-JUL-14 15:49 | per0714024a |
| 14797-73-0 | Perchlorate-101 | .568 | 2.27 | 2.40 | ug/kg | | 1 | 14-JUL-14 15:49 | per0714024a |
| | Perchlorate-O(18) | | | 5.74 | ug/kg | | 1 | 14-JUL-14 15:49 | per0714024a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area.
The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Perchlorate Analysis Data Sheet

**Lab Name:** GEL Laboratories LLC

**Lab Code:** GEL

**Instrument:** LCMSMS

**Method:** SW846 6850 Modified

**Matrix:** SOIL

**Extraction Batch ID:** 1402578

**Extraction Type:** Solid Prep

**Sample Volume/Weight:** 2.00 g

**Concentrated Extract Volume:** 20.0

**Client Sample No.**
RE57-14-84186MSD

**Date Received:** 10-JUL-14

**GEL Job No (SDG):** 2014-3701

**GEL Sample ID:** 1203125477

**Date Filtered:** 11-JUL-14

**Injection Volume (uL):** 20

**%Solids:** 87

| CAS No. | Analyte^ | MDL | RL | Conc* | Units | Q | Dilution Factor | Date Analyzed | GEL File ID |
|---|---|---|---|---|---|---|---|---|---|
| 14797-73-0 | Perchlorate | .576 | 2.3 | 2.35 | ug/kg | | 1 | 14-JUL-14 15:58 | per0714025a |
| | Perchlorate Isotope Ratio | | | 3.12 | | | 1 | 14-JUL-14 15:58 | per0714025a |
| 14797-73-0 | Perchlorate-101 | .576 | 2.3 | 2.38 | ug/kg | | 1 | 14-JUL-14 15:58 | per0714025a |
| | Perchlorate-O(18) | | | 5.72 | ug/kg | | 1 | 14-JUL-14 15:58 | per0714025a |

^ When the analyte name is Perchlorate Isotope Ratio the concentration is a unitless value calculated from the ratio of Perchlorate peak area to Perchlorate-101 peak area. The Perchlorate-101 and isotopic ratio results are provided for qualitative purposes only. The results are used to verify the presence and quantitation of Perchlorate.

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Aliquot}} \times \frac{1}{\%\text{Solids}}$$

# Metals Analysis

# Case Narrative

**Sample Analysis**

| Sample ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306013 | RE57-14-84196 |
| 352306015 | RE57-14-84194 |
| 1203123913 | Method Blank (MB) **ICP** |
| 1203123919 | Method Blank (MB) **ICP** |
| 1203123914 | Laboratory Control Sample (LCS) |
| 1203123920 | Laboratory Control Sample (LCS) |
| 1203123923 | 352306001(RE57-14-84178L) Serial Dilution (SD) |
| 1203123918 | 352306013(RE57-14-84196L) Serial Dilution (SD) |
| 1203123921 | 352306001(RE57-14-84178D) Sample Duplicate (DUP) |
| 1203123915 | 352306013(RE57-14-84196D) Sample Duplicate (DUP) |
| 1203123922 | 352306001(RE57-14-84178S) Matrix Spike (MS) |
| 1203123916 | 352306013(RE57-14-84196S) Matrix Spike (MS) |
| 1203143128 | 352306001(RE57-14-84178PS) Post Spike (PS) |
| 1203123935 | Method Blank (MB) **ICP-MS** |
| 1203123940 | Method Blank (MB) **ICP-MS** |

| | |
|---|---|
| 1203144439 | Method Blank (MB) **ICP-MS** |
| 1203123936 | Laboratory Control Sample (LCS) |
| 1203123941 | Laboratory Control Sample (LCS) |
| 1203144440 | Laboratory Control Sample (LCS) |
| 1203123944 | 352306001(RE57-14-84178L) Serial Dilution (SD) |
| 1203144443 | 352306001(RE57-14-84178L) Serial Dilution (SD) |
| 1203123939 | 352306013(RE57-14-84196L) Serial Dilution (SD) |
| 1203123942 | 352306001(RE57-14-84178D) Sample Duplicate (DUP) |
| 1203144441 | 352306001(RE57-14-84178D) Sample Duplicate (DUP) |
| 1203123937 | 352306013(RE57-14-84196D) Sample Duplicate (DUP) |
| 1203123943 | 352306001(RE57-14-84178S) Matrix Spike (MS) |
| 1203144442 | 352306001(RE57-14-84178S) Matrix Spike (MS) |
| 1203123938 | 352306013(RE57-14-84196S) Matrix Spike (MS) |
| 1203142510 | 352306013(RE57-14-84196PS) Post Spike (PS) |
| 1203129977 | Method Blank (MB) **CVAA** |
| 1203131318 | Method Blank (MB) **CVAA** |
| 1203129978 | Laboratory Control Sample (LCS) |
| 1203131319 | Laboratory Control Sample (LCS) |
| 1203129981 | 352465003(RE57-14-84197L) Serial Dilution (SD) |
| 1203131322 | 352722001(WST40-14-84681L) Serial Dilution (SD) |
| 1203129979 | 352465003(RE57-14-84197D) Sample Duplicate (DUP) |
| 1203131320 | 352722001(WST40-14-84681D) Sample Duplicate (DUP) |
| 1203129980 | 352465003(RE57-14-84197S) Matrix Spike (MS) |
| 1203131321 | 352722001(WST40-14-84681S) Matrix Spike (MS) |

The samples in this SDG were analyzed on an "as received" basis.

**Method/Analysis Information**

| | |
|---|---|
| **Analytical Batch:** | 1401945, 1401948, 1401959, 1401963, 1410027, 1404427 and 1404938 |
| **Prep Batch :** | 1401943, 1401947, 1401958, 1401961, 1410025, 1404425 and 1404933 |
| **Standard Operating Procedures:** | GL-MA-E-013 REV# 22, GL-MA-E-006 REV# 11, GL-MA-E-009 REV# 24, GL-MA-E-014 REV# 25 and GL-MA-E-010 REV# 28 |

| | |
|---|---|
| **Analytical Method:** | SW846 3005A/6010C, SW846 3050B/6010C, SW846 3005A/6020A, SW846 3050B/6020A, EPA 245.1/245.2 and SW846 7471A |
| **Prep Method :** | SW846 3005A, SW846 3050B, EPA 245.1/245.2 Prep and SW846 7471A Prep |

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

**System Configuration**

The Metals analysis-ICP was performed on a P E 5300 Optima radial/axial-viewing inductively coupled plasma atomic emission spectrometer. The instrument is equipped with an ESI SC-FAST introduction, cyclonic spray chamber, and yttrium or scandium internal standard. Operating conditions for the ICP are set at a power level of 1500 watts. The instrument has a peristaltic pump flow rate of 0.4L/min, argon gas flows of 13 L/min and 0.2 L/min for the torch and auxiliary gases, and a flow setting of 0.65L/min for the nebulizer.

**Calibration Information**

**Instrument Calibration**
All initial calibration requirements have been met for this sample delivery group (SDG).

**CRDL/PQL Requirements**
The CRDL/PQL standard recoveries met the referenced advisory control limits.

**ICSA/ICSAB Statement**
All interference check samples (ICSA and ICSAB) associated with this SDG met the established acceptance criteria.

**Continuing Calibration Blanks (CCB) Requirements**
All continuing calibration blanks (CCB) bracketing this batch met the established acceptance criteria.

**Continuing Calibration Verification (CCV) Requirements**
All continuing calibration verifications (CCV) bracketing this SDG met the acceptance criteria.

**Quality Control (QC) Information**

**Method Blank (MB) Statement**
The samples in this SDG either did not contain the above noted analytes at concentrations higher than the RDL, or the analytes were present at concentrations more than ten times the amount in the method blank. The data was not adversely affected and was reported. ICP-MS.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recoveries met the acceptance limits.

**Quality Control (QC) Sample Statement**
The following samples were selected as the quality control (QC) samples for this SDG: 352306013 (RE57-14-84196)-ICP and ICP-MS, 352306001 (RE57-14-84178)-ICP, ICP-MS and ICP-MS, 352465003 (RE57-14-84197) and 352722001 (WST40-14-84681)-CVAA.

**Matrix Spike (MS) Recovery Statement**
The percent recoveries (%R) obtained from the MS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The MS did not meet the recommended quality control acceptance criteria for percent recoveries for potassium and magnesium. 1203123922 (RE57-14-84178)-ICP.

The MS did not meet the recommended quality control acceptance criteria for percent recoveries for thallium. 1203123938 (RE57-14-84196)-ICP-MS.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD obtained from the designated sample duplicate (DUP) is evaluated based on acceptance criteria of 20% when the sample is >5X the contract required reporting limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control of +/-RL is used to evaluate the DUP results. Chromium, cobalt, manganese and vanadium analytes did not meet these requirements. 1203123921 (RE57-14-84178)-ICP.

**Serial Dilution % Difference Statement**
The serial dilution is used to assess matrix suppression or enhancement. Raw element concentrations 25x the IDL/MDL for CVAA, 50X the IDL/MDL for ICP and 100X the IDL/MDL for ICP-MS analyses are applicable for serial dilution assessment. All applicable analytes met the established acceptance percent difference criteria.

**Post Spike (PS) Recovery Statement**
The percent recoveries (%R) obtained from the PS analyses are evaluated when the sample concentration is less than four times (4X) the spike concentration added. The PS did not meet the recommended quality control acceptance criteria for percent recoveries for thallium and verifies the presence of matrix interferences. 1203142510 (RE57-14-84196)-ICP-MS.

**Technical Information**

**Holding Time Specifications**
GEL assigns holding times based on the associated methodology, which assigns the date and time from sample collection of sample receipt. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

**Preparation/Analytical Method Verification**
All procedures were performed as stated in the SOP. Method SW-846 3050B is not a total digestion technique for most samples. It is a very strong acid digestion that will dissolve almost all elements that could become environmentally available. By design, elements bound in silicate structures are not normally dissolved by this procedure as they are not usually mobile in the environment.

**Sample Dilutions**
Dilutions are performed to minimize matrix interferences resulting from elevated mineral element concentrations present in solid samples and/or to bring over range target analyte concentrations into the linear calibration range of the instrument. The ICPMS solid samples in this SDG were diluted the standard two times. ICP-MS.

**Preparation Information**
The samples in this SDG were prepared exactly according to the cited SOP.

**Miscellaneous Information**

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced

SOP or contractual documents. Data exception reports were included behind the Case Narrative or in the Miscellaneous Data section of this data package. The following DER was generated for this SDG: 1321331. 1203123921 (RE57-14-84178) and 1203123922 (RE57-14-84178)-ICP. The following DER was generated for this SDG: 1322737. 1203123935 (MB), 1203123938 (RE57-14-84196) and 1203142510 (RE57-14-84196)-ICP-MS.

**Additional Comments**
Additional comments were not required for this SDG.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:**_____ **Date:** 8/13/14

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3701  GEL Work Order: 352306

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

J  Value is estimated

N  Metals--The Matrix spike sample recovery is not within specified control limits

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____ 8/13/14

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306001 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84178 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5370000 | ug/kg | | 7190 | 21100 | 21100 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1060 | ug/kg | U | 349 | 1060 | 1060 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 1360 | ug/kg | | 213 | 1060 | 1060 | 2 | MS | BAJ | 08/07/14 13:41 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 55100 | ug/kg | | 106 | 528 | 528 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 470 | ug/kg | | 21.3 | 106 | 106 | 2 | MS | BAJ | 08/07/14 21:20 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 528 | ug/kg | U | 106 | 528 | 528 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 874000 | ug/kg | | 8450 | 26400 | 26400 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 8290 | ug/kg | * | 159 | 528 | 528 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 1260 | ug/kg | * | 159 | 528 | 528 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 2740 | ug/kg | | 317 | 1060 | 1060 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 8440000 | ug/kg | | 8450 | 26400 | 26400 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 10100 | ug/kg | | 349 | 1060 | 1060 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 421000 | ug/kg | N | 8980 | 31700 | 31700 | 1 | P | HSC | 08/06/14 11:16 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 326000 | ug/kg | * | 211 | 1060 | 1060 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 17.8 | ug/kg | | 4.4 | 13.1 | 13.1 | 1 | AV | MTM1 | 07/22/14 12:10 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 2750 | ug/kg | | 108 | 433 | 433 | 2 | MS | BAJ | 08/11/14 08:21 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 750000 | ug/kg | N | 6760 | 26400 | 26400 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 1060 | ug/kg | U | 351 | 1060 | 1060 | 2 | MS | BAJ | 08/07/14 13:41 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 528 | ug/kg | U | 106 | 528 | 528 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 279000 | ug/kg | | 7400 | 26400 | 26400 | 1 | P | HSC | 08/06/14 11:16 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 70.2 | ug/kg | J | 63.8 | 425 | 425 | 2 | MS | BAJ | 08/07/14 13:41 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 5630 | ug/kg | * | 106 | 528 | 528 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 50400 | ug/kg | | 423 | 1060 | 1060 | 1 | P | HSC | 08/04/14 18:46 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.53 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.527 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.512 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.517 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306002 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84182 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 91.4

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4660000 | ug/kg | | 7200 | 21200 | 21200 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1060 | ug/kg | U | 349 | 1060 | 1060 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 2000 | ug/kg | | 206 | 1030 | 1030 | 2 | MS | BAJ | 08/07/14 13:57 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 96200 | ug/kg | | 106 | 529 | 529 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 1060 | ug/kg | | 20.6 | 103 | 103 | 2 | MS | BAJ | 08/07/14 21:37 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 529 | ug/kg | U | 106 | 529 | 529 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 753000 | ug/kg | | 8470 | 26500 | 26500 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 41800 | ug/kg | * | 159 | 529 | 529 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 1160 | ug/kg | * | 159 | 529 | 529 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 4940 | ug/kg | | 318 | 1060 | 1060 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 10300000 | ug/kg | | 8470 | 26500 | 26500 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 14500 | ug/kg | | 349 | 1060 | 1060 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 338000 | ug/kg | N | 9000 | 31800 | 31800 | 1 | P | HSC | 08/06/14 11:31 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 385000 | ug/kg | * | 212 | 1060 | 1060 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 6.95 | ug/kg | J | 4.01 | 12 | 12 | 1 | AV | MTM1 | 07/22/14 12:12 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 3470 | ug/kg | | 105 | 421 | 421 | 2 | MS | BAJ | 08/11/14 08:33 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 674000 | ug/kg | N | 6770 | 26500 | 26500 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 358 | ug/kg | J | 339 | 1030 | 1030 | 2 | MS | BAJ | 08/07/14 13:57 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 529 | ug/kg | U | 106 | 529 | 529 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 307000 | ug/kg | | 7410 | 26500 | 26500 | 1 | P | HSC | 08/06/14 11:31 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 411 | ug/kg | U | 61.7 | 411 | 411 | 2 | MS | BAJ | 08/07/14 13:57 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 3890 | ug/kg | * | 106 | 529 | 529 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 62800 | ug/kg | | 423 | 1060 | 1060 | 1 | P | HSC | 08/04/14 19:00 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.517 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.532 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.548 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.52 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306003 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84186 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 87

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5040000 | ug/kg | | 7620 | 22400 | 22400 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1120 | ug/kg | U | 370 | 1120 | 1120 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 3110 | ug/kg | | 201 | 1000 | 1000 | 2 | MS | BAJ | 08/07/14 14:00 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 75200 | ug/kg | | 112 | 560 | 560 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 646 | ug/kg | | 20.1 | 100 | 100 | 2 | MS | BAJ | 08/07/14 21:41 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 560 | ug/kg | U | 112 | 560 | 560 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 1830000 | ug/kg | | 8970 | 28000 | 28000 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 5920 | ug/kg | * | 168 | 560 | 560 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 1810 | ug/kg | * | 168 | 560 | 560 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 3620 | ug/kg | | 336 | 1120 | 1120 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 8400000 | ug/kg | | 8970 | 28000 | 28000 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 10400 | ug/kg | | 370 | 1120 | 1120 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 634000 | ug/kg | N | 9530 | 33600 | 33600 | 1 | P | HSC | 08/06/14 11:34 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 351000 | ug/kg | * | 224 | 1120 | 1120 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 13.2 | ug/kg | | 4.08 | 12.2 | 12.2 | 1 | AV | MTM1 | 07/22/14 12:14 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 3590 | ug/kg | | 104 | 418 | 418 | 2 | MS | BAJ | 08/11/14 08:36 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 716000 | ug/kg | N | 7170 | 28000 | 28000 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 1000 | ug/kg | U | 331 | 1000 | 1000 | 2 | MS | BAJ | 08/07/14 14:00 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 560 | ug/kg | U | 112 | 560 | 560 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 140000 | ug/kg | | 7850 | 28000 | 28000 | 1 | P | HSC | 08/06/14 11:34 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 66.9 | ug/kg | J | 60.2 | 402 | 402 | 2 | MS | BAJ | 08/07/14 14:00 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 7770 | ug/kg | * | 112 | 560 | 560 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 44500 | ug/kg | | 448 | 1120 | 1120 | 1 | P | HSC | 08/04/14 19:04 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.514 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.574 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.568 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.552 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306004 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84179 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 88

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 6000000 | ug/kg | | 7420 | 21800 | 21800 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1090 | ug/kg | U | 360 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 1520 | ug/kg | | 208 | 1040 | 1040 | 2 | MS | BAJ | 08/07/14 14:14 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 73400 | ug/kg | | 109 | 546 | 546 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 611 | ug/kg | | 20.8 | 104 | 104 | 2 | MS | BAJ | 08/07/14 21:55 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 546 | ug/kg | U | 109 | 546 | 546 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 1180000 | ug/kg | | 8730 | 27300 | 27300 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 4040 | ug/kg | * | 164 | 546 | 546 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 1680 | ug/kg | * | 164 | 546 | 546 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 3170 | ug/kg | | 327 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 9350000 | ug/kg | | 8730 | 27300 | 27300 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 11300 | ug/kg | | 360 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 578000 | ug/kg | N | 9280 | 32700 | 32700 | 1 | P | HSC | 08/06/14 11:37 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 366000 | ug/kg | * | 218 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 11.1 | ug/kg | J | 4.34 | 12.9 | 12.9 | 1 | AV | MTM1 | 07/22/14 12:15 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 3220 | ug/kg | | 103 | 411 | 411 | 2 | MS | BAJ | 08/11/14 08:55 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 746000 | ug/kg | N | 6980 | 27300 | 27300 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 1040 | ug/kg | U | 344 | 1040 | 1040 | 2 | MS | BAJ | 08/07/14 14:14 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 546 | ug/kg | U | 109 | 546 | 546 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 223000 | ug/kg | | 7640 | 27300 | 27300 | 1 | P | HSC | 08/06/14 11:37 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 83.9 | ug/kg | J | 62.5 | 416 | 416 | 2 | MS | BAJ | 08/07/14 14:14 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 7220 | ug/kg | * | 109 | 546 | 546 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 53600 | ug/kg | | 437 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:07 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.518 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.543 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.524 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.55 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306005 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84183 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 90.7

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4390000 | ug/kg | | 7170 | 21100 | 21100 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1050 | ug/kg | U | 348 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 2520 | ug/kg | | 193 | 966 | 966 | 2 | MS | BAJ | 08/07/14 14:17 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 114000 | ug/kg | | 105 | 527 | 527 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 410 | ug/kg | | 19.3 | 96.6 | 96.6 | 2 | MS | BAJ | 08/07/14 21:59 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 527 | ug/kg | U | 105 | 527 | 527 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 907000 | ug/kg | | 8440 | 26400 | 26400 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 3370 | ug/kg | * | 158 | 527 | 527 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 1300 | ug/kg | * | 158 | 527 | 527 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 2990 | ug/kg | | 316 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 9170000 | ug/kg | | 8440 | 26400 | 26400 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 12400 | ug/kg | | 348 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 312000 | ug/kg | N | 8960 | 31600 | 31600 | 1 | P | HSC | 08/06/14 11:48 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 536000 | ug/kg | * | 211 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 9.56 | ug/kg | J | 4 | 11.9 | 11.9 | 1 | AV | MTM1 | 07/22/14 12:17 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 3340 | ug/kg | | 109 | 437 | 437 | 2 | MS | BAJ | 08/11/14 08:58 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 695000 | ug/kg | N | 6750 | 26400 | 26400 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 966 | ug/kg | U | 319 | 966 | 966 | 2 | MS | BAJ | 08/07/14 14:17 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 527 | ug/kg | U | 105 | 527 | 527 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 310000 | ug/kg | | 7380 | 26400 | 26400 | 1 | P | HSC | 08/06/14 11:48 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 386 | ug/kg | U | 58 | 386 | 386 | 2 | MS | BAJ | 08/07/14 14:17 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 6400 | ug/kg | * | 105 | 527 | 527 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 60900 | ug/kg | | 422 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:18 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.523 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.571 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.554 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.505 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306007 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84180 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5390000 | ug/kg | | 7410 | 21800 | 21800 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1090 | ug/kg | U | 360 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 1240 | ug/kg | | 197 | 983 | 983 | 2 | MS | BAJ | 08/07/14 14:20 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 79500 | ug/kg | | 109 | 545 | 545 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 421 | ug/kg | | 19.7 | 98.3 | 98.3 | 2 | MS | BAJ | 08/07/14 22:02 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 545 | ug/kg | U | 109 | 545 | 545 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 1150000 | ug/kg | | 8720 | 27200 | 27200 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 4410 | ug/kg | * | 163 | 545 | 545 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 2150 | ug/kg | * | 163 | 545 | 545 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 2690 | ug/kg | | 327 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 10600000 | ug/kg | | 8720 | 27200 | 27200 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 10400 | ug/kg | | 360 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 582000 | ug/kg | N | 9260 | 32700 | 32700 | 1 | P | HSC | 08/06/14 11:52 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 552000 | ug/kg | * | 218 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 11.2 | ug/kg | J | 3.94 | 11.8 | 11.8 | 1 | AV | MTM1 | 07/22/14 12:19 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 3030 | ug/kg | | 104 | 416 | 416 | 2 | MS | BAJ | 08/11/14 09:00 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 796000 | ug/kg | N | 6970 | 27200 | 27200 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 983 | ug/kg | U | 324 | 983 | 983 | 2 | MS | BAJ | 08/07/14 14:20 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 545 | ug/kg | U | 109 | 545 | 545 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 196000 | ug/kg | | 7630 | 27200 | 27200 | 1 | P | HSC | 08/06/14 11:52 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 393 | ug/kg | U | 59 | 393 | 393 | 2 | MS | BAJ | 08/07/14 14:20 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 10600 | ug/kg | * | 109 | 545 | 545 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 45500 | ug/kg | | 436 | 1090 | 1090 | 1 | P | HSC | 08/04/14 19:21 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.515 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.571 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.572 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.54 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306008 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84184 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.7

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3790000 | ug/kg | | 6480 | 19100 | 19100 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 953 | ug/kg | U | 315 | 953 | 953 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 1110 | ug/kg | | 209 | 1040 | 1040 | 2 | MS | BAJ | 08/07/14 14:23 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 79300 | ug/kg | | 95.3 | 477 | 477 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 347 | ug/kg | | 20.9 | 104 | 104 | 2 | MS | BAJ | 08/07/14 22:06 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 477 | ug/kg | U | 95.3 | 477 | 477 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 536000 | ug/kg | | 7620 | 23800 | 23800 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 23900 | ug/kg | * | 143 | 477 | 477 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 703 | ug/kg | * | 143 | 477 | 477 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 2220 | ug/kg | | 286 | 953 | 953 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 8680000 | ug/kg | | 7620 | 23800 | 23800 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 10500 | ug/kg | | 315 | 953 | 953 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 179000 | ug/kg | N | 8100 | 28600 | 28600 | 1 | P | HSC | 08/06/14 11:55 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 451000 | ug/kg | * | 191 | 953 | 953 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 12.6 | ug/kg | U | 4.22 | 12.6 | 12.6 | 1 | AV | MTM1 | 07/22/14 12:20 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 1470 | ug/kg | | 101 | 403 | 403 | 2 | MS | BAJ | 08/11/14 09:03 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 718000 | ug/kg | N | 6100 | 23800 | 23800 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 1040 | ug/kg | U | 345 | 1040 | 1040 | 2 | MS | BAJ | 08/07/14 14:23 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 477 | ug/kg | U | 95.3 | 477 | 477 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 418000 | ug/kg | | 6670 | 23800 | 23800 | 1 | P | HSC | 08/06/14 11:55 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 418 | ug/kg | U | 62.7 | 418 | 418 | 2 | MS | BAJ | 08/07/14 14:23 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 2890 | ug/kg | * | 95.3 | 477 | 477 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 72600 | ug/kg | | 381 | 953 | 953 | 1 | P | HSC | 08/04/14 19:24 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.56 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.511 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.508 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.53 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306009 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84188 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 93.6

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 3440000 | ug/kg | | 7150 | 21000 | 21000 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1050 | ug/kg | U | 347 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 1930 | ug/kg | | 189 | 944 | 944 | 2 | MS | BAJ | 08/07/14 14:27 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 126000 | ug/kg | | 105 | 526 | 526 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 505 | ug/kg | | 18.9 | 94.4 | 94.4 | 2 | MS | BAJ | 08/07/14 22:09 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 526 | ug/kg | U | 105 | 526 | 526 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 856000 | ug/kg | | 8420 | 26300 | 26300 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 4540 | ug/kg | * | 158 | 526 | 526 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 593 | ug/kg | * | 158 | 526 | 526 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 2620 | ug/kg | | 316 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 7380000 | ug/kg | | 8420 | 26300 | 26300 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 11800 | ug/kg | | 347 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 253000 | ug/kg | N | 8940 | 31600 | 31600 | 1 | P | HSC | 08/06/14 11:58 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 358000 | ug/kg | * | 210 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 4.42 | ug/kg | J | 3.95 | 11.8 | 11.8 | 1 | AV | MTM1 | 07/22/14 12:25 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 1660 | ug/kg | | 99.2 | 397 | 397 | 2 | MS | BAJ | 08/11/14 09:05 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 827000 | ug/kg | N | 6730 | 26300 | 26300 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 944 | ug/kg | U | 312 | 944 | 944 | 2 | MS | BAJ | 08/07/14 14:27 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 526 | ug/kg | U | 105 | 526 | 526 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 497000 | ug/kg | | 7360 | 26300 | 26300 | 1 | P | HSC | 08/06/14 11:58 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 378 | ug/kg | U | 56.7 | 378 | 378 | 2 | MS | BAJ | 08/07/14 14:27 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 2680 | ug/kg | * | 105 | 526 | 526 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 58400 | ug/kg | | 421 | 1050 | 1050 | 1 | P | HSC | 08/04/14 19:28 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.508 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.566 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.544 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.539 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306010 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84181 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 89

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 5330000 | ug/kg | | 7490 | 22000 | 22000 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1100 | ug/kg | U | 364 | 1100 | 1100 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 1190 | ug/kg | | 223 | 1110 | 1110 | 2 | MS | BAJ | 08/07/14 14:40 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 73500 | ug/kg | | 110 | 551 | 551 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 409 | ug/kg | | 22.3 | 111 | 111 | 2 | MS | BAJ | 08/07/14 22:24 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 551 | ug/kg | U | 110 | 551 | 551 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 1920000 | ug/kg | | 8810 | 27500 | 27500 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 4220 | ug/kg | * | 165 | 551 | 551 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 1700 | ug/kg | * | 165 | 551 | 551 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 3310 | ug/kg | | 331 | 1100 | 1100 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 9800000 | ug/kg | | 8810 | 27500 | 27500 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 11300 | ug/kg | | 364 | 1100 | 1100 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 817000 | ug/kg | N | 9370 | 33100 | 33100 | 1 | P | HSC | 08/06/14 12:02 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 404000 | ug/kg | * | 220 | 1100 | 1100 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 5.16 | ug/kg | J | 4.38 | 13.1 | 13.1 | 1 | AV | MTM1 | 07/22/14 12:27 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 3310 | ug/kg | | 106 | 423 | 423 | 2 | MS | BAJ | 08/11/14 09:08 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 798000 | ug/kg | N | 7050 | 27500 | 27500 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 1110 | ug/kg | U | 368 | 1110 | 1110 | 2 | MS | BAJ | 08/07/14 14:40 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 551 | ug/kg | U | 110 | 551 | 551 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 224000 | ug/kg | | 7710 | 27500 | 27500 | 1 | P | HSC | 08/06/14 12:02 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 446 | ug/kg | U | 66.9 | 446 | 446 | 2 | MS | BAJ | 08/07/14 14:40 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 7830 | ug/kg | * | 110 | 551 | 551 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 50400 | ug/kg | | 441 | 1100 | 1100 | 1 | P | HSC | 08/04/14 19:31 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.512 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.506 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.518 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.533 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306011 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84185 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 91

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4310000 | ug/kg | | 6530 | 19200 | 19200 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 961 | ug/kg | U | 317 | 961 | 961 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 1850 | ug/kg | | 213 | 1070 | 1070 | 2 | MS | BAJ | 08/07/14 14:43 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 75700 | ug/kg | | 96.1 | 480 | 480 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 359 | ug/kg | | 21.3 | 107 | 107 | 2 | MS | BAJ | 08/07/14 22:27 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 480 | ug/kg | U | 96.1 | 480 | 480 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 914000 | ug/kg | | 7690 | 24000 | 24000 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 13100 | ug/kg | * | 144 | 480 | 480 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 1190 | ug/kg | * | 144 | 480 | 480 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 4120 | ug/kg | | 288 | 961 | 961 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 9410000 | ug/kg | | 7690 | 24000 | 24000 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 12000 | ug/kg | | 317 | 961 | 961 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 300000 | ug/kg | N | 8170 | 28800 | 28800 | 1 | P | HSC | 08/06/14 12:05 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 435000 | ug/kg | * | 192 | 961 | 961 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 9.89 | ug/kg | J | 4.36 | 13 | 13 | 1 | AV | MTM1 | 07/22/14 12:29 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 2790 | ug/kg | | 108 | 431 | 431 | 2 | MS | BAJ | 08/11/14 09:10 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 655000 | ug/kg | N | 6150 | 24000 | 24000 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 1070 | ug/kg | U | 352 | 1070 | 1070 | 2 | MS | BAJ | 08/07/14 14:43 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 480 | ug/kg | U | 96.1 | 480 | 480 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 274000 | ug/kg | | 6730 | 24000 | 24000 | 1 | P | HSC | 08/06/14 12:05 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 426 | ug/kg | U | 63.9 | 426 | 426 | 2 | MS | BAJ | 08/07/14 14:43 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 4760 | ug/kg | * | 96.1 | 480 | 480 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 64600 | ug/kg | | 384 | 961 | 961 | 1 | P | HSC | 08/04/14 19:35 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.572 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.516 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.507 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.51 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306012 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84189 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 92.9

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4300000 | ug/kg | | 6430 | 18900 | 18900 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 946 | ug/kg | U | 312 | 946 | 946 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 2210 | ug/kg | | 206 | 1030 | 1030 | 2 | MS | BAJ | 08/07/14 14:46 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 136000 | ug/kg | | 94.6 | 473 | 473 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 477 | ug/kg | | 20.6 | 103 | 103 | 2 | MS | BAJ | 08/07/14 22:31 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 473 | ug/kg | U | 94.6 | 473 | 473 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 767000 | ug/kg | | 7570 | 23600 | 23600 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 78100 | ug/kg | * | 142 | 473 | 473 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 1430 | ug/kg | * | 142 | 473 | 473 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 26000 | ug/kg | | 284 | 946 | 946 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 8750000 | ug/kg | | 7570 | 23600 | 23600 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 13700 | ug/kg | | 312 | 946 | 946 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 264000 | ug/kg | N | 8040 | 28400 | 28400 | 1 | P | HSC | 08/06/14 12:08 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 454000 | ug/kg | * | 189 | 946 | 946 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 11.6 | ug/kg | U | 3.9 | 11.6 | 11.6 | 1 | AV | MTM1 | 07/22/14 12:30 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 3930 | ug/kg | | 97.9 | 391 | 391 | 2 | MS | BAJ | 08/11/14 09:13 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 810000 | ug/kg | N | 6050 | 23600 | 23600 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 347 | ug/kg | J | 340 | 1030 | 1030 | 2 | MS | BAJ | 08/07/14 14:46 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 473 | ug/kg | U | 94.6 | 473 | 473 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 446000 | ug/kg | | 6620 | 23600 | 23600 | 1 | P | HSC | 08/06/14 12:08 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 412 | ug/kg | U | 61.8 | 412 | 412 | 2 | MS | BAJ | 08/07/14 14:46 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 3670 | ug/kg | * | 94.6 | 473 | 473 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 75100 | ug/kg | | 378 | 946 | 946 | 1 | P | HSC | 08/04/14 19:38 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.569 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.523 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.555 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.55 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

**METALS**
**−1−**
**INORGANICS ANALYSIS DATA PACKAGE**

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** EPA

**SAMPLE ID:** 352306013 **BASIS:** As Received **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84196 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7439−97−6 | Mercury | 0.20 | ug/L | U | 0.067 | 0.2 | 0.2 | 1 | AV | MTM1 | 07/21/14 09:22 | 072114W1−15 | 1404427 |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306013 **BASIS:** As Received **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84196 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 0

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 145 | ug/L | J | 68 | 200 | 200 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7440−36−0 | Antimony | 3 | ug/L | U | 1 | 3 | 3 | 1 | MS | PRB | 08/08/14 19:05 | 140808−13 | 1401959 |
| 7440−38−2 | Arsenic | 1.78 | ug/L | J | 1.7 | 5 | 5 | 1 | MS | PRB | 08/11/14 00:13 | 140810−11 | 1401959 |
| 7440−39−3 | Barium | 31.6 | ug/L | | 1 | 5 | 5 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7440−41−7 | Beryllium | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7440−43−9 | Cadmium | 1 | ug/L | U | 0.11 | 1 | 1 | 1 | MS | PRB | 08/08/14 19:05 | 140808−13 | 1401959 |
| 7440−70−2 | Calcium | 11300 | ug/L | | 50 | 200 | 200 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7440−47−3 | Chromium | 9.08 | ug/L | J | 2 | 10 | 10 | 1 | MS | PRB | 08/11/14 00:13 | 140810−11 | 1401959 |
| 7440−48−4 | Cobalt | 5 | ug/L | U | 1 | 5 | 5 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7440−50−8 | Copper | 50 | ug/L | | 3 | 10 | 10 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7439−89−6 | Iron | 124 | ug/L | | 30 | 100 | 100 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7439−92−1 | Lead | 2 | ug/L | U | 0.5 | 2 | 2 | 1 | MS | PRB | 08/08/14 19:05 | 140808−13 | 1401959 |
| 7439−95−4 | Magnesium | 3490 | ug/L | | 110 | 300 | 300 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7439−96−5 | Manganese | 5.35 | ug/L | J | 2 | 10 | 10 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7440−02−0 | Nickel | 1.71 | ug/L | J | 0.5 | 2 | 2 | 1 | MS | PRB | 08/11/14 12:43 | 140811−12 | 1401959 |
| 7440−09−7 | Potassium | 2080 | ug/L | | 50 | 150 | 150 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7782−49−2 | Selenium | 5 | ug/L | U | 1.5 | 5 | 5 | 1 | MS | PRB | 08/08/14 19:05 | 140808−13 | 1401959 |
| 7440−22−4 | Silver | 1 | ug/L | U | 0.2 | 1 | 1 | 1 | MS | PRB | 08/08/14 19:05 | 140808−13 | 1401959 |
| 7440−23−5 | Sodium | 13200 | ug/L | | 100 | 300 | 300 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7440−28−0 | Thallium | 2 | ug/L | UN | 0.45 | 2 | 2 | 1 | MS | PRB | 08/11/14 00:13 | 140810−11 | 1401959 |
| 7440−62−2 | Vanadium | 8.4 | ug/L | | 1 | 5 | 5 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |
| 7440−66−6 | Zinc | 5.47 | ug/L | J | 3.3 | 10 | 10 | 1 | P | HSC | 07/28/14 08:00 | 072814−1 | 1401945 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401945 | 1401943 | SW846 3005A | 50 | mL | 50 | mL | 07/10/14 | JXO1 |
| 1401959 | 1401958 | SW846 3005A | 50 | mL | 50 | mL | 07/11/14 | JXM5 |
| 1404427 | 1404425 | EPA 245.1/245.2 Prep | 20 | mL | 20 | mL | 07/18/14 | AXS5 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **AV** | **EPA 245.1/245.2** |

# METALS
## −1−
## INORGANICS ANALYSIS DATA PACKAGE

**SDG No:** 2014−3701 **CONTRACT:** LANL00114 **METHOD TYPE:** SW846

**SAMPLE ID:** 352306015 **BASIS:** Dry Weight **DATE COLLECTED** 08−JUL−14

**CLIENT ID:** RE57−14−84194 **LEVEL:** Low **DATE RECEIVED** 10−JUL−14

**MATRIX:** SO **%SOLIDS:** 90.5

| CAS No. | Analyte | Result | Units | Qual | MDL | PQL | CRDL | DF | M* | Analyst | Run Date | Analytical Run | Analytical Batch |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7429−90−5 | Aluminum | 4610000 | ug/kg | | 7080 | 20800 | 20800 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−36−0 | Antimony | 1040 | ug/kg | U | 344 | 1040 | 1040 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−38−2 | Arsenic | 1800 | ug/kg | | 204 | 1020 | 1020 | 2 | MS | BAJ | 08/07/14 14:50 | 140807−5 | 1401963 |
| 7440−39−3 | Barium | 131000 | ug/kg | | 104 | 521 | 521 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−41−7 | Beryllium | 430 | ug/kg | | 20.4 | 102 | 102 | 2 | MS | BAJ | 08/07/14 22:34 | 140807−9 | 1401963 |
| 7440−43−9 | Cadmium | 521 | ug/kg | U | 104 | 521 | 521 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−70−2 | Calcium | 1880000 | ug/kg | | 8330 | 26000 | 26000 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−47−3 | Chromium | 4370 | ug/kg | * | 156 | 521 | 521 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−48−4 | Cobalt | 948 | ug/kg | * | 156 | 521 | 521 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−50−8 | Copper | 3190 | ug/kg | | 313 | 1040 | 1040 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7439−89−6 | Iron | 8480000 | ug/kg | | 8330 | 26000 | 26000 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7439−92−1 | Lead | 12300 | ug/kg | | 344 | 1040 | 1040 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7439−95−4 | Magnesium | 340000 | ug/kg | N | 8860 | 31300 | 31300 | 1 | P | HSC | 08/06/14 12:12 | 080614A−4 | 1401948 |
| 7439−96−5 | Manganese | 459000 | ug/kg | * | 208 | 1040 | 1040 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7439−97−6 | Mercury | 11.8 | ug/kg | J | 4.28 | 12.8 | 12.8 | 1 | AV | MTM1 | 07/22/14 12:32 | 072214S1−14 | 1404938 |
| 7440−02−0 | Nickel | 3260 | ug/kg | | 103 | 412 | 412 | 2 | MS | BAJ | 08/11/14 09:15 | 140810−10 | 1410027 |
| 7440−09−7 | Potassium | 730000 | ug/kg | N | 6670 | 26000 | 26000 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7782−49−2 | Selenium | 1020 | ug/kg | U | 336 | 1020 | 1020 | 2 | MS | BAJ | 08/07/14 14:50 | 140807−5 | 1401963 |
| 7440−22−4 | Silver | 521 | ug/kg | U | 104 | 521 | 521 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−23−5 | Sodium | 334000 | ug/kg | | 7290 | 26000 | 26000 | 1 | P | HSC | 08/06/14 12:12 | 080614A−4 | 1401948 |
| 7440−28−0 | Thallium | 408 | ug/kg | U | 61.1 | 408 | 408 | 2 | MS | BAJ | 08/07/14 14:50 | 140807−5 | 1401963 |
| 7440−62−2 | Vanadium | 4140 | ug/kg | * | 104 | 521 | 521 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |
| 7440−66−6 | Zinc | 64800 | ug/kg | | 417 | 1040 | 1040 | 1 | P | HSC | 08/04/14 19:41 | 080414−3 | 1401948 |

**Prep Information:**

| Analytical Batch | Prep Batch | Prep Method | Initial wt./vol. | Units | Final wt./vol. | Units | Date | Analyst |
|---|---|---|---|---|---|---|---|---|
| 1401948 | 1401947 | SW846 3050B | 0.53 | g | 50 | mL | 07/10/14 | KXP3 |
| 1401963 | 1401961 | SW846 3050B | 0.542 | g | 50 | mL | 07/10/14 | JXO1 |
| 1404938 | 1404933 | SW846 7471A Prep | 0.519 | g | 30 | mL | 07/21/14 | AXS5 |
| 1410027 | 1410025 | SW846 3050B | 0.536 | g | 50 | mL | 08/08/14 | KXP3 |

***Analytical Methods:**

**P** **SW846 3050B/6010C**
**MS** **SW846 3050B/6020A**
**AV** **SW846 7471A**

# Quality Control Summary

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| 1203123913 | | | | | | | | |
| | Barium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Beryllium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Aluminum | 68 | ug/L | +/−200 | U | P | 68 | 200 |
| | Calcium | 50 | ug/L | +/−200 | U | P | 50 | 200 |
| | Cobalt | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Copper | 3 | ug/L | +/−10 | U | P | 3 | 10 |
| | Iron | 30 | ug/L | +/−100 | U | P | 30 | 100 |
| | Magnesium | 110 | ug/L | +/−300 | U | P | 110 | 300 |
| | Manganese | 2 | ug/L | +/−10 | U | P | 2 | 10 |
| | Potassium | 56.8 | ug/L | +/−150 | J | P | 50 | 150 |
| | Sodium | 100 | ug/L | +/−300 | U | P | 100 | 300 |
| | Vanadium | 1 | ug/L | +/−5 | U | P | 1 | 5 |
| | Zinc | 3.3 | ug/L | +/−10 | U | P | 3.3 | 10 |
| 1203123919 | | | | | | | | |
| | Aluminum | 6750 | ug/kg | +/−19800 | U | P | 6750 | 19800 |
| | Antimony | 327 | ug/kg | +/−992 | U | P | 327 | 992 |
| | Barium | 99.2 | ug/kg | +/−496 | U | P | 99.2 | 496 |
| | Cadmium | 99.2 | ug/kg | +/−496 | U | P | 99.2 | 496 |
| | Calcium | 7940 | ug/kg | +/−24800 | U | P | 7940 | 24800 |
| | Chromium | 149 | ug/kg | +/−496 | U | P | 149 | 496 |
| | Cobalt | 149 | ug/kg | +/−496 | U | P | 149 | 496 |
| | Copper | 298 | ug/kg | +/−992 | U | P | 298 | 992 |
| | Iron | 7940 | ug/kg | +/−24800 | U | P | 7940 | 24800 |
| | Lead | 327 | ug/kg | +/−992 | U | P | 327 | 992 |
| | Magnesium | 8430 | ug/kg | +/−29800 | U | P | 8430 | 29800 |
| | Manganese | 198 | ug/kg | +/−992 | U | P | 198 | 992 |
| | Potassium | 6350 | ug/kg | +/−24800 | U | P | 6350 | 24800 |
| | Silver | 99.2 | ug/kg | +/−496 | U | P | 99.2 | 496 |
| | Sodium | 6940 | ug/kg | +/−24800 | U | P | 6940 | 24800 |
| | Vanadium | 99.2 | ug/kg | +/−496 | U | P | 99.2 | 496 |
| | Zinc | 397 | ug/kg | +/−992 | U | P | 397 | 992 |
| 1203123935 | | | | | | | | |
| | Antimony | 1 | ug/L | +/−3 | U | MS | 1 | 3 |
| | Arsenic | 1.7 | ug/L | +/−5 | U | MS | 1.7 | 5 |
| | Cadmium | 0.11 | ug/L | +/−1 | U | MS | 0.11 | 1 |
| | Chromium | 2 | ug/L | +/−10 | U | MS | 2 | 10 |
| | Lead | 0.5 | ug/L | +/−2 | U | MS | 0.5 | 2 |

**METALS**
**−3b−**
**PREPARATION BLANK SUMMARY**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Matrix:** SO

| Sample ID | Analyte | Result | Units | Acceptance Window | Conc Qual | M* | MDL | RDL |
|---|---|---|---|---|---|---|---|---|
| | Nickel | 2.51 | ug/L | +/−2 | | MS | 0.5 | 2 |
| | Selenium | 1.5 | ug/L | +/−5 | U | MS | 1.5 | 5 |
| | Silver | 0.2 | ug/L | +/−1 | U | MS | 0.2 | 1 |
| | Thallium | 0.45 | ug/L | +/−2 | U | MS | 0.45 | 2 |
| 1203123940 | | | | | | | | |
| | Arsenic | 197 | ug/kg | +/−986 | U | MS | 197 | 986 |
| | Beryllium | 19.7 | ug/kg | +/−98.6 | U | MS | 19.7 | 98.6 |
| | Selenium | 325 | ug/kg | +/−986 | U | MS | 325 | 986 |
| | Thallium | 59.2 | ug/kg | +/−394 | U | MS | 59.2 | 394 |
| 1203129977 | | | | | | | | |
| | Mercury | 0.067 | ug/L | +/−0.2 | U | AV | 0.067 | 0.2 |
| 1203131318 | | | | | | | | |
| | Mercury | 3.89 | ug/kg | +/−11.6 | U | AV | 3.89 | 11.6 |
| 1203144439 | | | | | | | | |
| | Nickel | 96.5 | ug/kg | +/−386 | U | MS | 96.5 | 386 |

***Analytical Methods:**

| | |
|---|---|
| **P** | **SW846 3005A/6010C** |
| **P** | **SW846 3050B/6010C** |
| **MS** | **SW846 3005A/6020A** |
| **MS** | **SW846 3050B/6020A** |
| **AV** | **SW846 7471A** |
| **AV** | **EPA 245.1/245.2** |

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84196S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352306013 **Spike ID:** 1203123916

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Barium | ug/L | 75−125 | 542 | | 31.6 | | 500 | 102 | | P |
| Beryllium | ug/L | 75−125 | 520 | | 1 | U | 500 | 104 | | P |
| Calcium | ug/L | 75−125 | 16600 | | 11300 | | 5000 | 105 | | P |
| Cobalt | ug/L | 75−125 | 509 | | 1 | U | 500 | 102 | | P |
| Copper | ug/L | 75−125 | 563 | | 50 | | 500 | 103 | | P |
| Iron | ug/L | 75−125 | 5300 | | 124 | | 5000 | 104 | | P |
| Magnesium | ug/L | 75−125 | 8740 | | 3490 | | 5000 | 105 | | P |
| Manganese | ug/L | 75−125 | 498 | | 5.35 | J | 500 | 98.6 | | P |
| Aluminum | ug/L | 75−125 | 5430 | | 145 | J | 5000 | 106 | | P |
| Potassium | ug/L | 75−125 | 7220 | | 2080 | | 5000 | 103 | | P |
| Sodium | ug/L | 75−125 | 18600 | | 13200 | | 5000 | 107 | | P |
| Vanadium | ug/L | 75−125 | 525 | | 8.4 | | 500 | 103 | | P |
| Zinc | ug/L | 75−125 | 500 | | 5.47 | J | 500 | 98.9 | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84178S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 89

**Sample ID:** 352306001 **Spike ID:** 1203123922

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/kg | 75−125 | 48900 | | 349 | U | 52800 | 92.3 | | P |
| Barium | ug/kg | 75−125 | 104000 | | 55100 | | 52800 | 92.8 | | P |
| Cadmium | ug/kg | 75−125 | 54400 | | 106 | U | 52800 | 103 | | P |
| Calcium | ug/kg | 75−125 | 1400000 | | 874000 | | 528000 | 99 | | P |
| Chromium | ug/kg | 75−125 | 59200 | | 8290 | | 52800 | 96.4 | | P |
| Cobalt | ug/kg | 75−125 | 54900 | | 1260 | | 52800 | 102 | | P |
| Copper | ug/kg | 75−125 | 62000 | | 2740 | | 52800 | 112 | | P |
| Iron | ug/kg | | 10100000 | | 8440000 | | 528000 | 313 | N/A | P |
| Lead | ug/kg | 75−125 | 68300 | | 10100 | | 52800 | 110 | | P |
| Magnesium | ug/kg | 75−125 | 1190000 | | 421000 | | 528000 | 146 | N | P |
| Manganese | ug/kg | | 396000 | | 326000 | | 52800 | 132 | N/A | P |
| Potassium | ug/kg | 75−125 | 1480000 | | 750000 | | 528000 | 137 | N | P |
| Silver | ug/kg | 75−125 | 53100 | | 106 | U | 52800 | 100 | | P |
| Sodium | ug/kg | 75−125 | 900000 | | 279000 | | 528000 | 117 | | P |
| Vanadium | ug/kg | 75−125 | 63400 | | 5630 | | 52800 | 109 | | P |
| Zinc | ug/kg | 75−125 | 111000 | | 50400 | | 52800 | 115 | | P |
| Aluminum | ug/kg | | 8880000 | | 5370000 | | 528000 | 664 | N/A | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84196S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352306013 **Spike ID:** 1203123938

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | 75−125 | 59.4 | | 1 | U | 50 | 118 | | MS |
| Arsenic | ug/L | 75−125 | 54 | | 1.78 | J | 50 | 104 | | MS |
| Cadmium | ug/L | 75−125 | 60.5 | | 0.11 | U | 50 | 121 | | MS |
| Chromium | ug/L | 75−125 | 63.2 | | 9.08 | J | 50 | 108 | | MS |
| Lead | ug/L | 75−125 | 59.5 | | 0.5 | U | 50 | 118 | | MS |
| Nickel | ug/L | 75−125 | 54.9 | | 1.71 | J | 50 | 106 | | MS |
| Selenium | ug/L | 75−125 | 56.7 | | 1.5 | U | 50 | 113 | | MS |
| Silver | ug/L | 75−125 | 59.8 | | 0.2 | U | 50 | 120 | | MS |
| Thallium | ug/L | 75−125 | 16.8 | | 0.45 | U | 50 | 33.2 | N | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84178S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 89

**Sample ID:** 352306001 **Spike ID:** 1203123943

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | 75−125 | 7050 | | 1360 | | 5550 | 103 | | MS |
| Beryllium | ug/kg | 75−125 | 5770 | | 470 | | 5550 | 95.6 | | MS |
| Selenium | ug/kg | 75−125 | 5590 | | 351 | U | 5550 | 99.1 | | MS |
| Thallium | ug/kg | 75−125 | 5360 | | 70.2 | J | 5550 | 95.4 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84197S

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352465003 **Spike ID:** 1203129980

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | 75−125 | 2.05 | | 0.067 | U | 2 | 103 | | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3701 **Client ID** WST40−14−84681S

**Contract:** LANL00114 **Level:** Low

**Matrix:** OIL **% Solids:**

**Sample ID:** 352722001 **Spike ID:** 1203131321

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | 80−120 | 110 | | 3.93 | U | 119 | 92 | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−5a−**

**Spike Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84196PS

**Contract:** LANL00114 **Level:** Low

**Matrix:** WATER **% Solids:**

**Sample ID:** 352306013 **Spike ID:** 1203142510

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Thallium | ug/L | 80−120 | 76.2 | | 0.45 | U | 50 | 152 | N | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−5a−**

**Spike Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84178PS

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 89

**Sample ID:** 352306001 **Spike ID:** 1203143128

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Magnesium | ug/L | 80−120 | 9450 | | 3990 | | 5000 | 109 | | P |
| Potassium | ug/L | 80−120 | 12100 | | 7100 | | 5000 | 101 | | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−5a−**

**Matrix Spike Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84178S

**Contract:** LANL00114 **Level:** Low

**Matrix:** SOIL **% Solids:** 89

**Sample ID:** 352306001 **Spike ID:** 1203144442

| Analyte | Units | Acceptance Limit | Spiked Result | C | Sample Result | C | Spike Added | % Recovery | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|---|
| Nickel | ug/kg | 75−125 | 9120 | | 2750 | | 5380 | 119 | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3701 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84196D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352306013 **Duplicate ID:** 1203123915 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/L | +/−200 | 145 | J | 129 | J | 11.6 | | P |
| Barium | ug/L | +/−20% | 31.6 | | 32.8 | | 3.61 | | P |
| Beryllium | ug/L | | 1 | U | 1 | U | | | P |
| Calcium | ug/L | +/−20% | 11300 | | 11800 | | 3.73 | | P |
| Cobalt | ug/L | | 1 | U | 1 | U | | | P |
| Copper | ug/L | +/−20% | 50 | | 52.5 | | 4.89 | | P |
| Iron | ug/L | +/−100 | 124 | | 122 | | 2.38 | | P |
| Magnesium | ug/L | +/−20% | 3490 | | 3630 | | 3.98 | | P |
| Manganese | ug/L | +/−10 | 5.35 | J | 5.44 | J | 1.62 | | P |
| Potassium | ug/L | +/−20% | 2080 | | 2200 | | 5.37 | | P |
| Sodium | ug/L | +/−20% | 13200 | | 13600 | | 2.77 | | P |
| Vanadium | ug/L | +/−5 | 8.4 | | 9.08 | | 7.74 | | P |
| Zinc | ug/L | +/−10 | 5.47 | J | 4.43 | J | 20.9 | | P |

***Analytical Methods:**

**P SW846 3005A/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3701 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84178D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352306001 **Duplicate ID:** 1203123921 **Percent Solids for Dup:** 89

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ug/kg | +/−20% | 5370000 | | 5500000 | | 2.4 | | P |
| Antimony | ug/kg | | 349 | U | 353 | U | | | P |
| Barium | ug/kg | +/−20% | 55100 | | 64600 | | 15.9 | | P |
| Cadmium | ug/kg | | 106 | U | 107 | U | | | P |
| Calcium | ug/kg | +/−20% | 874000 | | 957000 | | 9.07 | | P |
| Chromium | ug/kg | +/−20% | 8290 | | 5640 | | 38 | * | P |
| Cobalt | ug/kg | +/−534 | 1260 | | 1820 | | 36.5 | * | P |
| Copper | ug/kg | +/−1070 | 2740 | | 2790 | | 1.62 | | P |
| Iron | ug/kg | +/−20% | 8440000 | | 9260000 | | 9.34 | | P |
| Lead | ug/kg | +/−20% | 10100 | | 10300 | | 2.72 | | P |
| Magnesium | ug/kg | +/−20% | 421000 | | 478000 | | 12.5 | | P |
| Manganese | ug/kg | +/−20% | 326000 | | 505000 | | 43 | * | P |
| Potassium | ug/kg | +/−20% | 750000 | | 735000 | | 2.09 | | P |
| Silver | ug/kg | | 106 | U | 107 | U | | | P |
| Sodium | ug/kg | +/−20% | 279000 | | 245000 | | 13.1 | | P |
| Vanadium | ug/kg | +/−20% | 5630 | | 7430 | | 27.4 | * | P |
| Zinc | ug/kg | +/−20% | 50400 | | 45800 | | 9.6 | | P |

***Analytical Methods:**

**P SW846 3050B/6010C**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3701 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84196D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352306013 **Duplicate ID:** 1203123937 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Antimony | ug/L | | 1 | U | 1 | U | | | MS |
| Arsenic | ug/L | +/−5 | 1.78 | J | 2.12 | J | 17.3 | | MS |
| Cadmium | ug/L | | 0.11 | U | 0.11 | U | | | MS |
| Chromium | ug/L | +/−10 | 9.08 | J | 7.49 | J | 19.2 | | MS |
| Lead | ug/L | | 0.5 | U | 0.5 | U | | | MS |
| Nickel | ug/L | +/−2 | 1.71 | J | 1.64 | J | 4.05 | | MS |
| Selenium | ug/L | | 1.5 | U | 1.5 | U | | | MS |
| Silver | ug/L | | 0.2 | U | 0.2 | U | | | MS |
| Thallium | ug/L | | 0.45 | U | 0.45 | U | | | MS |

***Analytical Methods:**

**MS SW846 3005A/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3701 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84178D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352306001 **Duplicate ID:** 1203123942 **Percent Solids for Dup:** 89

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ug/kg | +/−1080 | 1360 | | 1490 | | 9.56 | | MS |
| Beryllium | ug/kg | +/−108 | 470 | | 533 | | 12.5 | | MS |
| Selenium | ug/kg | | 351 | U | 356 | U | | | MS |
| Thallium | ug/kg | | 70.2 | J | 64.8 | U | 200 | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3701 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84197D

**Matrix:** WATER **Level:** Low

**Sample ID:** 352465003 **Duplicate ID:** 1203129979 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/L | | 0.067 | U | 0.067 | U | | | AV |

***Analytical Methods:**

**AV EPA 245.1/245.2**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3701 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** WST40−14−84681D

**Matrix:** OIL **Level:** Low

**Sample ID:** 352722001 **Duplicate ID:** 1203131320 **Percent Solids for Dup:** N/A

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ug/kg | | 3.93 | U | 3.95 | U | | | AV |

***Analytical Methods:**

**AV SW846 7471A**

**Metals**
**−6−**
**Duplicate Sample Summary**

**SDG No.:** 2014−3701 **Lab Code:** GEL

**Contract:** LANL00114 **Client ID:** RE57−14−84178D

**Matrix:** SOIL **Level:** Low

**Sample ID:** 352306001 **Duplicate ID:** 1203144441 **Percent Solids for Dup:** 89

| Analyte | Units | Acceptance Limit | Sample Result | C | Duplicate Result | C | RPD | Qual | M* |
|---|---|---|---|---|---|---|---|---|---|
| Nickel | ug/kg | +/−20% | 2750 | | 3080 | | 11.3 | | MS |

***Analytical Methods:**

**MS SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Aqueous LCS Source:** OS2I **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203123914 | | | | | | | | |
| | Aluminum | ug/L | 5000 | 5170 | | 103 | 80−120 | P |
| | Barium | ug/L | 500 | 513 | | 103 | 80−120 | P |
| | Beryllium | ug/L | 500 | 513 | | 103 | 80−120 | P |
| | Calcium | ug/L | 5000 | 5140 | | 103 | 80−120 | P |
| | Cobalt | ug/L | 500 | 507 | | 101 | 80−120 | P |
| | Copper | ug/L | 500 | 499 | | 99.7 | 80−120 | P |
| | Iron | ug/L | 5000 | 5220 | | 104 | 80−120 | P |
| | Magnesium | ug/L | 5000 | 5300 | | 106 | 80−120 | P |
| | Manganese | ug/L | 500 | 493 | | 98.6 | 80−120 | P |
| | Potassium | ug/L | 5000 | 5270 | | 105 | 80−120 | P |
| | Sodium | ug/L | 5000 | 5180 | | 104 | 80−120 | P |
| | Vanadium | ug/L | 500 | 508 | | 102 | 80−120 | P |
| | Zinc | ug/L | 500 | 489 | | 97.7 | 80−120 | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203123920 | | | | | | | | |
| | Aluminum | ug/kg | 8680000 | 7800000 | | 89.9 | 44.9−154.4 | P |
| | Antimony | ug/kg | 166000 | 134000 | | 80.7 | 33.1−167.3 | P |
| | Barium | ug/kg | 290000 | 305000 | | 105 | 82.8−117.6 | P |
| | Cadmium | ug/kg | 85000 | 89900 | | 106 | 84−115.9 | P |
| | Calcium | ug/kg | 6120000 | 6680000 | | 109 | 83.2−117 | P |
| | Chromium | ug/kg | 168000 | 182000 | | 108 | 81.5−117.9 | P |
| | Cobalt | ug/kg | 87000 | 94300 | | 108 | 84.8−114.9 | P |
| | Copper | ug/kg | 187000 | 216000 | | 116 | 84−116.6 | P |
| | Iron | ug/kg | 12500000 | 13600000 | | 109 | 50.5−148.8 | P |
| | Lead | ug/kg | 120000 | 125000 | | 104 | 83.3−116.7 | P |
| | Magnesium | ug/kg | 2920000 | 3000000 | | 103 | 75−125.3 | P |
| | Manganese | ug/kg | 310000 | 323000 | | 104 | 82.6−117.4 | P |
| | Potassium | ug/kg | 2780000 | 2640000 | | 94.9 | 69.1−130.9 | P |
| | Silver | ug/kg | 55200 | 55100 | | 99.9 | 66.3−133.7 | P |
| | Sodium | ug/kg | 504000 | 543000 | | 108 | 73.6−126.4 | P |
| | Vanadium | ug/kg | 138000 | 155000 | | 112 | 79.7−120.3 | P |
| | Zinc | ug/kg | 206000 | 218000 | | 106 | 82−118 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Aqueous LCS Source:** O2Si **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203123936 | | | | | | | | |
| | Arsenic | ug/L | 50 | 51 | | 102 | 80−120 | MS |
| | Cadmium | ug/L | 50 | 58.1 | | 116 | 80−120 | MS |
| | Chromium | ug/L | 50 | 51.3 | | 103 | 80−120 | MS |
| | Lead | ug/L | 50 | 58.2 | | 116 | 80−120 | MS |
| | Nickel | ug/L | 50 | 52.2 | | 104 | 80−120 | MS |
| | Selenium | ug/L | 50 | 55 | | 110 | 80−120 | MS |
| | Silver | ug/L | 50 | 58.7 | | 117 | 80−120 | MS |
| | Thallium | ug/L | 50 | 46.9 | | 93.8 | 80−120 | MS |
| | Antimony | ug/L | 50 | 56.7 | | 113 | 80−120 | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203123941 | | | | | | | | |
| | Arsenic | ug/kg | 137000 | 148000 | | 108 | 83.2−117.5 | MS |
| | Beryllium | ug/kg | 138000 | 147000 | | 106 | 84.1−115.9 | MS |
| | Selenium | ug/kg | 43500 | 50000 | | 115 | 77.9−122.3 | MS |
| | Thallium | ug/kg | 146000 | 156000 | | 107 | 81.5−119.2 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Aqueous LCS Source:** GEL **Solid LCS Source:**

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203129978 | | | | | | | | |
| | Mercury | ug/L | 2 | 2.02 | | 101 | 85−115 | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** GEL

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203131319 | | | | | | | | |
| | Mercury | ug/kg | 115 | 110 | | 95.8 | 71.4−129 | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−7−**
**Laboratory Control Sample Summary**

**SDG NO.** 2014−3701

**Contract:** LANL00114

**Aqueous LCS Source:** **Solid LCS Source:** ERA

| Sample ID | Analyte | Units | True Value | Result | C | % Recovery | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| 1203144440 | | | | | | | | |
| | Nickel | ug/kg | 159000 | 171000 | | 108 | 84.3−115.7 | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84196L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352306013 **Serial Dilution ID:** 1203123918

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 145 | J | 340 | U | 100 | | | P |
| Barium | 31.6 | | 31.5 | | .482 | | | P |
| Beryllium | 1 | U | 5 | U | | | | P |
| Calcium | 11300 | | 11500 | | 1.32 | | 10 | P |
| Cobalt | 1 | U | 5 | U | | | | P |
| Copper | 50 | | 47.2 | J | 5.64 | | | P |
| Iron | 124 | | 150 | U | 100 | | | P |
| Magnesium | 3490 | | 3550 | | 1.66 | | | P |
| Manganese | 5.35 | J | 10 | U | 100 | | | P |
| Potassium | 2080 | | 2330 | | 11.9 | | | P |
| Sodium | 13200 | | 13600 | | 2.85 | | 10 | P |
| Vanadium | 8.4 | | 7.09 | J | 15.6 | | | P |
| Zinc | 5.47 | J | 16.5 | U | 100 | | | P |

***Analytical Methods:**

**P** **SW846 3005A/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84178L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352306001 **Serial Dilution ID:** 1203123923

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 50800 | | 51300 | | .936 | | 10 | P |
| Antimony | 3.3 | U | 16.5 | U | | | | P |
| Barium | 521 | | 522 | | .182 | | 10 | P |
| Cadmium | 1 | U | 5 | U | | | | P |
| Calcium | 8270 | | 8080 | | 2.3 | | 10 | P |
| Chromium | 78.5 | | 75.5 | | 3.82 | | 10 | P |
| Cobalt | 11.9 | | 12.1 | J | 1.85 | | | P |
| Copper | 25.9 | | 23.6 | J | 9.11 | | | P |
| Iron | 79800 | | 80000 | | .269 | | 10 | P |
| Lead | 95.2 | | 101 | | 6 | | | P |
| Magnesium | 3990 | | 4070 | | 2.12 | | | P |
| Manganese | 3090 | | 3150 | | 2.21 | | 10 | P |
| Potassium | 7100 | | 7100 | | .062 | | 10 | P |
| Silver | 1 | U | 5 | U | | | | P |
| Sodium | 2640 | | 2210 | | 16.2 | | | P |
| Vanadium | 53.3 | | 52.2 | | 2.02 | | 10 | P |
| Zinc | 477 | | 462 | | 3.22 | | 10 | P |

***Analytical Methods:**

**P** **SW846 3050B/6010C**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84196L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352306013 **Serial Dilution ID:** 1203123939

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Antimony | 1 | U | 5 | U | | | | MS |
| Arsenic | 1.78 | J | 8.5 | U | 100 | | | MS |
| Cadmium | .11 | U | .55 | U | | | | MS |
| Chromium | 9.08 | J | 10.2 | J | 12.2 | | | MS |
| Lead | .5 | U | 2.5 | U | | | | MS |
| Nickel | 1.71 | J | 2.5 | U | 100 | | | MS |
| Selenium | 1.5 | U | 7.5 | U | | | | MS |
| Silver | .2 | U | 1 | U | | | | MS |
| Thallium | .45 | U | 6.69 | J | | | | MS |

***Analytical Methods:**

**MS** **SW846 3005A/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84178L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352306001 **Serial Dilution ID:** 1203123944

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Arsenic | 6.38 | | 6.54 | J | 2.38 | | | MS |
| Beryllium | 2.21 | | 2.2 | J | .769 | | | MS |
| Selenium | 1.65 | U | 8.25 | U | | | | MS |
| Thallium | .33 | J | 1.5 | U | 100 | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84197L

**Contract:** LANL00114

**Matrix:** LIQUID **Level:** Low

**Sample ID:** 352465003 **Serial Dilution ID:** 1203129981

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .067 | U | .335 | U | | | | AV |

***Analytical Methods:**

**AV** **EPA 245.1/245.2**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3701 **Client ID** WST40−14−84681L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352722001 **Serial Dilution ID:** 1203131322

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Mercury | .067 | U | .335 | U | | | | AV |

***Analytical Methods:**

**AV** **SW846 7471A**

**METALS**
**−9−**
**Serial Dilution Sample Summary**

**SDG NO.** 2014−3701 **Client ID** RE57−14−84178L

**Contract:** LANL00114

**Matrix:** SOLID **Level:** Low

**Sample ID:** 352306001 **Serial Dilution ID:** 1203144443

| Analyte | Initial Value ug/L | C | Serial Value ug/L | C | % Difference | Qual | Acceptance Limit | M* |
|---|---|---|---|---|---|---|---|---|
| Nickel | 12.7 | | 13 | | 2.58 | | | MS |

***Analytical Methods:**

**MS** **SW846 3050B/6020A**

# Miscellaneous

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 06-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| ICP | SW846 3050B/6010C | Solid | LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1401948 | See Below | | |

**Potentially affected work order(s)(SDG): 352306(2014-3701)**

**Application Issues:**

Failed Recovery for MS/PS

Failed RPD for DUP

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed Recovery for MS/PS:<br>QC 1203123922MS<br>2. Failed RPD for DUP:<br>QC 1203123921DUP | 1. The matrix spike recovery failed outside of the control limits for potassium and magnesium. The post spike passed the required control limits for all analytes. This verifies the absence of a matrix interference.<br>2. The sample and sample duplicate % RPD failed outside the control limits for chromium, cobalt, manganese and vanadium due to possible sample non-homogeneity and/or matrix interference. |

**Originator's Name:**

Helen Camello 06-AUG-14

**Data Validator/Group Leader:**

Travis Tola 06-AUG-14

# DATA EXCEPTION REPORT

| Mo.Day Yr. | Division: | Quality Criteria: | Type: |
|---|---|---|---|
| 11-AUG-14 | Industrial | Specifications | Process |
| **Instrument Type:** | **Test / Method:** | **Matrix Type:** | **Client Code:** |
| ICP/MS | SW846 3005A/6020A | Liquid | ESHL, LANL |
| **Batch ID:** | **Sample Numbers:** | | |
| 1401959 | See Below | | |

**Potentially affected work order(s)(SDG): 352306(2014-3701),352307(2014-3700)**

**Application Issues:**

Method Blank contamination

Failed Recovery for MS/PS

| Specification and Requirements Exception Description: | DER Disposition: |
|---|---|
| 1. Failed Recovery for MS/PS:<br><br>QC 1203123938MS,1203142510PS | The matrix spike recovery failed outside of the control limits for thallium. The post spike failed outside the required control limits for thallium. This verifies the presence of a matrix interference. |
| 2. Method Blank contamination:<br><br>QC 1203123935MB | The Method Blank contained nickel. The samples in this SDG either did not contain the above noted analytes at concentrations higher than the RDL, or the analytes were present at concentrations more than ten times the amount in the method blank. The data was not adversely affected and was reported. |

**Originator's Name:**

Paul Boyd 11-AUG-14

**Data Validator/Group Leader:**

Jamie Johnson 13-AUG-14

# General Chem Analysis

# Case Narrative

**General Chemistry Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3701**

## Method/Analysis Information

| | | | |
|---|---|---|---|
| **Product:** | **Cyanide and Total** | | |
| **Analytical Batch:** | 1402234 | **Method:** | SW9012A Cyanide and Total |
| **Prep Batch :** | 1402233 | **Method:** | SSW846 9010B Prep |

## Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

| Sample ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306015 | RE57-14-84194 |
| 1203124664 | MB for batch 1402233 |
| 1203124669 | Laboratory Control Sample (LCS) |
| 1203124666 | 352306001(RE57-14-84178) Sample Duplicate (DUP) |
| 1203124668 | 352306001(RE57-14-84178) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-095 REV# 17.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

## Calibration Information

The Flow Injection analysis was performed on a Lachat QuickChem FIA+ 8000 Series.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

## Quality Control (QC) Information

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following sample was selected for QC analysis: 352306001 (RE57-14-84178).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recovery for this sample set was within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1203124666 (RE57-14-84178).

## Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Preservation/Integrity**
All the samples from this sample group met the preservation and integrity requirements of the method.

**Sample Dilutions**
The following sample in this sample group was diluted due to high concentration: 1203124669 (LCS).

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

**Miscellaneous Information**

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Method/Analysis Information**

| | | | |
|---|---|---|---|
| **Product:** | **Ion Chromatography** | | |
| **Analytical Batch:** | 1403032 | **Method:** | EPA 300.0 Nitrate in Soil |
| **Prep Batch :** | 1403027 | **Method:** | EPA 300.0 PREP |

**Sample Analysis**

The following samples were analyzed using the analytical protocol as established in EPA 300.0:

| Sample ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306015 | RE57-14-84194 |
| 1203126590 | MB for batch 1403027 |
| 1203126595 | Laboratory Control Sample (LCS) |
| 1203126591 | 352306002(RE57-14-84182) Sample Duplicate (DUP) |
| 1203126592 | 352306004(RE57-14-84179) Sample Duplicate (DUP) |
| 1203126593 | 352306002(RE57-14-84182) Matrix Spike (MS) |
| 1203126594 | 352306004(RE57-14-84179) Matrix Spike (MS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-GC-E-086 REV# 22.

**Preparation/Analytical Method Verification**

The SOP stated above has been prepared based on technical research and testing conducted by GEL Laboratories, LLC. and with guidance from the regulatory documents listed in this "Method/Analysis Information" section.

## Calibration Information

The Ion Chromatography analysis was performed on a Dionex ICS-3000 Ion Chromatograph.

**Initial Calibration**
All initial calibration requirements have been met for this SDG.

**Continuing Calibration Blanks**
All continuing calibration blanks (CCBs) associated with reported data from this batch were within acceptance limits.

**Calibration Verification Information (CCV)**
All continuing calibration verification standards (CCVs) associated with reported data from this batch were within acceptance limits.

**Y Intercept Rule**
The absolute value of the intercept is less than 3 times the MDL.

## Quality Control (QC) Information

**Method Blank (MB) Statement**
The MB analyzed with this SDG met the acceptance criteria.

**Laboratory Control Sample (LCS) Recovery**
The LCS spike recovery met the acceptance limits.

**Quality Control (QC) Designation**
The following samples were selected for QC analysis: 352306002 (RE57-14-84182) and 352306004 (RE57-14-84179).

**Matrix Spike (MS)/Post Spike (PS) Recovery Statement**
The MS/PS recoveries for this sample set were within the required acceptance limits.

**Duplicate Relative Percent Difference (RPD) Statement**
The RPD between the sample and its duplicate met the acceptance limits.

## Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

**Holding Times**
All samples in this SDG met the specified holding time.

**Sample Dilutions**
The samples in this SDG did not require dilutions.

**Sample Re-analysis**
The samples in this SDG did not require re-analysis.

## Miscellaneous Information

**Data Exception (DER) Documentation**
Data exception reports (DERs) are generated to document procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integrations**
The following sample from this sample group had to be manually integrated due to errors in the instrument software peak integration: 1203126592 (RE57-14-84179).

**Additional Comments**
Additional comments were not required for this SDG.

**Electronic Packaging Comment**
This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:
Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

**Review Validation:**

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

**The following data validator verified the information presented in this case narrative:**

**Reviewer:**_____ **Date:**_____06Aug14_____

# Sample Data Summary

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis Report
## for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3701  GEL Work Order: 352306

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria
**  Analyte is a Tracer compound
**  Analyte is a surrogate compound
H  Analytical holding time was exceeded
J  Value is estimated
N  Metals--The Matrix spike sample recovery is not within specified control limits
U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
h  Preparation or preservation holding time was exceeded

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the limit as defined in the 'U' qualifier above.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by _____

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84178
Sample ID: 352306001
Matrix: SO
Collect Date: 08-JUL-14 08:30
Receive Date: 10-JUL-14
Collector: Client
Moisture: 10.7%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 85.0 | 255 | ug/kg | 1 | AXH3 | 07/14/14 | 1349 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 1.39 | 0.370 | 1.12 | mg/kg | 1 | RXB5 | 07/14/14 | 1904 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84182
Sample ID: 352306002
Matrix: SO
Collect Date: 08-JUL-14 11:45
Receive Date: 10-JUL-14
Collector: Client
Moisture: 8.64%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 78.8 | 236 | ug/kg | 1 | AXH3 | 07/14/14 | 1351 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 3.24 | 0.361 | 1.09 | mg/kg | 1 | RXB5 | 07/14/14 | 1935 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84186 | Project: | LANL00114 |
| Sample ID: | 352306003 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 08-JUL-14 09:15 | | |
| Receive Date: | 10-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 13.2% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 94.3 | 282 | ug/kg | 1 | AXH3 | 07/14/14 | 1352 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 8.03 | 0.380 | 1.15 | mg/kg | 1 | RXB5 | 07/14/14 | 2108 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84179
Sample ID: 352306004
Matrix: SO
Collect Date: 08-JUL-14 13:00
Receive Date: 10-JUL-14
Collector: Client
Moisture: 11.6%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 80.0 | 240 | ug/kg | 1 | AXH3 | 07/14/14 | 1353 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | J | 0.563 | 0.373 | 1.13 | mg/kg | 1 | RXB5 | 07/14/14 | 2139 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

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## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84183
Sample ID: 352306005
Matrix: SO
Collect Date: 08-JUL-14 13:20
Receive Date: 10-JUL-14
Collector: Client
Moisture: 9.34%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 85.3 | 255 | ug/kg | 1 | AXH3 | 07/14/14 | 1354 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 1.70 | 0.364 | 1.10 | mg/kg | 1 | RXB5 | 07/15/14 | 0013 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

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2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84180
Sample ID: 352306007
Matrix: SO
Collect Date: 08-JUL-14 08:30
Receive Date: 10-JUL-14
Collector: Client
Moisture: 10.9%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 88.4 | 265 | ug/kg | 1 | AXH3 | 07/14/14 | 1355 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 1.88 | 0.370 | 1.12 | mg/kg | 1 | RXB5 | 07/15/14 | 0044 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

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2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84184 | Project: | LANL00114 |
| Sample ID: | 352306008 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 08-JUL-14 08:55 | | |
| Receive Date: | 10-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 6.31% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 79.6 | 238 | ug/kg | 1 | AXH3 | 07/14/14 | 1356 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 3.56 | 0.352 | 1.07 | mg/kg | 1 | RXB5 | 07/15/14 | 0115 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

| | | | |
|---|---|---|---|
| Client Sample ID: | RE57-14-84188 | Project: | LANL00114 |
| Sample ID: | 352306009 | Client ID: | ARSL004 |
| Matrix: | SO | | |
| Collect Date: | 08-JUL-14 11:35 | | |
| Receive Date: | 10-JUL-14 | | |
| Collector: | Client | | |
| Moisture: | 6.44% | | |

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 79.7 | 239 | ug/kg | 1 | AXH3 | 07/14/14 | 1401 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 2.86 | 0.353 | 1.07 | mg/kg | 1 | RXB5 | 07/15/14 | 0146 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84181
Sample ID: 352306010
Matrix: SO
Collect Date: 08-JUL-14 08:16
Receive Date: 10-JUL-14
Collector: Client
Moisture: 11.4%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 84.1 | 252 | ug/kg | 1 | AXH3 | 07/14/14 | 1402 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 2.53 | 0.372 | 1.13 | mg/kg | 1 | RXB5 | 07/15/14 | 0217 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84185
Sample ID: 352306011
Matrix: SO
Collect Date: 08-JUL-14 08:31
Receive Date: 10-JUL-14
Collector: Client
Moisture: 9.03%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 85.0 | 254 | ug/kg | 1 | AXH3 | 07/14/14 | 1402 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 5.42 | 0.363 | 1.10 | mg/kg | 1 | RXB5 | 07/15/14 | 0248 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84189
Sample ID: 352306012
Matrix: SO
Collect Date: 08-JUL-14 11:20
Receive Date: 10-JUL-14
Collector: Client
Moisture: 7.11%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 83.2 | 249 | ug/kg | 1 | AXH3 | 07/14/14 | 1403 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 2.78 | 0.355 | 1.08 | mg/kg | 1 | RXB5 | 07/15/14 | 0319 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Certificate of Analysis

Report Date: August 6, 2014

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545
Contact: Mr. Keith Greene
Project: LANL ER

Client SDG: 2014-3701

Client Sample ID: RE57-14-84194
Sample ID: 352306015
Matrix: SO
Collect Date: 08-JUL-14 13:20
Receive Date: 10-JUL-14
Collector: Client
Moisture: 9.45%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | DL | RL | Units | DF | Analyst | Date | Time | Batch | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Injection Analysis | | | | | | | | | | | |
| SW9012A Cyanide, Total "Dry Weight Corrected" | | | | | | | | | | | |
| Cyanide, Total | U | ND | 78.1 | 234 | ug/kg | 1 | AXH3 | 07/14/14 | 1404 | 1402234 | 1 |
| Ion Chromatography | | | | | | | | | | | |
| EPA 300.0 Nitrate in Soil "Dry Weight Corrected" | | | | | | | | | | | |
| Nitrate-N | | 1.85 | 0.364 | 1.10 | mg/kg | 1 | RXB5 | 07/15/14 | 0350 | 1403032 | 2 |

The following Prep Methods were performed:

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| EPA 300.0 PREP | EPA 300.0 Total Anions in Soil | RXB5 | 07/14/14 | 1415 | 1403027 |
| SW846 9010B Prep | SW846 9010B Prep | AXH3 | 07/14/14 | 1300 | 1402233 |

The following Analytical Methods were performed:

| Method | Description | Analyst Comments |
|---|---|---|
| 1 | SW846 9012A | |
| 2 | EPA 300.0 | |

**Notes:**

# Quality Control Summary

# GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

## QC Summary

**Report Date: August 6, 2014**



**Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**
**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352306**

| Parmname | NOM | | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Flow Injection Analysis** | | | | | | | | | | | |
| Batch 1402234 | | | | | | | | | | | |
| QC1203124666 352306001 DUP | | | | | | | | | | | |
| Cyanide, Total | | U | ND | U | ND | ug/kg | N/A | | | AXH3 | 07/14/14 13:50 |
| QC1203124669 LCS | | | | | | | | | | | |
| Cyanide, Total | 90600 | | | | 94300 | ug/kg | | 104 | (68%-140%) | | 07/14/14 13:43 |
| QC1203124664 MB | | | | | | | | | | | |
| Cyanide, Total | | | | U | 250 | ug/kg | | | | | 07/14/14 13:42 |
| QC1203124668 352306001 MS | | | | | | | | | | | |
| Cyanide, Total | 4910 | U | ND | | 5210 | ug/kg | | 106 | (55%-125%) | | 07/14/14 13:51 |
| **Ion Chromatography** | | | | | | | | | | | |
| Batch 1403032 | | | | | | | | | | | |
| QC1203126591 352306002 DUP | | | | | | | | | | | |
| Nitrate-N | | | 3.24 | | 3.33 | mg/kg | 2.83 ^ | | (+/-1.09) | RXB5 | 07/14/14 20:06 |
| QC1203126592 352306004 DUP | | | | | | | | | | | |
| Nitrate-N | | J | 0.563 | J | 0.575 | mg/kg | 2.18 ^ | | (+/-1.13) | | 07/14/14 22:10 |
| QC1203126595 LCS | | | | | | | | | | | |
| Nitrate-N | 25.0 | | | | 24.7 | mg/kg | | 99 | (90%-110%) | | 07/14/14 18:33 |
| QC1203126590 MB | | | | | | | | | | | |
| Nitrate-N | | | | U | 1.00 | mg/kg | | | | | 07/14/14 18:02 |
| QC1203126593 352306002 MS | | | | | | | | | | | |
| Nitrate-N | 27.4 | | 3.24 | | 28.5 | mg/kg | | 92.3 | (90%-110%) | | 07/14/14 20:37 |
| QC1203126594 352306004 MS | | | | | | | | | | | |
| Nitrate-N | 28.3 | J | 0.563 | | 27.9 | mg/kg | | 96.6 | (90%-110%) | | 07/14/14 22:41 |

**Notes:**

- < Result is less than value reported
- > Result is greater than value reported
- B The target analyte was detected in the associated blank.
- E General Chemistry--Concentration of the target analyte exceeds the instrument calibration range
- H Analytical holding time was exceeded
- J Value is estimated

## QC Summary

**Workorder:** **352306**



| Parmname | NOM | Sample | Qual | QC | Units | RPD% | REC% | Range | Anlst | Date | Time |
|---|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Per section 9.3.4.1 of Method 1664 Revision B, due to matrix spike recovery issues, this result may not be reported or used for regulatory compliance purposes. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Z | Paint Filter Test--Particulates passed through the filter, however no free liquids were observed. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| d | 5-day BOD--The 2:1 depletion requirement was not met for this sample |
| e | 5-day BOD--Test replicates show more than 30% difference between high and low values. The data is qualified per the method and can be used for reporting purposes |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# Radiological Analysis

**Radiochemistry Case Narrative**
**ARS International, LLC (ARSL)**
**SDG 2014-3701**
**Work Order 352306**

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **ISOU** |
| Analytical Method: | DOE EML HASL-300, U-02-RC Modified |
| Prep Method: | Dry Soil Prep |
| Analytical Batch Number: | 1401981 |
| Prep Batch Number: | 1401960 |

| Sample ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306015 | RE57-14-84194 |
| 1203123981 | Method Blank (MB) |
| 1203123982 | 352306001(RE57-14-84178) Sample Duplicate (DUP) |
| 1203123983 | Laboratory Control Sample (LCS) |

The samples in this SDG were analyzed on a "dry weight" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-011 REV# 25.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met. Calibrations are performed monthly using mixed alpha standards comprised of the following: Gd-148, Np-237, and Cm-244.

**Standards Information**
Standard solutions for these analysis are NIST traceable or verified with a NIST traceable standard and used

before the expiration dates.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Blank Information**
Aliquot for sample 1203123981 (MB) was changed to 1.0 per client request.

**Designated QC**
The following sample was used for QC: 352306001 (RE57-14-84178). The QC was from ARSL work order 352306.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Manual Integration**
No manual integrations were performed on data in this batch.

**Sample-Specific MDA/MDC**
The MDA/MDC reported on the certificate of analysis is a sample-specific MDA/MDC.

**Additional Comments**
The MDCs (and Lc if requested) are calculated using a blank population.

**Blank Decision Level**
The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Method/Analysis Information**

| | |
|---|---|
| **Product:** | **Dry Weight-Percent Moisture** |
| Analytical Method: | Dry Soil Prep |
| Analytical Batch Number: | 1401960 |

| Sample ID | Client ID |
|---|---|
| 352306001 | RE57-14-84178 |
| 352306002 | RE57-14-84182 |
| 352306003 | RE57-14-84186 |
| 352306004 | RE57-14-84179 |
| 352306005 | RE57-14-84183 |
| 352306007 | RE57-14-84180 |
| 352306008 | RE57-14-84184 |
| 352306009 | RE57-14-84188 |
| 352306010 | RE57-14-84181 |
| 352306011 | RE57-14-84185 |
| 352306012 | RE57-14-84189 |
| 352306015 | RE57-14-84194 |
| 1203123949 | 352306001(RE57-14-84178) Sample Duplicate (DUP) |

The samples in this SDG were analyzed on an "as received" basis.

**SOP Reference**
Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-OA-E-020 REV# 10 and GL-RAD-A-021 REV# 20.

**Calibration Information:**

**Calibration Information**
All initial and continuing calibration requirements have been met.

**Sample Geometry**
All counting sources were prepared in the same geometry as the calibration standards.

**Quality Control (QC) Information:**

**Designated QC**
The following sample was used for QC: 352306001 (RE57-14-84178). The QC was from ARSL work order 352306.

**QC Information**
All of the QC samples met the required acceptance limits.

**CSU**
Not applicable. The blank result is less than 1.65 times the CSU.

**Technical Information:**

**Holding Time**
All sample procedures for this sample set were performed within the required holding time.

**Sample Re-prep/Re-analysis**
None of the samples in this sample set required reprep or reanalysis.

**Recounts**
None of the samples in this sample set were recounted.

**Miscellaneous Information:**

**Data Exception (DER) Documentation**
Data exception reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A data exception report (DER) was not generated for this SDG.

**Additional Comments**
Additional comments were not required for this sample set.

**Blank Decision Level**
Not Applicable. The blank result is less than the decision level.

**Qualifier Information**

Manual qualifiers were not required.

**Certification Statement**

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

# GEL LABORATORIES LLC

2040 Savage Road  Charleston SC 29407 - (843) 556-8171 - www.gel.com

## Qualifier Definition Report
for

ARSL004 ARS International, LLC (ARS-LANS-MTOA6-25093-GEL)

Client SDG: 2014-3701  GEL Work Order: 352306

**The Qualifiers in this report are defined as follows:**

*  A quality control analyte recovery is outside of specified acceptance criteria

**  Analyte is a Tracer compound

U  Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

**Review/Validation**

GEL requires all analytical data to be verified by a qualified data reviewer.  In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

**Signature:** **Name: Kate Gellatly**

**Date: 18 JUL 2014**  **Title: Analyst I**

# Sample Data Summary

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545 Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84178
Sample ID: 352306001
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 10.7%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.21 | +/-0.0724 | 0.104 | 0.0464 | +/-0.106 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | U | 0.0717 | +/-0.0205 | 0.0747 | 0.0304 | +/-0.021 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.32 | +/-0.0748 | 0.0652 | 0.027 | +/-0.113 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 86.5 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84182
Sample ID: 352306002
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 8.64%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.28 | +/-0.0805 | 0.125 | 0.0559 | +/-0.116 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | U | 0.0555 | +/-0.0205 | 0.090 | 0.0366 | +/-0.0208 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.25 | +/-0.0802 | 0.0785 | 0.0325 | +/-0.115 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 71.9 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84186
Sample ID: 352306003
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 13.2%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.25 | +/-0.0769 | 0.116 | 0.0518 | +/-0.112 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | | 0.0857 | +/-0.0249 | 0.0833 | 0.0339 | +/-0.0255 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.19 | +/-0.0743 | 0.0727 | 0.0301 | +/-0.107 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 77.0 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84179
Sample ID: 352306004
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 11.6%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.31 | +/-0.0931 | 0.156 | 0.0697 | +/-0.129 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | U | 0.0461 | +/-0.0217 | 0.112 | 0.0457 | +/-0.022 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.33 | +/-0.0918 | 0.0979 | 0.0405 | +/-0.129 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 55.4 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84183
Sample ID: 352306005
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 9.34%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.11 | +/-0.0739 | 0.120 | 0.0535 | +/-0.103 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | U | 0.0708 | +/-0.0221 | 0.086 | 0.035 | +/-0.0225 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.25 | +/-0.0779 | 0.075 | 0.0311 | +/-0.113 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 73.4 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
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Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84180
Sample ID: 352306007
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 10.9%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.24 | +/-0.0725 | 0.104 | 0.0464 | +/-0.108 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | U | 0.0665 | +/-0.0245 | 0.0746 | 0.0304 | +/-0.0249 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.14 | +/-0.0693 | 0.0651 | 0.027 | +/-0.101 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 88.3 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84184
Sample ID: 352306008
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 6.31%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.32 | +/-0.0715 | 0.0955 | 0.0426 | +/-0.110 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | | 0.0752 | +/-0.021 | 0.0685 | 0.0279 | +/-0.0215 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.27 | +/-0.070 | 0.0598 | 0.0247 | +/-0.107 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 93.5 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84188
Sample ID: 352306009
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 6.44%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.27 | +/-0.0718 | 0.0971 | 0.0433 | +/-0.108 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | | 0.0717 | +/-0.0219 | 0.0697 | 0.0284 | +/-0.0224 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.32 | +/-0.0722 | 0.0608 | 0.0252 | +/-0.111 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 89.9 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84181
Sample ID: 352306010
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 11.4%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.12 | +/-0.0656 | 0.0951 | 0.0424 | +/-0.0967 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | | 0.0795 | +/-0.0204 | 0.0682 | 0.0278 | +/-0.021 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.11 | +/-0.0658 | 0.0595 | 0.0246 | +/-0.0966 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 92.6 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# GEL LABORATORIES LLC

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84185
Sample ID: 352306011
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 9.03%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.26 | +/-0.0788 | 0.110 | 0.0492 | +/-0.113 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | U | -0.0163 | +/-0.0249 | 0.0792 | 0.0322 | +/-0.0249 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.32 | +/-0.0808 | 0.0691 | 0.0286 | +/-0.118 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 78.5 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84189
Sample ID: 352306012
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 7.11%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.22 | +/-0.0746 | 0.109 | 0.0487 | +/-0.109 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | U | 0.0376 | +/-0.0194 | 0.0783 | 0.0319 | +/-0.0195 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.29 | +/-0.0753 | 0.0683 | 0.0283 | +/-0.112 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 79.4 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

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# Certificate of Analysis

Company : Los Alamos National Laboratory
Address : TA-03, SM271, Drop Pt. 02U, Rm111

Los Alamos, New Mexico 87545

Report Date: July 18, 2014

Contact: Mr. Keith Greene
Project: LANL ER

Client Sample ID: RE57-14-84194
Sample ID: 352306015
Matrix: SO
Collect Date: 08-JUL-14
Receive Date: 10-JUL-14
Collector: Client
Moisture: 9.45%

Project: LANL00114
Client ID: ARSL004

| Parameter | Qualifier | Result | Uncertainty | MDC | Lc | TPU | RL | Units | DF | Analyst | Date | Time | Batch | Mtd. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Gravimetric Solids** | | | | | | | | | | | | | | |
| *"As Received"* | | | | | | | | | | | | | | |
| **Rad Alpha Spec Analysis** | | | | | | | | | | | | | | |
| *ISOU "Dry Weight Corrected"* | | | | | | | | | | | | | | |
| Uranium-233/234 | | 1.15 | +/-0.0749 | 0.118 | 0.0526 | +/-0.106 | 0.100 | pCi/g | | MXS2 | 07/15/14 | 1311 | 1401981 | 2 |
| Uranium-235/236 | U | 0.0696 | +/-0.0217 | 0.0846 | 0.0344 | +/-0.0222 | 0.100 | pCi/g | | | | | | |
| Uranium-238 | | 1.24 | +/-0.0771 | 0.0738 | 0.0306 | +/-0.112 | 0.100 | pCi/g | | | | | | |

**The following Prep Methods were performed**

| Method | Description | Analyst | Date | Time | Prep Batch |
|---|---|---|---|---|---|
| Dry Soil Prep | Dry Soil Prep GL-RAD-A-021 | CXC1 | 07/10/14 | 1353 | 1401960 |

**The following Analytical Methods were performed**

| Method | Description |
|---|---|
| 1 | ASTM D 2216 (Modified) |
| 2 | DOE EML HASL-300, U-02-RC Modified |

| Surrogate/Tracer Recovery | Test | Batch ID | Recovery% | Acceptable Limits |
|---|---|---|---|---|
| Uranium-232 Tracer | ISOU "Dry Weight Corrected" | 1401981 | 72.1 | (50%-105%) |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

# Quality Control Data

# GEL LABORATORIES LLC

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## QC Summary

**Report Date: July 18, 2014**


**Client :** **Los Alamos National Laboratory**
**TA-03, SM271, Drop Pt. 02U, Rm111**

**Los Alamos, New Mexico**

**Contact:** **Mr. Keith Greene**

**Workorder:** **352306**

| Parmname | NOM | | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Rad Alpha Spec** | | | | | | | | | | | |
| Batch 1401981 | | | | | | | | | | | |
| QC1203123982 352306001 DUP | | | | | | | | | | | |
| Uranium-233/234 | | | 1.21 | | 1.29 | pCi/g | 0.172 | | (0-1) | MXS2 | 07/15/1413:11 |
| | | TPU: | +/-0.106 | | +/-0.119 | | | | | | |
| Uranium-235/236 | | U | 0.0717 | U | 0.0766 | pCi/g | 0.0493 | | (0-1) | | |
| | | TPU: | +/-0.021 | | +/-0.029 | | | | | | |
| Uranium-238 | | | 1.32 | | 1.37 | pCi/g | 0.109 | | (0-1) | | |
| | | TPU: | +/-0.113 | | +/-0.124 | | | | | | |
| **Uranium-232 Tracer | 4.38 | | 3.78 | | 3.33 | pCi/g | | 76 | (50%-105%) | | |
| | | TPU: | +/-0.311 | | +/-0.326 | | | | | | |
| QC1203123983 LCS | | | | | | | | | | | |
| Uranium-233/234 | | | | | 6.73 | pCi/g | | | | MXS2 | 07/15/1413:11 |
| | | TPU: | | | +/-0.585 | | | | | | |
| Uranium-235/236 | | | | U | 0.315 | pCi/g | | | | | |
| | | TPU: | | | +/-0.100 | | | | | | |
| Uranium-238 | 5.75 | | | | 5.86 | pCi/g | | 102 | (75%-125%) | | |
| | | TPU: | | | +/-0.524 | | | | | | |
| **Uranium-232 Tracer | 21.7 | | | | 19.8 | pCi/g | | 91.1 | (50%-105%) | | |
| | | TPU: | | | +/-1.57 | | | | | | |
| QC1203123981 MB | | | | | | | | | | | |
| Uranium-233/234 | | | | U | -0.00594 | pCi/g | | | | MXS2 | 07/15/1413:11 |
| | | TPU: | | | +/-0.0094 | | | | | | |
| Uranium-235/236 | | | | U | 0.00 | pCi/g | | | | | |
| | | TPU: | | | +/-0.0116 | | | | | | |
| Uranium-238 | | | | U | 0.00297 | pCi/g | | | | | |
| | | TPU: | | | +/-0.00665 | | | | | | |
| **Uranium-232 Tracer | 2.19 | | | | 1.32 | pCi/g | | 60.1 | (50%-105%) | | |
| | | TPU: | | | +/-0.168 | | | | | | |

**Notes:**

TPU and Counting Uncertainty are calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

| | |
|---|---|
| ** | Analyte is a Tracer compound |
| < | Result is less than value reported |
| > | Result is greater than value reported |
| BD | Results are either below the MDC or tracer recovery is low |
| FA | Failed analysis. |
| H | Analytical holding time was exceeded |
| J | Value is estimated |
| K | Analyte present. Reported value may be biased high. Actual value is expected to be lower. |
| L | Analyte present. Reported value may be biased low. Actual value is expected to be higher. |

## QC Summary

**Workorder:** **352306**



| Parmname | NOM | Sample | Qual | QC | Units | RER | REC% | Range | Anlst | Date Time |
|---|---|---|---|---|---|---|---|---|---|---|

| | |
|---|---|
| M | M if above MDC and less than LLD |
| M | REMP Result > MDC/CL and < RDL |
| N/A | RPD or %Recovery limits do not apply. |
| N1 | See case narrative |
| ND | Analyte concentration is not detected above the detection limit |
| NJ | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Q | One or more quality control criteria have not been met. Refer to the applicable narrative or DER. |
| R | Sample results are rejected |
| U | Analyte was analyzed for, but not detected above the MDL, MDA, or LOD. |
| UI | Gamma Spectroscopy--Uncertain identification |
| UJ | Gamma Spectroscopy--Uncertain identification |
| UL | Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias. |
| X | Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier |
| Y | Other specific qualifiers were required to properly define the results. Consult case narrative. |
| ^ | RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry. |
| h | Preparation or preservation holding time was exceeded |

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
** Indicates analyte is a surrogate/tracer compound.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptence criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

# Appendix F

*Box Plots and Statistical Results*

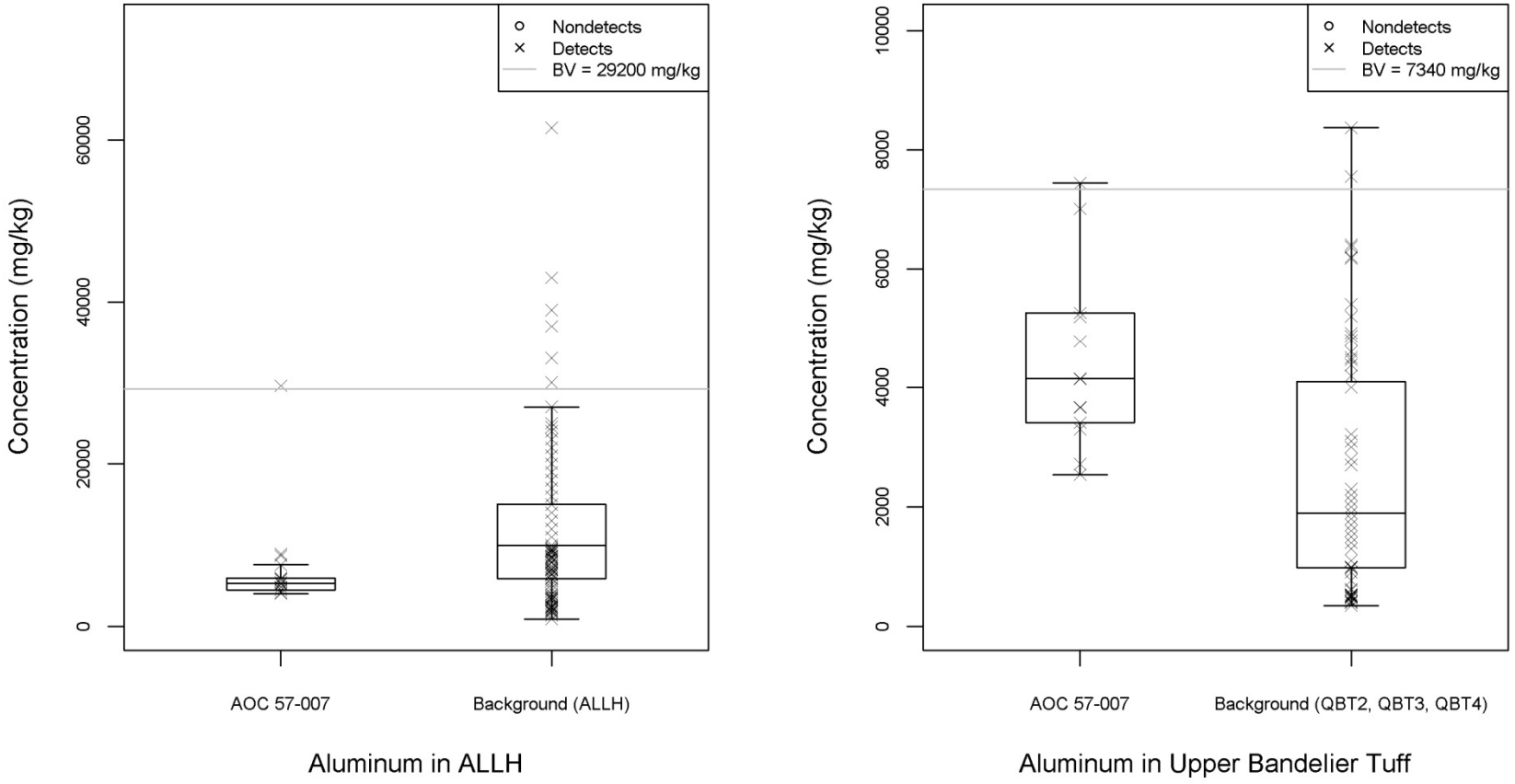


**Figure F-1 Box plots for aluminum in soil and tuff at AOC 57-007**

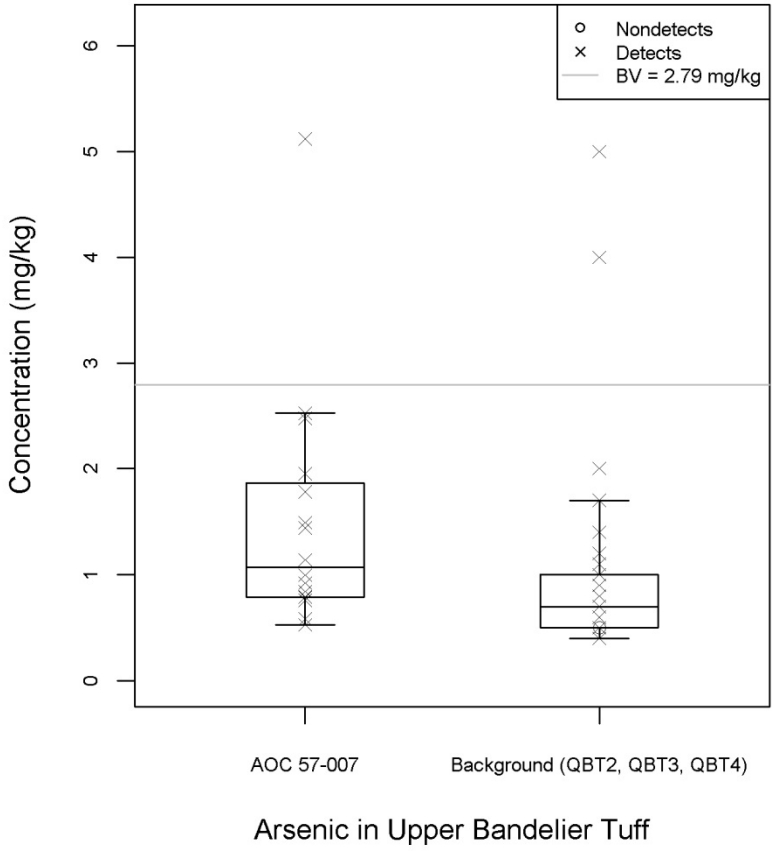


**Figure F-2 Box plot for arsenic in tuff at AOC 57-007**

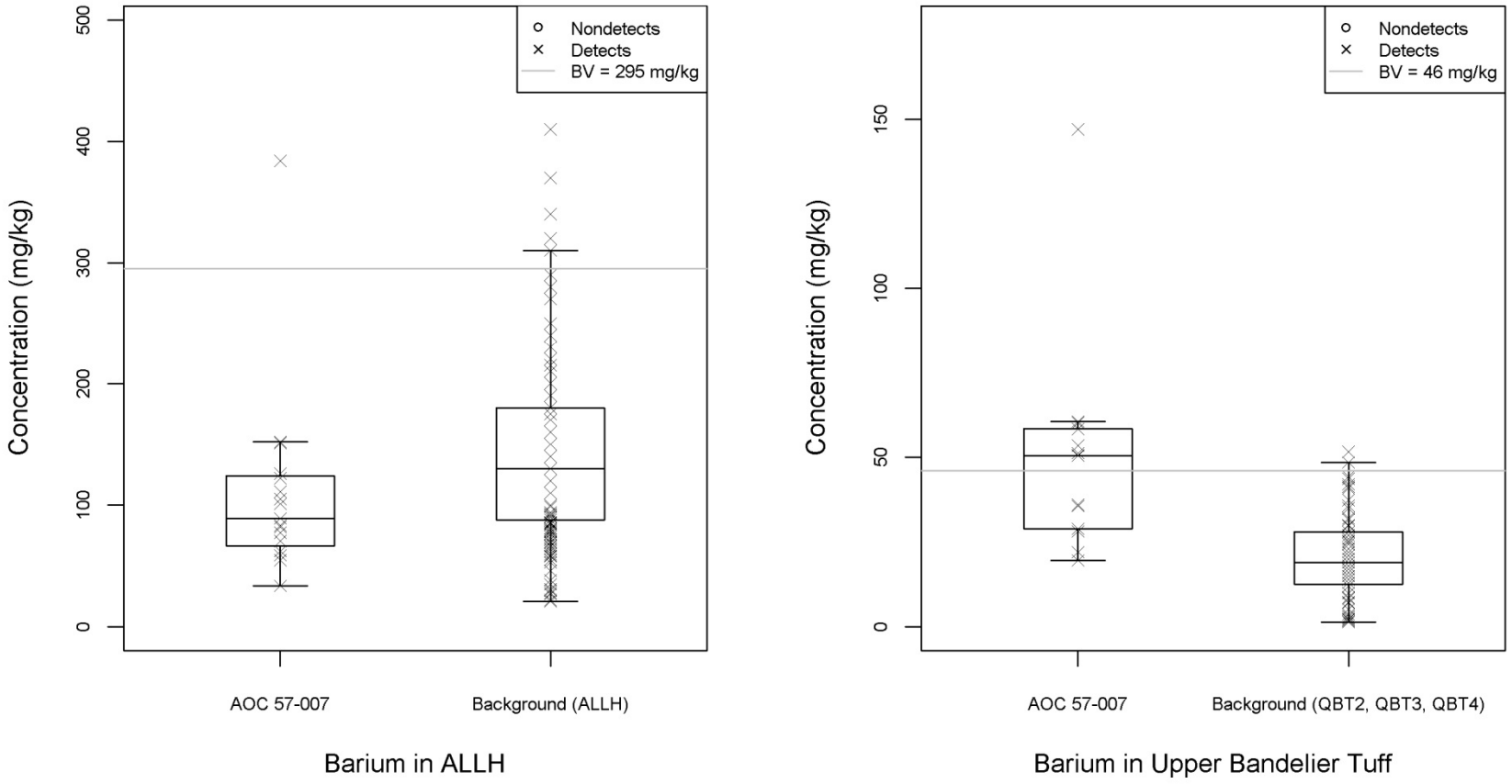


**Figure F-3 Box plots for barium in soil and tuff at AOC 57-007**

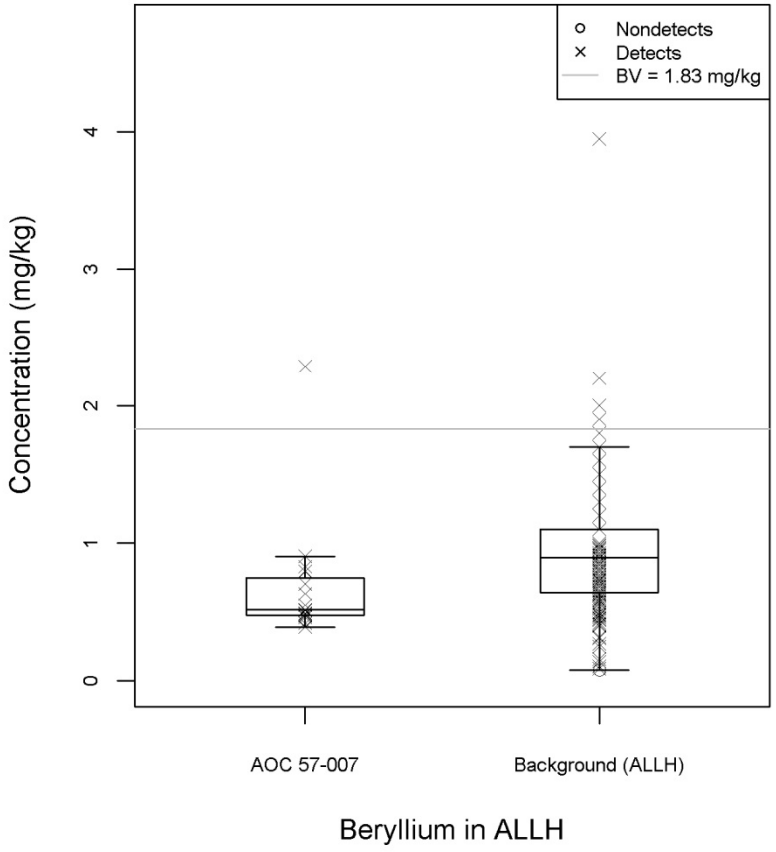


**Figure F-4 Box plot for beryllium in soil at AOC 57-007**

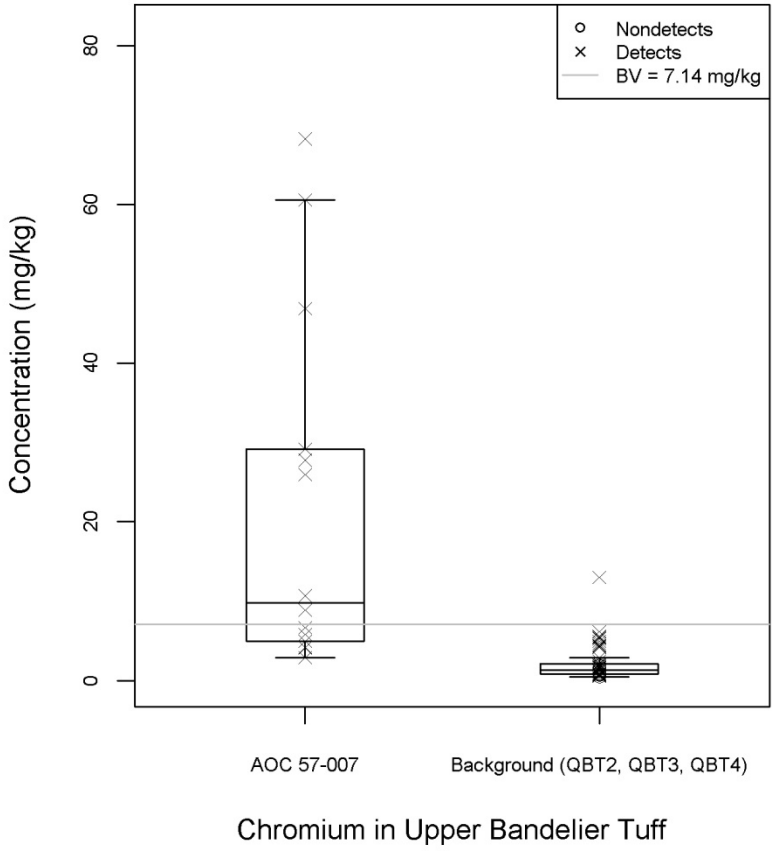


**Figure F-5 Box plot for chromium in tuff at AOC 57-007**

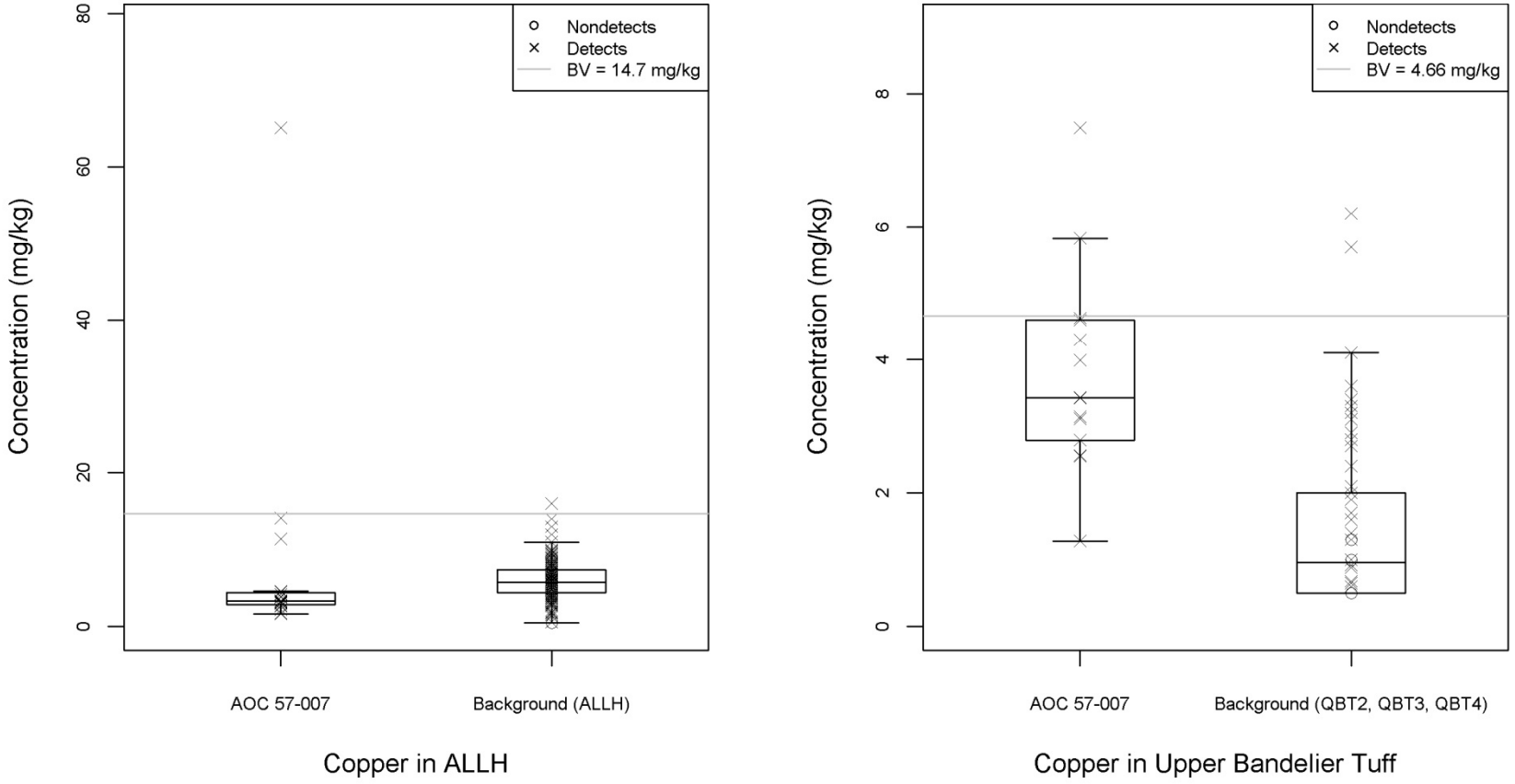


**Figure F-6 Box plots for copper in soil and tuff at AOC 57-007**

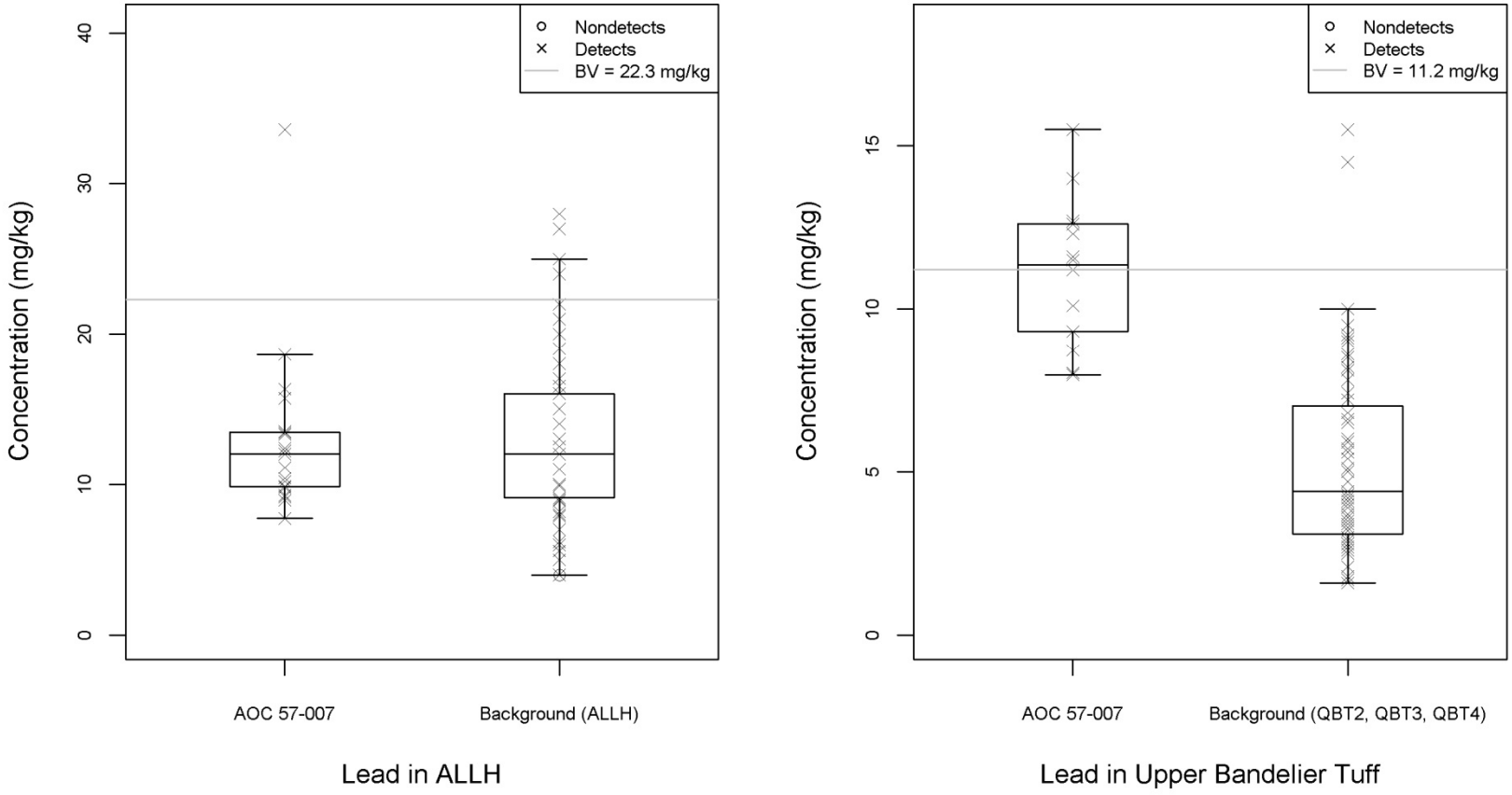


**Figure F-7 Box plots for lead in soil and tuff at AOC 57-007**

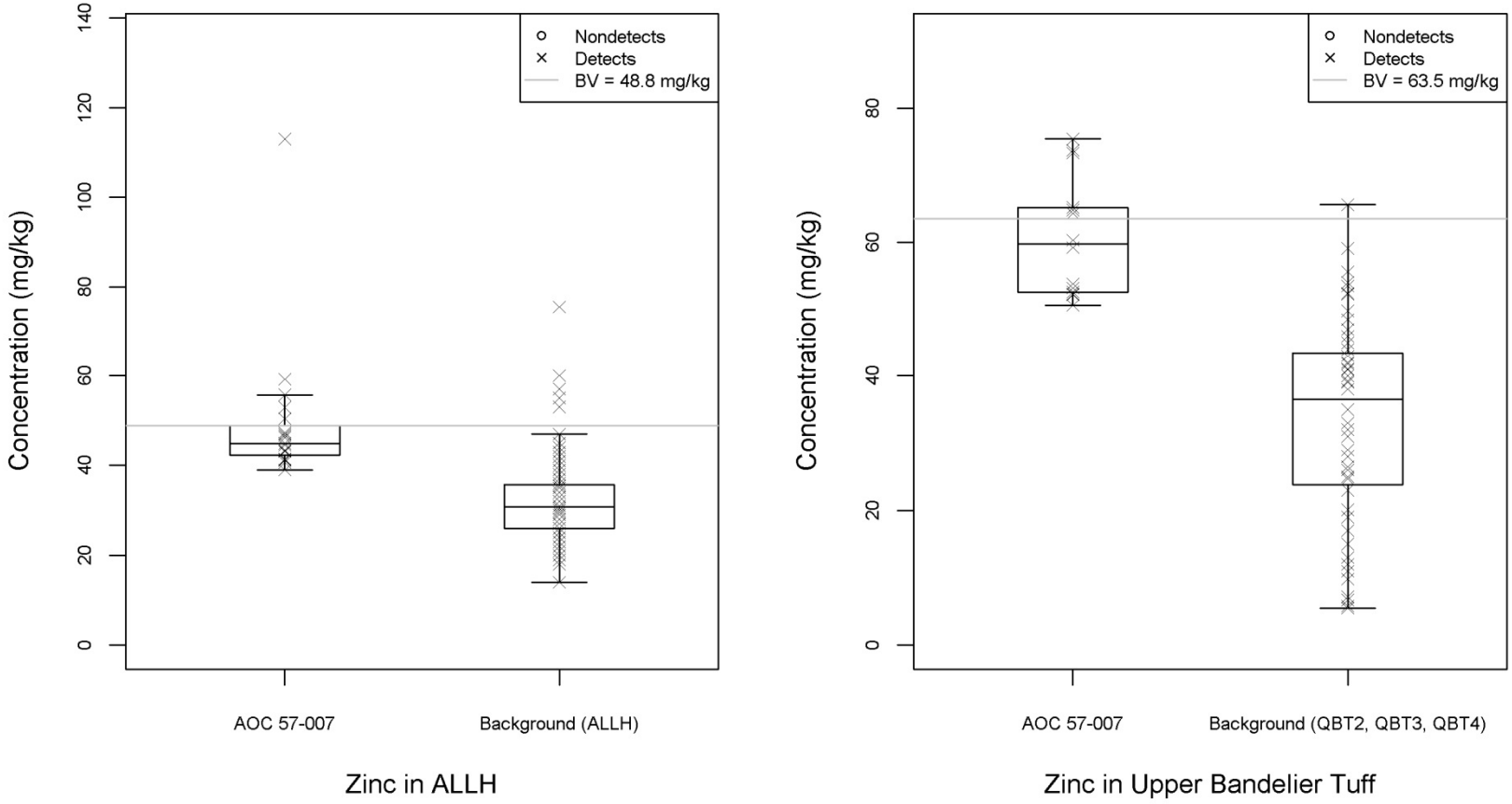


**Figure F-8 Box plot for zinc in soil and tuff at AOC 57-007**

**Table F-1**
**Results of Statistical Tests for Inorganic Chemicals in Soil at AOC 57-007**

| Analyte | Gehan Test p-Value | Quantile Test p-Value | Slippage p-value | Retain as COPC? |
|---|---|---|---|---|
| Aluminum | 0.99828 | 1 | n/a* | No |
| Barium | 0.99503 | 0.61676 | n/a | No |
| Beryllium | 0.99975 | 0.6147 | n/a | No |
| Copper | 0.99957 | 0.04668 | 0.09845 | No |
| Lead | 0.64765 | 0.61676 | n/a | No |
| Zinc | 0 | 0 | n/a | Yes |

*n/a = Not applicable.

**Table F-2**
**Results of Statistical Tests for Inorganic Chemicals in Tuff at AOC 57-007**

| Analyte | Gehan Test p-Value | Quantile Test p-Value | Slippage p-value | Retain as COPC? |
|---|---|---|---|---|
| Aluminum | 0.00028 | 0.13382 | 1 | No |
| Arsenic | 0.00279 | 0.01862 | n/a* | Yes |
| Barium | 0 | 9.00E-05 | n/a | Yes |
| Chromium | 0 | 0 | n/a | Yes |
| Copper | 0 | 8.00E-05 | n/a | Yes |
| Lead | 0 | 0 | n/a | Yes |
| Zinc | 0 | 0 | n/a | Yes |

*n/a = Not applicable.

# Appendix G

*Risk Assessments*

## CONTENTS

**G-1.0 INTRODUCTION ..... G-1**

**G-2.0 BACKGROUND ..... G-1**
G-2.1 Site Descriptions and Operational History ..... G-1
G-2.1.1 AOC 57-006 ..... G-1
G-2.1.2 AOC 57-007 ..... G-1
G-2.2 Investigation Sampling ..... G-1
G-2.3 Determination of COPCs ..... G-2

**G-3.0 CONCEPTUAL SITE MODEL ..... G-2**
G-3.1 Receptors and Exposure Pathways ..... G-2
G-3.2 Environmental Fate and Transport ..... G-3
G-3.2.1 Inorganic Chemicals ..... G-4
G-3.2.2 Organic Chemicals ..... G-5
G-3.3 Exposure Point Concentration Calculations ..... G-6

**G-4.0 HUMAN HEALTH RISK SCREENING ASSESSMENT RESULTS ..... G-7**
G-4.1 Human Health SSLs ..... G-7
G-4.2 Results of Human Health Screening Evaluation ..... G-7
G-4.2.1 AOC 57-006 ..... G-7
G-4.2.2 AOC 57-007 ..... G-7
G-4.3 Vapor-Intrusion Pathway ..... G-8
G-4.3.1 AOC 57-006 ..... G-8
G-4.3.2 AOC 57-007 ..... G-8
G-4.4 Uncertainty Analysis ..... G-9
G-4.4.1 Data-Evaluation and COPC-Identification Process ..... G-9
G-4.4.2 Exposure Evaluation ..... G-9
G-4.4.3 Toxicity Evaluation ..... G-10
G-4.4.4 Additive Approach ..... G-11
G-4.5 Interpretation of Human Health Risk Screening Results ..... G-11
G-4.5.1 AOC 57-006 ..... G-11
G-4.5.2 AOC 57-007 ..... G-11

**G-5.0 ECOLOGICAL RISK-SCREENING EVALUATIONS ..... G-11**
G-5.1 Introduction ..... G-11
G-5.2 Scoping Evaluation ..... G-12
G-5.3 Assessment Endpoints ..... G-13
G-5.4 Ecological Risk Screening Evaluation ..... G-13
G-5.4.1 AOC 57-006 ..... G-14
G-5.4.2 AOC 57-007 ..... G-14
G-5.5 Uncertainty Analysis ..... G-14
G-5.5.1 Chemical Form ..... G-14
G-5.5.2 Exposure Assumptions ..... G-15
G-5.5.3 Toxicity Values ..... G-15
G-5.5.4 Population Area Use Factors ..... G-15
G-5.5.5 LOAEL Analysis ..... G-16
G-5.5.6 Site Discussions ..... G-16
G-5.5.7 Chemicals without ESLs ..... G-17

G-5.6 Interpretation of Ecological Risk Screening Results ..... G-17
G-5.6.1 Receptor Lines of Evidence ..... G-17
G-5.6.2 COPECs with No ESLs ..... G-20
G-5.6.3 Summary ..... G-20

**G-6.0 CONCLUSIONS ..... G-20**
G-6.1 Human Health Risk ..... G-20
G-6.2 Ecological Risk ..... G-20

**G-7.0 REFERENCES ..... G-20**

**Figure**

Figure G-3.1-1 Conceptual site model for the TA-57 Aggregate Area AOCs ..... G-23

**Tables**

Table G-2.3-1 EPCs at AOC 57-006 for the Residential Scenario ..... G-25
Table G-2.3-2 EPCs at AOC 57-006 for Ecological Risk ..... G-25
Table G-2.3-3 EPCs at AOC 57-007 for the Industrial Scenario ..... G-26
Table G-2.3-4 EPCs at AOC 57-007 for the Residential Scenario ..... G-27
Table G-2.3-5 EPCs at AOC 57-007 for Ecological Risk ..... G-28
Table G-3.2-1 Physical and Chemical Properties of Inorganic COPCs for the TA-57 Aggregate Area ..... G-29
Table G-3.2-2 Physical and Chemical Properties of Organic COPCs for the TA-57 Aggregate Area ... G-29
Table G-4.1-1 Exposure Parameter Values Used to Calculate Chemical SSLs for the Industrial and Residential Scenarios ..... G-30
Table G-4.2-1 Residential Carcinogenic Screening Evaluation for AOC 57-006 ..... G-31
Table G-4.2-2 Residential Noncarcinogenic Screening Evaluation for AOC 57-006 ..... G-31
Table G-4.2-3 Industrial Noncarcinogenic Screening Evaluation for AOC 57-007 ..... G-31
Table G-4.2-4 Residential Carcinogenic Screening Evaluation for AOC 57-007 ..... G-32
Table G-4.2-5 Residential Noncarcinogenic Screening Evaluation for AOC 57-007 ..... G-32
Table G-4.3-1 Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 57-006 ..... G-33
Table G-4.3-2 Residential Carcinogenic Screening of Vapor Intrusion for AOC 57-007 ..... G-33
Table G-4.3-3 Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 57-007 ..... G-33
Table G-5.4-1 ESLs for Terrestrial Receptors ..... G-34
Table G-5.4-2 Minimum ESL Comparison for AOC 57-006 ..... G-35
Table G-5.4-3 HI Analysis for AOC 57-006 ..... G-36
Table G-5.4-4 Minimum ESL Comparison for AOC 57-007 ..... G-37
Table G-5.4-5 HI Analysis for AOC 57-007 ..... G-38
Table G-5.5-1 PAUFs for Ecological Receptors for AOC 57-006 ..... G-39
Table G-5.5-2 Adjusted HIs at AOC 57-006 ..... G-40
Table G-5.5-3 PAUFs for Ecological Receptors for AOC 57-007 ..... G-41
Table G-5.5-4 Adjusted HIs for AOC 57-007 ..... G-42

Table G-5.5-5 LOAEL-Based ESLs for Terrestrial Receptors ..... G-43
Table G-5.5-6 HI Analysis Using LOAEL-Based ESLs at AOC 57-007 ..... G-43

**Attachments**

Attachment G-1 ProUCL Files (on CD included with this document)

Attachment G-2 Vapor Intrusion Model Spreadsheets (on CD included with this document)

Attachment G-3 Ecological Scoping Checklist

Attachment G-4 Jemez Mountain Salamander Report

## G-1.0 INTRODUCTION

This appendix presents the results of the human health and ecological risk-screening assessments conducted in support of the environmental characterization of two sites within the Technical Area 57 (TA-57) Aggregate Area. The areas of concern (AOCs) are located at TA-57, which is west of the main portion of Los Alamos National Laboratory (LANL or the Laboratory) (Figure 1.1-1 of the investigation report). The evaluation of potential risks at the two AOCs is based on decision-level data from the 2014 investigations.

## G-2.0 BACKGROUND

Brief descriptions of the AOCs assessed for potential risks are presented below.

### G-2.1 Site Descriptions and Operational History

TA-57 was established in 1974 to support the Laboratory's Hot Dry Rock (HDR) program. HDR was an experimental geothermal energy program designed to test the feasibility of extracting heat from deep geologic units near the Valles Caldera. The first location chosen for HDR was in Barley Canyon north of the current TA-57 site. After one test well had been drilled, this location was abandoned because of poor winter access and topographic limitations. Operations were moved to the current TA-57 location, which offered a large flat area with easier access. Operations at the TA-57 site began in 1974.

#### G-2.1.1 AOC 57-006

AOC 57-006 is the former location of a plastic-lined 55-gal. drum that was buried in the ground at TA-57 beneath a trailer (structure 57-23) that served as an analytical chemistry laboratory. The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer was used to dispose of wastewater associated with chemical analyses. The sink drained to a leach field (AOC 57-007) near the trailer. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to the polyethylene drum. When the drum was full, its contents were transported to the Laboratory for disposal. In 1994, the drum was removed as part of a voluntary corrective action (VCA). The chemistry trailer was removed from the site in March 1994.

#### G-2.1.2 AOC 57-007

AOC 57-007 is a leach field at TA-57 that served a former trailer (structure 57-23) used as an analytical chemistry laboratory. The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer drained to the leach field and was used to dispose of wastewater associated with chemical analyses. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to a polyethylene-lined 55-gal. drum (AOC 57-006). The chemistry trailer was removed from the site in March 1994.

### G-2.2 Investigation Sampling

The data sets used to identify chemicals of potential concern (COPCs) and evaluate potential risks to human health and the environment for the sites consist of all validated data compiled from the 2014

investigations. Only data determined to be decision-level following the data-quality assessment (Appendix D) are included in the data sets evaluated in this appendix.

### G-2.3 Determination of COPCs

Section 5 of the investigation report summarizes the COPC selection process. COPCs were retained only if they were detected above background (inorganic chemicals and radionuclides), had detection limits greater than background values (BVs) (inorganic chemicals), and were detected (organic chemicals and inorganic chemicals with no BVs). The industrial scenario utilizes data from samples collected from 0.0–1.0 ft below ground surface (bgs). The ecological risk screening utilizes data from samples collected from 0.0–5.0 ft bgs. The residential scenario utilizes data from samples collected from 0.0–10.0 ft bgs. However, sampling depths often overlapped because of multiple investigations; therefore, all samples with a starting depth less than the lower bound of the interval for each scenario were included in the risk-screening assessments for a given scenario.

Tables G-2.3-1 to G-2.3-5 summarize the COPCs evaluated for potential risk for the sites. Some of the COPCs identified by the data review may not be evaluated for potential risk under one or more scenarios because they were not COPCs within the specified depth intervals associated with a given scenario.

## G-3.0 CONCEPTUAL SITE MODEL

The primary mechanisms of release are related to historical contaminant sources described in detail in the historical investigation report for the TA-57 Aggregate Area (LANL 2012, 214549) and summarized in section 2.3 of the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). Releases at the sites may have occurred as a result of subsurface leaks or effluent discharges. Previous sampling results indicated contamination from inorganic chemicals (LANL 2012, 214549).

### G-3.1 Receptors and Exposure Pathways

The primary exposure pathway for human receptors is surface soil and subsurface soil/tuff that may be brought to the surface through intrusive activities. Migration of contamination to groundwater through the vadose zone is unlikely given the depth to groundwater (greater than 1000 ft bgs). Human receptors (industrial worker and resident) may be exposed through direct contact with soil or suspended particulates by ingestion, inhalation, dermal contact, and external irradiation pathways. Direct contact exposure pathways from subsurface contamination to human receptors are complete for the resident. The beef ingestion pathway is not complete because the sites are less than 2 acres in size. In addition, the area encompassing TA-57 is behind a locked fence, thereby prohibiting access by cattle. The exposure pathways for subsurface soil are the same as those for surface soil. Sources, exposure pathways, and receptors are shown in the conceptual site model (CSM) (Figure G-3.1-1).

The sites in the TA-57 Aggregate Area are industrial areas on U.S. Forest Service land used by the U.S. Department of Energy (DOE) pursuant to agreements with the Forest Service. The AOCs provide potential habitat and exposure pathways are complete to surface soil and tuff for ecological receptors. Weathering of tuff is the only viable natural process that may result in the exposure of receptors to COPCs in tuff. However, because of the slow rate of weathering expected for tuff, exposure to COPCs in tuff is negligible, although it is included in the assessments. Exposure pathways to subsurface contamination below 5.0 ft are not complete unless contaminated soil or tuff were excavated and brought to the surface. The potential pathways are root uptake by plants, inhalation of vapors (burrowing animals only), inhalation of dust, dermal contact, incidental ingestion of soil, external irradiation, and food web

transport. Pathways from subsurface releases may be complete for plants. Surface water exposure was not evaluated because of the lack of surface water features. Sources, exposure pathways, and receptors are presented in the CSM (Figure G-3.1-1).

### G-3.2 Environmental Fate and Transport

The evaluation of environmental fate addresses the chemical processes affecting the persistence of chemicals in the environment and the evaluation of transport addresses the physical processes affecting mobility along a migration pathway. Migration into soil and tuff depends on precipitation or snowmelt, soil moisture content, depth of soil, soil hydraulic properties, and properties of the COPCs. Migration into and through tuff also depends on the unsaturated flow properties of the tuff and the presence of joints and fractures.

The most important factor with respect to the potential for COPCs to migrate to groundwater is the presence of saturated conditions. Downward migration in the vadose zone is also limited by a lack of hydrostatic pressure as well as the lack of a source for the continued release of contamination. Without sufficient moisture and a source, little or no potential migration of materials through the vadose zone to groundwater occurs.

Contamination at depth is addressed in the discussion of nature and extent in the investigation report. Results from the deepest samples collected at most sites showed either no detected concentrations of COPCs or low- to trace-level concentrations of only a few inorganic, radionuclide, and/or organic COPCs in tuff. The limited extent of contamination is related to the absence of the key factors that facilitate migration, as discussed above. Given how long the contamination has been present in the subsurface, the physical and chemicals properties of the COPCs, and the lack of saturated conditions, the potential for contaminant migration to groundwater is very low.

The New Mexico Environment Department (NMED) guidance (NMED 2014, 600115) contains screening levels that consider the potential for contaminants in soil to result in groundwater contamination. These screening levels consider equilibrium partitioning of contaminants among solid, aqueous, and vapor phases and account for dilution and attenuation in groundwater through the use of dilution attenuation factors (DAFs). These DAF soil screening levels (SSLs) may be used to identify chemical concentrations in soil that have the potential to contaminate groundwater (EPA 1996, 059902). Screening contaminant concentrations in soil against these DAF SSLs does not, however, provide an indication of the potential for contaminants to migrate to groundwater. The assumptions used in the development of these DAF SSLs include an assumption of uniform contaminant concentrations from the contaminant source to the water table (i.e., it is assumed migration to groundwater has already occurred). Furthermore, this assumption is inappropriate for the sites where sampling has shown that contamination is vertically bounded near the surface and the distance from the surface to the water table is large. For these reasons, screening of contaminant concentrations in soil against the DAF SSLs was not performed.

The relevant release and transport processes of the COPCs are a function of chemical-specific properties that include the relationship between the physical form of the constituents and the nature of the constituent transport processes in the environment. Specific properties include the degree of saturation and the potential for ion exchange (barium and other inorganic chemicals) or sorption and the potential for natural bioremediation. The transport of volatile organic compounds (VOCs) occurs primarily in the vapor phase by diffusion or advection in subsurface air.

Current potential transport mechanisms that may lead to exposure include:

- dissolution and/or particulate transport of surface contaminants during precipitation and runoff events,
- airborne transport of contaminated surface soil,
- continued dissolution and advective/dispersive transport of chemical contaminants contained in subsurface soil and tuff as a result of past operations,
- disturbance of contaminants in shallow soil and subsurface tuff by Laboratory operations, and
- disturbance and uptake of contaminants in shallow soil by plants and animals.

Contaminant distributions at the sites indicate that after the initial deposition of contaminants from operational activities and historical remediation efforts, elevated levels of COPCs tend to remain concentrated in the vicinity of the original release points. The primary potential release and transport mechanisms identified for the AOCs include direct discharge; precipitation, sorption, and mechanical transport; dissolution and advective transport in water; and volatilization, diffusion, and dispersion. Less significant transport mechanisms include wind entrainment and, given the asphalt pavement covering most sites, dispersal of surface soil and uptake of contaminants from soil and water by biota.

Gas or vapor-phase contaminants such as VOCs are likely to volatilize to the atmosphere from near-surface soil and sediment and/or migrate by diffusion through air-filled pores in the vadose zone. Migration of vapor-phase contaminants from tuff into ambient air may occur by diffusion or advection driven by barometric pressure changes.

### G-3.2.1 Inorganic Chemicals

In general, and particularly in a semiarid climate, inorganic chemicals are not highly soluble or mobile in the environment, although there are exceptions. The physical and chemical factors that determine the distribution of inorganic COPCs within the soil and tuff are the soil-water partition coefficient ($K_d$) of the inorganic chemicals, the pH of the soil, soil characteristics (such as sand or clay content), and the redox potential (Eh). The interaction of these factors is complex, but the $K_d$ values provide a general assessment of the potential for migration through the subsurface; chemicals with higher $K_d$ values are less likely to be mobile than those with lower ones. Chemicals with $K_d$ values greater than 40 are very unlikely to migrate through soil towards the water table (Kincaid et al. 1998, 093270). Table G-3.2-1 presents the $K_d$ values and water solubility for the inorganic COPCs at the AOCs. Based on this criterion, the following COPCs have a low potential to mobilize and migrate through soil and the vadose zone: antimony, barium, chromium, lead, mercury, and zinc. The $K_d$ values for arsenic, cyanide, perchlorate, selenium, and silver are less than 40 and may indicate a greater potential to mobilize and migrate through soil and the vadose zone beneath the sites.

It is important to note that other factors besides the $K_d$ values (e.g., speciation in soil, oxidation-reduction potential, pH, and soil mineralogy) also play significant roles in the likelihood that inorganic chemicals will migrate. The COPCs with $K_d$ values less than 40 are discussed further below. Information about the fate and transport properties of inorganic chemicals was obtained from individual chemical profiles published by the Agency for Toxic Substances and Disease Registry (ATSDR 1997, 056531, and http://www.atsdr.cdc.gov/toxpro2).

Arsenic may undergo a variety of reactions, including oxidation-reduction reactions, ligand exchange, precipitation, and biotransformation. Arsenic forms insoluble complexes with iron, aluminum, and magnesium oxides found in soil and in this form, arsenic is relatively immobile. However, under low pH

and reducing conditions, arsenic can become soluble and may potentially leach into groundwater or result in runoff of arsenic into surface waters. Arsenic is expected to have low mobility under the environmental conditions (neutral to alkaline soil pH and oxidizing near-surface conditions) present at the sites.

Copper movement in soil is determined by physical and chemical interactions with the soil components. Most copper deposited in soil will be strongly adsorbed and remains in the upper few centimeters of soil. Copper will adsorb to organic matter, carbonate minerals, clay minerals, or hydrous iron, and manganese oxides. In most temperate soil, pH, organic matter, and ionic strength of the soil solutions are the key factors affecting adsorption. Soil in the area is alkaline to neutral, so the leaching of copper is not a concern at this site. Copper binds to soil much more strongly than other divalent cations, and the distribution of copper in the soil solution is less affected by pH than other metals. Copper is expected to be bound to the soil and move in the system by way of transport of soil particles by water as opposed to movement as dissolved species.

Cyanide tends to adsorb onto various natural media, including clay and sediment; however, sorption is insignificant relative to the potential for cyanide to volatilize and/or biodegrade. At soil surfaces, volatilization of hydrogen cyanide is a significant mechanism for cyanide loss. Cyanide at low concentrations in subsurface soil is likely to biodegrade under both aerobic and anaerobic conditions. Cyanide is present at the site in trace to low levels and is not expected to be mobile.

Perchlorate is somewhat soluble in water and may migrate with water molecules in saturated soil. As noted above, the subsurface material beneath the sites has low moisture content, which inhibits the mobility of nitrate and perchlorate as well as most other inorganic chemicals.

Selenium is not often found in the environment in its elemental form but is usually combined with sulfide minerals or with silver, copper, lead, and nickel minerals. In soil, pH and Eh are determining factors in the transport and partitioning of selenium. In soil with a pH of greater than 7.5, selenates, which have high solubility and a low tendency to adsorb onto soil particles, are the major selenium species and are very mobile.

Natural processes, such as the weathering of rock and the erosion of soil release silver to air and water. Silver sorbs onto soil and sediment and tends to form complexes with inorganic chemicals and humic substances in soil. Organic matter complexes with silver and reduces its mobility. Silver compounds tend to leach from well-drained soil so that it may potentially migrate into the subsurface. Site conditions are neutral to slightly alkaline and silver is not expected to be mobile.

### G-3.2.2 Organic Chemicals

Table G-3.2-2 presents the physical and chemical properties (organic carbon-water partition coefficient [$K_{oc}$], logarithm to the base 10 octanol-water partition coefficient [log $K_{ow}$], water solubility, and vapor pressure) of the organic COPCs identified for the sites. The physical and chemical properties of organic chemicals are important when evaluating their fate and transport. The following discussion about the physiochemical properties of organic COPCs is presented to illustrate some aspects of the fate and transport tendencies of the COPCs. The information is summarized from Ney (1995, 058210).

Water solubility is perhaps the most important chemical characteristic used to assess mobility of organic chemicals. The higher the water solubility of a chemical, the more likely it is to be mobile and the less likely it is to accumulate, bioaccumulate, volatilize, or persist in the environment. A highly soluble chemical (water solubility greater than 1000 mg/L) is prone to biodegradation and metabolism that may detoxify the parent chemical. Benzoic acid, methylene chloride, and trichloroethene have water solubilities greater than 1000 mg/L.

The lower the water solubility of a chemical, especially below 10 mg/L, the more likely it will be immobilized by adsorption. Chemicals with lower water solubilities are likely to accumulate or bioaccumulate and persist in the environment, to be slightly prone to biodegradation, and may be metabolized in plants and animals. The COPCs identified as having water solubilities less than 10 mg/L include bis(2-ethylhexyl)phthalate, butylbenzylphthalate, and the polycyclic aromatic hydrocarbons (PAHs).

Vapor pressure is a chemical characteristic used to evaluate the tendency of organic chemicals to volatize. Chemicals with vapor pressure greater than 0.01 mmHg are likely to volatilize and, therefore, concentrations at the site are reduced over time; vapors of these chemicals are more likely to travel toward the atmosphere and not migrate towards groundwater. Dichlorobenzene[1,4-], methylene chloride, and trichloroethene have vapor pressures greater than 0.01 mmHg.

Chemicals with vapor pressures less than 0.000001 mmHg are less likely to volatilize and, therefore, tend to remain immobile. Bis(2-ethylhexyl)phthalate has a vapor pressure less than 0.000001 mmHg.

The $K_{ow}$ is an indicator of a chemical's potential to bioaccumulate or bioconcentrate in the fatty tissues of living organisms. The unitless $K_{ow}$ value is an indicator of water solubility, mobility, sorption and bioaccumulation. The higher the $K_{ow}$ above 1000, the greater the affinity the chemical has for bioaccumulation/bioconcentration in the food chain, the greater the potential for sorption in the soil, and the lower the mobility (Ney 1995, 058210). The PAHs, phthalates, and 1,4-dichlorobenzene have a $K_{ow}$ greater than 1000. A $K_{ow}$ of less than 500 indicates high water solubility, mobility, little to no affinity for bioaccumulation, and degradability by microbes, plants, and animals. Benzoic acid, methylene chloride, and trichloroethene have a $K_{ow}$ much less than 500.

The $K_{oc}$ measures the tendency of a chemical to adsorb to organic carbon in soil. $K_{oc}$ values above 500 $cm^3/g$ indicate a strong tendency to adsorb to soil, leading to low mobility (NMED 2014, 600115). Bis(2-ethylhexyl)phthalate, butylbenzylphthalate, and the PAHs have $K_{oc}$ values above 500 $cm^3/g$, indicating a very low potential to migrate toward groundwater. The organic COPCs with $K_{oc}$ values less than 500 $cm^3/g$ include benzoic acid, 1,4-dichlorobenzene, methylene chloride, and trichloroethene.

### G-3.3 Exposure Point Concentration Calculations

The exposure point concentrations (EPCs) represent upper bound concentrations of COPCs. For comparison to risk-screening levels, the upper confidence limit (UCL) of the arithmetic mean was calculated when possible and used as the EPC. The UCLs were calculated using all available decision-level data within the depth range of interest. If an appropriate UCL of the mean could not be calculated or if the UCL exceeded the maximum concentration, the maximum detected concentration of the COPC was used as the EPC (maximum detection limits were used as the EPCs for some inorganic COPCs). The summary statistics, including the EPC for each COPC for the human health and the ecological risk-screening assessments and the distribution used for the calculation, are presented in Tables G-2.3-1 to G-2.3-5.

Calculation of UCLs of the mean concentrations was done using the EPA ProUCL 5.0.00 software (EPA 2013, 251074), which is based on EPA guidance (EPA 2002, 085640). The ProUCL program calculates 95%, 97.5%, and 99% UCLs and recommends a distribution and UCL. The 95% UCL for the recommended calculation method was used as the EPC. The ProUCL software performs distributional tests on the data set for each COPC and calculates the most appropriate UCL based on the distribution of the data set. Environmental data may have a normal, lognormal, or gamma distribution but are often nonparametric (no definable shape to the distribution). The ProUCL documentation strongly recommends against using the maximum detected concentration for the EPC. The maximum detected concentration

was used to represent the EPC for COPCs only when there were too few detects to calculate a UCL. Input and output data files for ProUCL calculations are provided on CD as Attachment G-1.

## G-4.0 HUMAN HEALTH RISK SCREENING ASSESSMENT RESULTS

The human health risk-screening assessments were conducted for each of the sites included in this report. All sites were screened for the residential scenarios using data from 0.0–10.0 ft bgs. Sites were also screened for the industrial scenario using data from 0.0–1.0 ft bgs, where available. The human health risk-screening assessments compare either the 95% UCL of the mean concentration, the maximum detected concentration, or the maximum detection limit of each COPC with SSLs for chemicals.

### G-4.1 Human Health SSLs

Human health risk-screening assessments for chemicals were conducted using SSLs for the industrial and residential scenarios obtained from NMED guidance (NMED 2014, 600115). The NMED SSLs are based on a target noncarcinogenic hazard quotient (HQ) of 1 and a target cancer risk of $1 \times 10^{-5}$ (NMED 2014, 600115). If SSLs were not available from NMED guidance, values from the EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) were used. The EPA SSLs for carcinogens were multiplied by 10 to adjust from a $10^{-6}$ cancer risk level to the NMED target cancer risk level of $10^{-5}$. Exposure parameters used to calculate the industrial and residential SSLs are presented in Table G-4.1-1.

### G-4.2 Results of Human Health Screening Evaluation

The EPC of each COPC in soil was compared with the SSLs for the industrial and residential scenarios. For carcinogenic chemicals, the EPCs were divided by the SSL and multiplied by $1 \times 10^{-5}$. The sum of the carcinogenic risks was compared with the NMED target cancer risk level of $1 \times 10^{-5}$. For noncarcinogenic chemicals, an HQ was generated for each COPC by dividing the EPC by the SSL. The HQs were summed to generate a hazard index (HI). The HI was compared with the NMED target HI of 1. The results are presented in Tables G-4.2-1 to G-4.2-5 and are described below for each AOC evaluated.

#### G-4.2.1 AOC 57-006

The samples at AOC 57-006 were collected from depths greater than 0.0−1.0 ft bgs; therefore, no complete exposure pathways exist for the industrial scenario.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-1 and G-4.2-2. The total excess cancer risk for the residential scenario is $6 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$ (NMED 2014, 600115). The residential HI is 0.05, which is less than the NMED target HI of 1 (NMED 2014, 600115).

#### G-4.2.2 AOC 57-007

The results of the risk-screening assessment for the industrial scenario are presented in Table G-4.2-3. No carcinogen COPCs were identified in the 0.0−1.0 ft bgs depth interval. The industrial HI is 0.001, which is less than the NMED target HI of 1 (NMED 2014, 600115).

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-4 and G-4.2-5. The total excess cancer risk for the residential scenario is $7 \times 10^{-6}$, which is less than the

NMED target risk level of $1 \times 10^{-5}$ (NMED 2014, 600115). The residential HI is 0.3, which is less than the NMED target HI of 1 (NMED 2014, 600115).

### G-4.3 Vapor-Intrusion Pathway

NMED guidance (NMED 2014, 600115) requires an evaluation of the vapor-intrusion pathway. The evaluation can be qualitative for a potentially complete pathway if the following criteria are met:

- VOCs are minimally detected,
- concentrations are below NMED's vapor-intrusion screening levels for soil-gas and/or groundwater,
- there is no suspected source(s) for VOCs, and
- concentrations are decreasing with depth (for soil).

Because only bulk soil data are available for the two AOCs, the vapor-intrusion screening levels are not applicable for the evaluation. Residential soil screening values were calculated using the Johnson and Ettinger model (http://www.epa.gov/swerrims/riskassessment/airmodel/johnson_ettinger.htm) for subsurface vapor intrusion into buildings (EPA 2002, 094114). The advanced soil model was used to calculate risk-based soil concentrations for VOCs. The maximum detected concentration of each VOC COPC was compared with the risk-based concentration generated by the model for each site. The model inputs and risk-based concentrations generated are provided in Attachment G-2 on CD. HQs and HIs were calculated for noncarcinogenic COPCs and total excess cancer risks for carcinogenic COPCs. The NMED target risk level of $1 \times 10^{-5}$ and NMED target HI of 1 were applied.

The vapor-intrusion pathway was qualitatively evaluated as part of the residential scenario for each AOC.

#### G-4.3.1 AOC 57-006

There is no source for VOCs at AOC 57-006. The waste collection drum was removed as part of a VCA in 1994 (LANL 1995, 054336). Therefore, the potential source of the VOCs was removed approximately 20 yr ago. In addition, no buildings are currently on or near the site, and the Laboratory, DOE, or the Forest Service has no plans to put another trailer, structure, or building of any kind at this site.

VOCs were minimally detected at this AOC. Methylene chloride and trichloroethene were each detected in two samples at concentrations below the estimated quantitation limits (EQLs). In addition, concentrations decreased with depth at all locations. The screening of the bulk soil data using the Johnson and Ettinger model, as presented below, indicates the soil has not been impacted. The vapor-intrusion pathway is therefore potentially complete based on NMED guidance (NMED 2014, 600115) and no additional evaluation is necessary.

The results of the residential vapor-intrusion screening assessments are presented in Table G-4.3-1. The HI is approximately 0.004, which is less than the NMED target HI of 1 (NMED 2014, 600115). These results do not change the HI and cancer risk calculated as a result of exposure to soil, as presented in section G-4.2.

#### G-4.3.2 AOC 57-007

There is no source for VOCs at AOC 57-007. The chemistry trailer was used until 1989 and was removed from the site in March 1994. In addition, no buildings are currently on or near the site, and the Laboratory,

DOE, or the Forest Service has no plans to put another trailer, structure, or building of any kind at this site.

VOCs were minimally detected at this AOC. Dichlorobenzene[1,4-] was detected in three samples, and methylene chloride and trichloroethene were each detected in two samples. Concentrations were below or slightly above the EQLs and decreased with depth at all locations. The screening of the bulk soil data using the Johnson and Ettinger model, as presented below, indicates the soil has not been impacted. The vapor-intrusion pathway is therefore potentially complete based on NMED guidance (NMED 2014, 600115) and no additional evaluation is necessary.

The results of the residential vapor-intrusion screening assessments are presented in Tables G-4.3-2 and G-4.3-3. The total excess cancer risk is approximately $2 \times 10^{-8}$, which is less than the NMED target cancer risk level of $1 \times 10^{-5}$ (NMED 2014, 600115). The HI is approximately 0.004, which is less than the NMED target HI of 1 (NMED 2014, 600115). These results do not change the HI and cancer risk calculated as a result of exposure to soil, as presented in section G-4.2.

## G-4.4 Uncertainty Analysis

The human health risk-screening evaluations are subject to varying degrees and types of uncertainty. Aspects of data evaluation and COPC identification, exposure evaluation, toxicity evaluation, and the additive approach all contribute to uncertainties in the risk-evaluation process.

### G-4.4.1 Data-Evaluation and COPC-Identification Process

A primary uncertainty associated with the COPC-identification process is the possibility that a chemical may be inappropriately identified as a COPC when it is actually not a COPC or that a chemical may not be identified as a COPC when it actually should be identified as a COPC. All detected organic chemicals were retained for analysis. Inorganic chemicals were appropriately identified as COPCs because those either detected or with detection limits above background were retained for further analysis. However, background concentrations may not be representative of certain subunits of the Bandelier Tuff (e.g., fractured, clay-rich material) because such samples are not included in the background dataset.

Other uncertainties may include errors in sampling, laboratory analysis, and data analysis. However, because concentrations used in the risk-screening evaluations include those detected below EQLs and nondetects above BVs, data evaluation uncertainties are expected to have little effect on the risk-screening results.

### G-4.4.2 Exposure Evaluation

The current and reasonably foreseeable future land use is industrial. To the degree actual activity patterns are not represented by those activities assumed by the industrial scenario, uncertainties are introduced in the assessment, and the evaluation presented in this assessment overestimates potential risk. An individual may be subject to exposures in a different manner than the exposure assumptions used to derive the industrial SSLs. For the sites evaluated, individuals might not be on-site at present or in the future for that frequency and duration. The industrial assumptions for the SSLs are that the potentially exposed individual is outside on-site for 8 h/d, 225 d/yr, and 25 yr (NMED 2014, 600115). The residential SSLs are based on exposure of 24 h/d, 350 d/yr, and 30 yr (NMED 2014, 600115). As a result, the industrial and residential scenarios evaluated at these sites likely overestimate the exposure and risk.

A number of assumptions are made relative to exposure pathways, including input parameters, completeness of a given pathway, the contaminated media to which an individual may be exposed, and intake rates for different routes of exposure. In the absence of site-specific data, the exposure assumptions used were consistent with default values (NMED 2014, 600115). When several upper-bound values (as are found in NMED 2014, 600115) are combined to estimate exposure for any one pathway, the resulting risk estimate can exceed the 99th percentile and, therefore, can exceed the range of risk that may be reasonably expected. Also, the assumption that residual concentrations of chemicals in the tuff are available and result in exposure in the same manner as if they were in soil overestimates the potential exposure and risk to receptors.

Uncertainty is introduced in the concentration aggregation of data for estimating the EPCs at a site. Risk from a single location or area with relatively high COPC concentrations may be underestimated by using a representative site-wide value. The use of a UCL is intended to provide a protective upper-bound (i.e., conservative) COPC concentration and is assumed to be representative of the average exposure to a COPC across the entire site. Potential risk and exposure from a single location or area with relatively high COPC concentrations may be overestimated if a representative site-wide value is used. The use of the maximum detected concentration for the EPC overestimates the exposure to contamination because receptors are not consistently exposed to the maximum detected concentration across the site. In addition, the maximum detection limit was used as the EPC for some inorganic COPCs with elevated detection limits above BVs.

### G-4.4.3 Toxicity Evaluation

The primary uncertainty associated with the SSLs is related to the derivation of toxicity values used in their calculation. Toxicity values (reference doses [RfDs] and slope factors [SFs]) were used to derive the SSLs used in this risk-screening evaluation (NMED 2014, 600115). Uncertainties were identified in four areas with respect to the toxicity values: (1) extrapolation from other animals to humans, (2) interindividual variability in the human population, (3) the derivation of RfDs and SFs, and (4) the chemical form of the COPC. No surrogates were used to establish toxicity values in the risk assessments.

*Extrapolation from Animals to Humans.* The SFs and RfDs are often determined by extrapolation from animal data to humans, which may result in uncertainties in toxicity values because differences exist in chemical absorption, metabolism, excretion, and toxic responses between animals and humans. Differences in body weight, surface area, and pharmacokinetic relationships between animals and humans are taken into account to address these uncertainties in the dose-response relationship. However, conservatism is usually incorporated in each of these steps, resulting in the overestimation of potential risk.

*Individual Variability in the Human Population.* For noncarcinogenic effects, the degree of variability in human physical characteristics is important both in determining the risks that can be expected at low exposures and in defining the no observed adverse effect level (NOAEL). The NOAEL uncertainty factor approach incorporates a 10-fold factor to reflect individual variability within the human population that can contribute to uncertainty in the risk evaluation; this factor of 10 is generally considered to result in a conservative estimate of risk to noncarcinogenic COPCs.

*Derivation of RfDs and SFs.* The RfDs and SFs for different chemicals are derived from experiments conducted by different laboratories that may have different accuracy and precision that could lead to an over- or underestimation of the risk. The uncertainty associated with the toxicity factors for noncarcinogens is measured by the uncertainty factor, the modifying factor, and the confidence level. For

carcinogens, the weight of evidence classification indicates the likelihood that a contaminant is a human carcinogen. Toxicity values with high uncertainties may change as new information is evaluated.

*Chemical Form of the COPC.* COPCs may be bound to the environment matrix and not available for absorption into the human body. However, it is assumed that the COPCs are bioavailable. This assumption can lead to an overestimation of the total risk.

#### G-4.4.4 Additive Approach

For noncarcinogens, the effects of exposure to multiple chemicals are generally not known, and possible interactions could be synergistic or antagonistic, resulting in either an overestimation or underestimation of the potential risk. Additionally, RfDs used in the risk calculations typically are not based on the same endpoints with respect to severity, effects, or target organs. Therefore, the potential for noncarcinogenic effects may be overestimated for individual COPCs that act by different mechanisms and on different target organs but are addressed additively.

### G-4.5 Interpretation of Human Health Risk Screening Results

#### G-4.5.1 AOC 57-006

**Industrial Scenario**

Samples were not collected from 0.0−1.0 ft bgs. Therefore, the industrial scenario was not evaluated.

**Residential Scenario**

The total excess cancer risk for the residential scenario is $6 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$. The residential HI is 0.05, which is less than the NMED target HI of 1.

#### G-4.5.2 AOC 57-007

**Industrial Scenario**

No carcinogen COPCs were identified in the depth interval of 0.0−1.0 ft bgs. The HI for the industrial scenario is 0.001, which is less than the NMED target HI of 1.

**Residential Scenario**

The total excess cancer risk for the residential scenario is $7 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$. The residential HI is 0.3, which is less than the NMED target HI of 1.

## G-5.0 ECOLOGICAL RISK-SCREENING EVALUATIONS

### G-5.1 Introduction

The approach for conducting ecological evaluations is described in the “Screening Level Ecological Risk Assessment Methods, Revision 3” (LANL 2012, 226715). The evaluation consists of four parts: a scoping evaluation, a screening evaluation, an uncertainty analysis, and an interpretation of the results.

### G-5.2 Scoping Evaluation

The scoping evaluation establishes the breadth and focus of the screening evaluation. The ecological scoping checklist (Attachment G-3) is a useful tool for organizing existing ecological information. The information was used to determine whether ecological receptors might be affected, identify the types of receptors that might be present, and develop the ecological conceptual site model for the sites (Attachment G-3). Most of the area on the mesa top is developed and typically provides minimal potential habitat for ecological receptors. The quality of the habitat varies and, in some cases, includes native grasses, forbs, and trees that can be suitable habitat for ecological receptors.

The scoping evaluation indicated that terrestrial receptors were appropriate for evaluating the concentrations of COPCs in soil and tuff. Exposure is assessed across a site to a depth of 0.0–5.0 ft bgs. Aquatic receptors were not evaluated because no aquatic communities and no aquatic habitat or perennial source of water exist at any of the sites. The depth of the regional aquifer (greater than 1000 ft bgs) and the semiarid climate limit transport to groundwater. The potential exposure pathways for terrestrial receptors in soil and tuff are root uptake, inhalation, soil ingestion, dermal contact, and food web transport (Attachment G-3). The weathering of tuff is the only viable natural process that may result in the exposure of receptors to contaminants in tuff. Because of the slow rate of weathering expected for tuff, exposure in tuff is negligible, although it is included in the assessment. Plant exposure in tuff is largely limited to fractures near the surface, which does not produce sufficient biomass to support an herbivore population. Consequently, the contaminants in tuff are unavailable to receptors.

The potential risk was evaluated in the risk-screening assessments for the following ecological receptors representing several trophic levels:

- a plant
- soil dwelling invertebrates (represented by the earthworm)
- the deer mouse (mammalian omnivore)
- the montane shrew (mammalian insectivore)
- desert cottontail (mammalian herbivore)
- red fox (mammalian carnivore)
- American robin (avian insectivore, avian omnivore, and avian herbivore)
- American kestrel (avian insectivore and avian carnivore)

The rationale for using these receptors is presented in “Screening Level Ecological Risk Evaluation Methods, Revision 3” (LANL 2012, 226715). The Mexican spotted owl does not nest or forage in the Fenton Hill area. The Jemez Mountain salamander (JMS) is the only threatened and endangered [T&E] species known to occur in the Fenton Hill area (Attachment G-4). The entire footprint of TA-57 is comprised of either developed or undeveloped core habitat for the JMS as defined by the Laboratory’s Habitat Management Plan (ENV Division Resources Management Team 2014, 600084). The previously disturbed footprint at TA-57 is developed core habitat and the undeveloped tree covered areas are undeveloped core habitat. Both AOCs 57-006 and 57-007 and their sampling locations are within developed core habitat for JMS.

Surveys for the JMS at TA-57 have been conducted by Federal- and State-permitted Laboratory biologists in 2012, 2013, and 2014 during the monsoon season, and no JMSs were observed. Historical surveys were completed at the site on June 23, 1985, and no JMSs were found. The nearest JMS observation to TA-57 is 0.75 mi north-northeast in designated critical habitat on the east side of the

highway. In a 2-mi radius of TA-57, all of the positive observations of JMS occurred on undeveloped tree-covered slopes. The TA-57 complex is situated on a flat, open mesa top with very little change in elevation. The likelihood of JMS occurring on the sites is very low, and occurrence of a JMS in the developed core habitat areas would essentially be zero (Attachment G-4).

### G-5.3 Assessment Endpoints

An assessment endpoint is an explicit expression of the environmental value to be protected. These endpoints are ecologically relevant and help sustain the natural structure, function, and biodiversity of an ecosystem or its components (EPA 1998, 062809). In a screening-level evaluation, assessment endpoints are any adverse effects on ecological receptors, where receptors are populations and communities (EPA 1997, 059370). The purpose of the ecological screening evaluation is to protect populations and communities of biota rather than individual organisms, except for listed or candidate T&E species or treaty-protected species (EPA 1999, 070086) because populations of protected species tend to be small and the loss of an individual adversely affects the species as a whole (EPA 1997, 059370).

In accordance with this guidance, the Laboratory developed generic assessment endpoints (LANL 1999, 064137) to ensure that values at all levels of ecological organization are considered in the ecological screening process. These general assessment endpoints can be measured using impacts on reproduction, growth, and survival to represent categories of effects that may adversely impact populations. In addition, specific receptor species were chosen to represent each functional group. The receptor species were chosen because of their presence at the site, their sensitivity to the COPCs, and their potential for exposure to those COPCs. These categories of effects and the chosen receptor species were used to select the types of effects seen in toxicity studies considered in the development of the toxicity reference values (TRVs). Toxicity studies used in the development of TRVs included only studies in which the adverse effect evaluated affected reproduction, survival, and/or growth.

The selection of receptors and assessment endpoints is designed to be protective of both the representative species used as screening receptors and the other species within their feeding guilds and the overall food web for the terrestrial and aquatic ecosystems. Focusing the assessment endpoints on the general characteristics of species that affect populations (rather than the biochemical and behavioral changes that may affect only the studied species) also ensures the applicability to the ecosystem of concern.

### G-5.4 Ecological Risk Screening Evaluation

The ecological screening evaluation identifies chemicals of potential ecological concern (COPECs) and is based on the comparison of EPCs (95% UCLs, maximum detected concentrations, or maximum detection limits) to ecological screening levels (ESLs). The EPCs used in the assessments for the sites are presented in Tables G-2.3-1 through Table G-2.3-5.

The ESLs were obtained from the ECORISK Database, Version 3.2 (LANL 2014, 262559) and are presented in Table G-5.4-1. The ESLs are based on similar species and are derived from experimentally determined NOAELs, lowest observed adverse effect levels (LOAELs), or doses determined lethal to 50% of the test population. Information relevant to the calculation of ESLs, including concentration equations, dose equations, bioconcentration factors, transfer factors, and TRVs, are presented in the ECORISK Database, Version 3.2 (LANL 2014, 262559).

The analysis begins with a comparison of the minimum ESL for a given COPC to the EPC. The HQ is defined as the ratio of the EPC to the concentration that has been determined to be acceptable to a given

ecological receptor (i.e., the ESL). The higher the contaminant levels relative to the ESLs, the higher the potential risk to receptors; conversely, the higher the ESLs relative to the contaminant levels, the lower the potential risk to receptors. HQs greater than 0.3 are used to identify COPECs requiring additional evaluation (LANL 2012, 226715). Individual HQs for a receptor are summed to derive an HI; COPCs without ESLs are retained as COPECs and evaluated further in the uncertainty section. An HI greater than 1 indicates further assessment may be needed to ensure exposure to multiple COPECs at a site will not lead to potential adverse impacts to a given receptor population. The HQ and HI analysis is a conservative indication of potential adverse effects and is designed to minimize the potential of overlooking possible COPECs at the site.

#### G-5.4.1 AOC 57-006

The results of the minimum ESL comparisons are presented in Table G-5.4-2. Antimony and zinc are retained as COPECs because the HQs were greater than 0.3.

The HQs and HIs for each COPEC and receptor combination are presented in Table G-5.4-3. The HI analysis indicates that the robin (insectivore) and shrew have HIs equivalent to 1 (the shrew HI was 0.97). The COPECs and receptors are discussed in the uncertainty section.

#### G-5.4.2 AOC 57-007

The results of the minimum ESL comparisons are presented in Table G-5.4-4. Barium, chromium, copper, cyanide, lead, mercury, selenium, silver, zinc, benzoic acid, and bis(2-ethylhexyl)phthalate are retained as COPECs because the HQs were greater than 0.3.

Perchlorate does not have ESLs, is retained as a COPEC, and is discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table G-5.4-5. The HI analysis indicates that the kestel (both feeding guilds), robin (all feeding guilds), cottontail, shrew, deer mouse, earthworm, and plant have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### G-5.5 Uncertainty Analysis

The uncertainty analysis describes the key sources of uncertainty related to the screening evaluations. This analysis can result in either adding or removing chemicals from the list of COPECs for sites. The following narrative contains a qualitative uncertainty analysis of the issues relevant to evaluating the potential ecological risk at the sites.

#### G-5.5.1 Chemical Form

The assumptions used in the ESL derivations were conservative and not necessarily representative of actual conditions. These assumptions include maximum chemical bioavailability, maximum receptor ingestion rates, minimum bodyweight, and additive effects of multiple COPECs. Most of these factors tend to result in conservative estimates of the ESLs, which may lead to an overestimation of the potential risk. The assumption of additive effects for multiple COPECs may result in an over- or underestimation of the potential risk to receptors.

The chemical form of the individual COPCs was not determined as part of the investigation, largely a limitation on analytical quantitation of individual chemical species. Toxicological data are typically based

on the most toxic and bioavailable chemical species not likely found in the environment. The inorganic, organic, and radionuclide COPECs are generally not 100% bioavailable to receptors in the natural environment because of the adsorption of chemical constituents to matrix surfaces (e.g., soil) or rapid oxidation or reduction changes that render harmful chemical forms unavailable to biotic processes. The ESLs were calculated to ensure a conservative indication of potential risk (LANL 2012, 226715), and the values were biased toward overestimating the potential risk to receptors.

#### G-5.5.2 Exposure Assumptions

The EPCs used in the calculations of HQs were the 95% UCL, the maximum detected concentration, or the maximum detection limit to a depth of 5.0 ft, thereby conservatively estimating the exposure to each COPC. As a result, the exposure of individuals within a population was evaluated using this specific concentration, which was assumed constant throughout the exposure area. The sampling also focused on areas of known contamination, and receptors were assumed to ingest 100% of their food and spend 100% of their time at the site. The assumptions made regarding exposure for terrestrial receptors results in an overestimation of the potential exposure and risk because COPECs varied across the site and were infrequently detected.

#### G-5.5.3 Toxicity Values

The HQs were calculated using ESLs, which are based on NOAELs as threshold effect levels; actual risk for a given COPEC/receptor combination occurs at a higher level, somewhere between the NOAEL-based threshold and the threshold based on the LOAEL. The use of NOAELs leads to an overestimation of potential risk to ecological receptors. ESLs are based on laboratory studies requiring extrapolation to wildlife receptors. Laboratory studies are typically based on “artificial” and maintained populations with genetically similar individuals and are limited to single chemical exposures in isolated and controlled conditions using a single exposure pathway. Wild species are concomitantly exposed to a variety of chemical and environmental stressors, potentially rendering them more susceptible to chemical stress. On the other hand, wild populations are likely more genetically diverse than laboratory populations, making wild populations, as a whole, less sensitive to chemical exposure than laboratory populations. The uncertainties associated with the ESLs may result in an under- or overestimation of potential risk.

#### G-5.5.4 Population Area Use Factors

EPA guidance is to manage the ecological risk to populations rather than to individuals, with the exception of T&E species (EPA 1999, 070086). One approach to address the potential effects on populations at sites is to estimate the spatial extent of the area inhabited by the local population that overlaps with the contaminated area. The population area for a receptor is based on the individual receptor home range (HR) and its dispersal distance. Bowman et al. (2002, 073475) estimate that the median dispersal distance for mammals is 7 times the linear dimension of the HR (i.e., the square root of the HR area). If only the dispersal distances for the mammals with HRs within the range of the screening receptors are used (Bowman et al. 2002, 073475), the median dispersal distance becomes 3.6 times the square root of the HR ($R^2$=0.91). If it is assumed that the receptors can disperse the same distance in any direction, the population area is circular and the dispersal distance is the radius of the circle. Therefore, the population area can be derived by $\pi(3.6\sqrt{HR})^2$ or approximately 40HR.

**AOC 57-006**

The area of AOC 57-006 is approximately 0.001 ha. The population area use factors (PAUFs) are estimated by dividing the site area by the population area of each receptor population (Table G-5.5-1). The HQs and HIs are recalculated using the PAUFs. The HIs for the plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The adjusted HIs for AOC 57-006 are less than 1 for all receptors. The plant had an unadjusted HI of 0.4 and the earthworm had an unadjusted HI of 0.5 (Table G-5.5-2).

**AOC 57-007**

The area of AOC 57-007 is approximately 0.03 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.5-3). The HQs and HIs are recalculated using the PAUFs. The HIs for the plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The adjusted HIs for AOC 57-007 are less than 1 for all receptors. The plant had an unadjusted HI of 4 and the earthworm had an unadjusted HI of 82 (Table G-5.5-4).

### G-5.5.5 LOAEL Analysis

AOC 57-007 has HIs greater than 1 for one or more receptors. To address the HIs and reduce the associated uncertainty, analyses were conducted using ESLs calculated based on a LOAEL rather than a NOAEL. The LOAEL-based ESLs were calculated based on toxicity information in the ECORISK Database, Release 3.2 (LANL 2014, 262559) and are presented in Table G-5.4-5. The analyses address some of the uncertainties and conservativeness of the ESLs used in the initial screening assessments. HI analyses and adjusted HI analyses were conducted using the LOAEL-based ESLs.

### G-5.5.6 Site Discussions

**AOC 57-007**

The HI for AOC 57-007 is greater than 1 for the plant, with barium, selenium, and zinc being the primary COPECs. The HI analysis using LOAEL-based ESLs resulted in an HI of 0.9 for the plant (Table G-5.5-6).

The HI for AOC 57-007 is greater than 1 for the earthworm, with barium, mercury, and zinc being the primary COPECs. The HI analysis using LOAEL-based ESLs resulted in an HI of approximately 8 for the earthworm primarily from mercury (Table G-5.5-6). The mercury EPC for the 0.0–5.0 ft interval is 4.04 mg/kg. However, only four samples at two locations have mercury concentrations greater than the BV of 0.1 mg/kg. The locations are within the leach field and are in close proximity (less than 5 ft apart). In addition, two of the four samples in which mercury concentrations were above the BV were collected from Qbt3, which is a less bioavailable matrix compared with soil. The EPC without the two largest concentrations from soil (20.6 mg/kg and 4.2 mg/kg) is 0.21 mg/kg, which is less than the LOAEL-based-ESL and results in an HQ of 0.4. Thus, most of the site poses no potential risk to the earthworm, and the HI does not indicate potential risk to the soil invertebrate population beyond the small area and limited depth of the elevated mercury concentrations. In addition, field observations made during the site visit found no indication of adverse effects from COPECs on the terrestrial community (Attachment G-3). Field observations indicated the area in and around the site has moderate-to-high vegetative cover, which is evidence of recolonzation of these sites after their active use as industrial sites. Therefore, the HI does not indicate potential risk to the plants or soil invertebrates.

#### G-5.5.7 Chemicals without ESLs

One COPEC does not have ESLs for any receptor in version 3.2 of the ECORISK Database (LANL 2014, 262559). In an effort to address this uncertainty and to provide a quantitative assessment of potential ecological risk, several online toxicity databases searches were conducted to determine if any relevant toxicity information is available. The online searches of the following databases were conducted: EPA Ecotox Database, EPA Office of Pesticide Programs Aquatic Life Benchmarks, U.S. Army Corps of Engineers/EPA Environmental Residue-Effects, California Cal/Ecotox Database, Pesticide Action Network Pesticide Database, U.S. Army Wildlife Toxicity Assessment Program, U.S. Department of Agriculture Integrated Pesticide Management Database, American Bird Conservancy Pesticide Toxicity Database, and Oak Ridge National Laboratory Risk Assessment Information System. Some COPECs without ESLs do not have chemical-specific toxicity data or surrogate chemicals to be used in the screening assessments and cannot be assessed quantitatively for potential ecological risk. The COPEC in question was not detected at one site and infrequently detected at the other site.

Toxicity data are not available for perchlorate. For perchlorate, no surrogate or other toxicity information is available.

Perchlorate was not detected at AOC 57-006 and was detected in seven samples at AOC 57-007 from 0.0−5.0 ft with concentrations ranging from 0.000582 mg/kg to 0.00159 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that potential toxicity is low. Because of the potential low toxicity and infrequent detection of perchlorate, it is eliminated as a COPEC.

### G-5.6 Interpretation of Ecological Risk Screening Results

#### G-5.6.1 Receptor Lines of Evidence

Based on the ecological risk-screening assessments, several COPECs (including COPECs without an ESL) were identified for the sites. Receptors were evaluated using several lines of evidence: minimum ESL comparisons, HI analyses, potential effects to populations, and LOAEL analyses.

**Plant**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the plant, were less than 0.3.
- The HI was less than 1 for the plant at AOC 57-006, and the HI was greater than 1 for the plant at AOC 57-007.
- The HI analysis using the LOAEL-based ESL resulted in an HI less than 1 for AOC 57-007.
- Field observations made during the site visit found no indication of adverse effects on the plant community from COPECs. In addition, these sites have moderate-to-high vegetative cover, which is evidence of recolonization of these sites since their active use as industrial sites.

These lines of evidence support the conclusion that no potential ecological risk to the plants exists at theTA-57 Aggregate Area sites.

**Earthworm (Invertebrate)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the earthworm, were less than 0.3.
- The HI was less than 1 for the earthworm at AOC 57-006, and the HI was greater than 1 for the earthworm at AOC 57-007.
- The HI analysis using the LOAEL-based ESL resulted in an HI greater than 1 for AOC 57-007.
- As discussed in section G-5.5.6, the potential risks to the earthworm are overestimated and/or are not representative of the site.

These lines of evidence support the conclusion that no potential ecological risk to the earthworm (soil invertebrate population) exists at the TA-57 Aggregate Area sites.

**Montane Shrew (Insectivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the shrew, were less than 0.3.
- The HI was less than 1 for the shrew at AOC 57-006, and the HI was greater than 1 for the shrew at AOC 57-007.
- The HI for AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the shrew's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risk to the montane shrew exists at the TA-57 Aggregate Area sites.

**Deer Mouse (Omnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the deer mouse, were less than 0.3.
- The HI was less than 1 for the deer mouse at AOC 57-006, and the HI was greater than 1 for the deer mouse at AOC 57-007.
- The HI for AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the deer mouse's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risk to the deer mouse exists at the TA-57 Aggregate Area sites.

**Desert Cottontail (Herbivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the cottontail, were less than 0.3.
- The HI was less than 1 for the cottontail at AOC 57-006, and the HI was greater than 1 for the cottontail at AOC 57-007.
- The HI for AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the cottontail's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risk to the cottontail exists at the TA-57 Aggregate Area sites.

**Red Fox (Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the fox, were less than 0.3.
- The HIs were less than 1 for the red fox at both sites.

These lines of evidence support the conclusion that no potential ecological risk to the fox exists at the TA-57 Aggregate Area sites.

**Robin (All Feeding Guilds)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the robin, were less than 0.3.
- The HI was less than 1 for the robin (herbivore and omnivore) and equivalent to 1 for the robin (insectivore) at AOC 57-006, and the HIs were greater than 1 for the robin (all feeding guilds) at AOC 57-007.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the robin's population area. The adjusted HIs were less than 1 at both sites.

These lines of evidence support the conclusion that no potential ecological risk to the robin (all feeding guilds) exists at the TA-57 Aggregate Area sites.

**Kestrel (Intermediate Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the kestrel (intermediate carnivore), were less than 0.3.
- The HI was less than 1 for the kestrel (intermediate carnivore) at AOC 57-006, and the HI was greater than 1 for the kestrel (intermediate carnivore) at AOC 57-007.
- The HI at AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the kestrel's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risk to the kestrel (intermediate carnivore) exists at the TA-57 Aggregate Area sites.

**Kestrel (Top Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the kestrel (top carnivore), were less than 0.3.
- The HI was less than 1 for the kestrel (top carnivore) at AOC 57-006, and the HI was greater than 1 for the kestrel (top carnivore) at AOC 57-007.
- The HI at AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the kestrel's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risks to the kestrel (top carnivore) exist at the TA-57 Aggregate Area sites.

#### G-5.6.2 COPECs with No ESLs

The COPEC without ESLs was eliminated based on comparisons to human health SSLs and the frequency of detection.

#### G-5.6.3 Summary

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations, LOAEL analyses, and COPECs without ESLs no potential ecological risks to the ecological receptors exist at the TA-57 Aggregate Area sites.

## G-6.0 CONCLUSIONS

### G-6.1 Human Health Risk

AOC 57-006 was not evaluated for the industrial scenario because no samples were collected from the 0.0–1.0-ft depth interval. For AOC 57-007, no carcinogen COPCs were identified in the 0.0–1.0-ft depth interval and the industrial HI was less than 1. Therefore, the exposure and risk are not issues for a Laboratory worker. For the residential scenario, both sites had total excess cancer risks less than the $1 \times 10^{-5}$ target risk level and had HIs less than 1.

### G-6.2 Ecological Risk

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations, LOAEL analyses, and COPECs without ESLs, no potential ecological risks to the earthworm, plant, American robin, American kestrel, deer mouse, montane shrew, desert cottontail, and red fox exist for the TA-57 Aggregate Area sites.

## G-7.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the ESH Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

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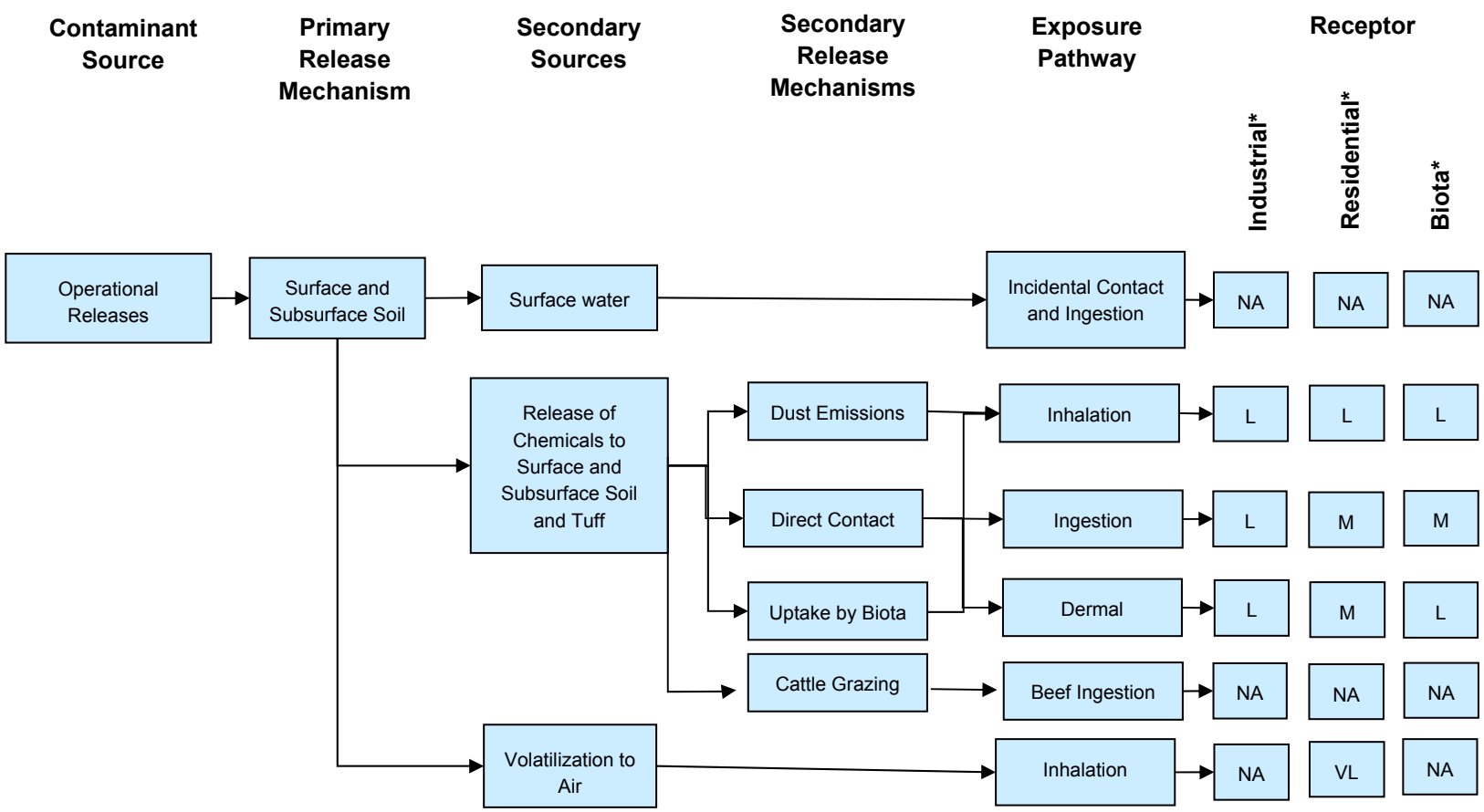


* VL = Very low, L = low, and M = moderate. Designations indicate the pathway is a potentially complete pathway and is evaluated in the risk assessments.
NA = Not applicable and indicates the pathway is incomplete and is not evaluated in the risk assessments.

**Figure G-3.1-1 Conceptual site model for the TA-57 Aggregate Area AOCs**

**Table G-2.3-1**
**EPCs at AOC 57-006 for the Residential Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 12 | 0 | 0.946(U) | 1.12(U) | n/a* | 1.12(U) | Maximum detection limit |
| Barium | 12 | 12 | 42.6 | 136 | Normal | 99.9 | 95% Student's-t |
| Chromium | 12 | 12 | 3.37 | 113 | Gamma | 58.6 | 95% Adjusted Gamma |
| Copper | 12 | 12 | 2.22 | 26 | Nonparametric | 13.5 | 95% Chebyshev (Mean, Sd) |
| Selenium | 12 | 2 | 0.347 | 1.11(U) | n/a | 0.358 | Maximum detected concentration |
| Zinc | 12 | 12 | 44.5 | 75.1 | Normal | 64 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 12 | 1 | 0.269 | 0.384(U) | n/a | 0.269 | Maximum detected concentration |
| Methylene Chloride | 12 | 2 | 0.00248 | 0.00576(U) | n/a | 0.0028 | Maximum detected concentration |
| Trichloroethene | 12 | 2 | 0.000539 | 0.00115(U) | n/a | 0.000726 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-2.3-2**
**EPCs at AOC 57-006 for Ecological Risk**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 4 | 0 | 1.06(U) | 1.1(U) | n/a* | 1.1(U) | Maximum detection limit |
| Zinc | 4 | 4 | 45.5 | 53.6 | n/a | 53.6 | Maximum detected concentration |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Methylene Chloride | 4 | 1 | 0.00248 | 0.00565(U) | n/a | 0.00248 | Maximum detected concentration |
| Trichloroethene | 4 | 1 | 0.000539 | 0.00113(U) | n/a | 0.000539 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-2.3-3**
**EPCs at AOC 57-007 for the Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 7 | 2 | 0.361 | 1.06(U) | n/a* | 0.488 | Maximum detected concentration |
| Perchlorate | 7 | 2 | 0.000786 | 0.00225(U) | n/a | 0.000841 | Maximum detected concentration |
| Zinc | 7 | 7 | 41.1 | 55.7 | n/a | 55.7 | Maximum detected concentration |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Fluoranthene | 7 | 1 | 0.0145 | 0.0373(U) | n/a | 0.0145 | Maximum detected concentration |
| Methylene Chloride | 7 | 1 | 0.00277 | 0.00561(U) | n/a | 0.00277 | Maximum detected concentration |
| Phenanthrene | 7 | 1 | 0.0134 | 0.0373(U) | n/a | 0.0134 | Maximum detected concentration |
| Trichloroethene | 7 | 2 | 0.00105(U) | 0.00294 | n/a | 0.00294 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-2.3-4**
**EPCs at AOC 57-007 for the Residential Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 33 | 7 | 0.361 | 1.15(U) | Normal | 0.474 | 95% KM (t) |
| Arsenic | 37 | 37 | 0.527 | 5.12 | Gamma | 1.95 | 95% Adjusted Gamma |
| Barium | 33 | 33 | 19.6 | 384 | Gamma | 102 | 95% Adjusted Gamma |
| Chromium | 33 | 33 | 2.92 | 68.3 | Nonparametric | 25.4 | 95% Chebyshev (Mean, Sd) |
| Copper | 33 | 33 | 1.28 | 65.1 | Nonparametric | 14.2 | 95% Chebyshev (Mean, Sd) |
| Cyanide (Total) | 33 | 4 | 0.085 | 0.73 | n/a* | 0.73 | Maximum detected concentration |
| Lead | 33 | 33 | 7.74 | 33.6 | Gamma | 13.5 | 95% Adjusted Gamma |
| Mercury | 33 | 33 | 0.00703 | 20.6 | Nonparametric | 3.56 | 95% Chebyshev (Mean, Sd) |
| Perchlorate | 33 | 8 | 0.000582 | 0.00225(U) | Normal | 0.00112 | 95% KM (t) |
| Selenium | 33 | 0 | 0.917(U) | 1.11(U) | n/a | 1.11 | Maximum detection limit |
| Silver | 33 | 16 | 0.105 | 15.2 | Nonparametric | 1.62 | 95% KM (BCA) |
| Zinc | 33 | 33 | 39 | 113 | Gamma | 58.6 | 95% Adjusted Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzoic Acid | 33 | 3 | 0.324 | 2.83 | n/a | 2.83 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 33 | 1 | 0.13 | 0.385(U) | n/a | 0.13 | Maximum detected concentration |
| Butylbenzylphthalate | 33 | 1 | 0.339 | 0.385(U) | n/a | 0.339 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 33 | 3 | 0.000357 | 0.00116(U) | n/a | 0.00043 | Maximum detected concentration |
| Fluoranthene | 33 | 2 | 0.013 | 0.0385(U) | n/a | 0.0145 | Maximum detected concentration |
| Methylene Chloride | 33 | 2 | 0.00277 | 0.00578(U) | n/a | 0.00299 | Maximum detected concentration |
| Phenanthrene | 33 | 1 | 0.0134 | 0.0385(U) | n/a | 0.0134 | Maximum detected concentration |
| Trichloroethene | 33 | 2 | 0.00103(U) | 0.00294 | n/a | 0.00294 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-2.3-5**
**EPCs at AOC 57-007 for Ecological Risk**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 29 | 6 | 0.361 | 1.15(U) | Normal | 0.475 | 95% KM (t) |
| Arsenic | 31 | 31 | 0.527 | 3.85 | Normal | 1.80 | 95% Student's-t |
| Barium | 29 | 29 | 19.6 | 384 | Normal | 109.6 | 95% Student's-t |
| Chromium | 29 | 29 | 2.92 | 68.3 | Nonparametric | 23.1 | 95% Chebyshev (Mean, Sd) |
| Copper | 29 | 29 | 1.28 | 65.1 | Nonparametric | 15.7 | 95% Chebyshev (Mean, Sd) |
| Cyanide (Total) | 29 | 4 | 0.085 | 0.73 | n/a* | 0.73 | Maximum detected concentration |
| Lead | 29 | 29 | 7.74 | 33.6 | Gamma | 13.8 | 95% Adjusted Gamma |
| Mercury | 29 | 29 | 0.00703 | 20.6 | Nonparametric | 4.04 | 95% Chebyshev (Mean, Sd) |
| Selenium | 29 | 0 | 0.917(U) | 1.11(U) | n/a | 1.11(U) | Maximum detection limit |
| Silver | 29 | 16 | 0.105 | 15.2 | Nonparametric | 3.08 | 95% KM Chebyshev |
| Zinc | 29 | 29 | 39 | 113 | Normal | 59.5 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzoic Acid | 29 | 3 | 0.324 | 2.83 | n/a | 2.83 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 29 | 1 | 0.13 | 0.385(U) | n/a | 0.13 | Maximum detected concentration |
| Butylbenzylphthalate | 29 | 1 | 0.339 | 0.385(U) | n/a | 0.339 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 29 | 3 | 0.000357 | 0.00116(U) | n/a | 0.00043 | Maximum detected concentration |
| Fluoranthene | 29 | 2 | 0.013 | 0.0385(U) | n/a | 0.0145 | Maximum detected concentration |
| Methylene Chloride | 29 | 2 | 0.00277 | 0.00578(U) | n/a | 0.00299 | Maximum detected concentration |
| Phenanthrene | 29 | 1 | 0.0134 | 0.0385(U) | n/a | 0.0134 | Maximum detected concentration |
| Trichloroethene | 29 | 2 | 0.00103(U) | 0.00294 | n/a | 0.00294 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-3.2-1**
**Physical and Chemical Properties of**
**Inorganic COPCs for the TA-57 Aggregate Area**

| COPC | $K_d$[a] ($cm^3/g$) | Water Solubility[a,b] (g/L) |
|---|---|---|
| Antimony | 45 | Insoluble |
| Arsenic | 29 | Insoluble |
| Barium | 41 | Insoluble |
| Chromium | 850 | Insoluble |
| Copper | 35 | Insoluble |
| Cyanide (Total) | 9.9 | na[c] |
| Lead | 900 | Insoluble |
| Mercury | 52 | Insoluble |
| Perchlorate | na | 2.45E+05 |
| Selenium | 5 | Insoluble |
| Silver | 8.3 | Insoluble |
| Zinc | 62 | Insoluble |

[a] Information from http://rais.ornl.gov/cgi-bin/tox/TOX_select?select=nrad.

[b] Information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] na = Not available.

**Table G-3.2-2**
**Physical and Chemical Properties of Organic COPCs for the TA-57 Aggregate Area**

| COPC | Water Solubility[a] (mg/L) | Organic Carbon Coefficient $K_{oc}$[a] (L/kg) | Log Octanol-Water Partition Coefficient $K_{ow}$[a] | Vapor Pressure[a] (mm Hg at 25°C) |
|---|---|---|---|---|
| Benzoic acid | 3.40E+03[b] | 1.45E+01 | 1.87E+00[b] | 7.00E-04[b] |
| Bis(2-ethylhexyl)phthalate | 2.70E-01[b] | 1.65E+05 | 7.60E+00[b] | 1.42E-07[b] |
| Butylbenzylphthalate | 2.69E+00 | 9.36E+03 | 4.73E+00 | 8.25E-06 |
| Dichlorobenzene[1,4-] | 8.13E+01 | 3.75E+02 | 3.44E+00 | 1.74E+00 |
| Fluoranthene | 2.60E-01[c] | 5.55E+04[c] | 5.16E+00 | 9.22E-06 |
| Methylene chloride | 1.30E+04[b] | 2.37E+01 | 1.30E+00[b] | 4.30E+02[b] |
| Phenanthrene | 1.15E+00[b] | 2.08E+04 | 4.46E+00[b] | 1.12E-04[b] |
| Trichloroethene | 1.28E+03 | 6.07E+01 | 2.42E+00 | 6.90E+01 |

[a] Information from http://rais.ornl.gov/cgi-bin/tox/TOX_search, unless noted otherwise.

[b] Information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] Information from NMED (2014, 600115).

**Table G-4.1-1**
**Exposure Parameter Values Used to Calculate**
**Chemical SSLs for the Industrial and Residential Scenarios**

| Parameters | Residential Values | Industrial Values |
|---|---|---|
| Target HQ | 1 | 1 |
| Target cancer risk | $10^{-5}$ | $10^{-5}$ |
| Averaging time (carcinogen/mutagen) | 70 yr × 365 d | 70 yr × 365 d |
| Averaging time (noncarcinogen) | Exposure duration × 365 d | Exposure duration × 365 d |
| Skin absorption factor | Semivolatile organic compound (SVOC) = 0.1 | SVOC = 0.1 |
| | Chemical-specific | Chemical-specific |
| Adherence factor–child | 0.2 mg/cm$^2$ | n/a[a] |
| Body weight–child | 15 kg (0–6 yr of age) | n/a |
| Cancer slope factor–oral (chemical-specific) | (mg/kg-d)$^{-1}$ | (mg/kg-d)$^{-1}$ |
| Inhalation unit risk (chemical-specific) | (µg/m$^3$) | (µg/m$^3$) |
| Exposure frequency | 350 d/yr | 225 d/yr |
| Exposure time | 24 h/d | 8 h/day |
| Exposure duration–child | 6 yr[b] | n/a |
| Age-adjusted ingestion factor for carcinogens | 36,750 mg/kg | n/a |
| Age-adjusted ingestion factor for mutagens | 25,550 mg/kg | n/a |
| Soil ingestion rate–child | 200 mg/d | n/a |
| Particulate emission factor | $6.61 \times 10^9$ m$^3$/kg | $6.61 \times 10^9$ m$^3$/kg |
| Reference dose–oral (chemical-specific) | (mg/kg-d) | (mg/kg-d) |
| Reference dose–inhalation (chemical-specific) | (mg/kg-d) | (mg/kg-d) |
| Exposed surface area–child | 2690 cm$^2$/d | n/a |
| Age-adjusted skin contact factor for carcinogens | 112266 mg/kg | n/a |
| Age-adjusted skin contact factor for mutagens | 166833 mg/kg | n/a |
| Volatilization factor for soil (chemical-specific) | (m$^3$/kg) | (m$^3$/kg) |
| Body weight–adult | 80 kg | 80 kg |
| Exposure duration[c] | 30 yr[d] | 25 yr |
| Adherence factor–adult | 0.07 mg/cm$^2$ | 0.12 mg/cm$^2$ |
| Soil ingestion rate–adult | 100 mg/d | 100 mg/d |
| Exposed surface area–adult | 6032 cm$^2$/d | 3470 cm$^2$/d |

Note: Parameter values from NMED (2014, 600115).

[a] n/a = Not applicable.

[b] The child exposure duration for mutagens is subdivided into 0–2 yr and 2–6 yr.

[c] Exposure duration for lifetime resident is 26 yr. For carcinogens, the exposures are combined for child (6 yr) and adult (20 yr).

[d] The adult exposure duration for mutagens is subdivided into 6–16 yr and 16–30 yr.

**Table G-4.2-1**
**Residential Carcinogenic**
**Screening Evaluation for AOC 57-006**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Chromium | 58.6 | 96.6 | 6.07E-06 |
| Bis(2-ethylhexyl)phthalate | 0.269 | 380 | 7.08E-09 |
| | | **Total Excess Cancer Risk** | **6E-06** |

*SSLs from NMED (2014, 600115).

**Table G-4.2-2**
**Residential Noncarcinogenic**
**Screening Evaluation for AOC 57-006**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | HQ |
|---|---|---|---|
| Antimony | 1.12(U) | 31.3 | 3.58E-02 |
| Barium | 99.9 | 15,600 | 6.40E-03 |
| Copper | 13.5 | 3130 | 4.33E-03 |
| Selenium | 0.358 | 391 | 9.16E-04 |
| Zinc | 64 | 23,500 | 2.72E-03 |
| Methylene Chloride | 0.0028 | 409 | 6.85E-06 |
| Trichloroethene | 0.000726 | 6.77 | 1.07E-04 |
| | | **HI** | **0.05** |

*SSLs from NMED (2014, 600115).

**Table G-4.2-3**
**Industrial Noncarcinogenic**
**Screening Evaluation for AOC 57-007**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | HQ |
|---|---|---|---|
| Antimony | 0.488 | 519 | 9.40E-04 |
| Perchlorate | 0.000841 | 908 | 9.26E-07 |
| Zinc | 55.7 | 389,000 | 1.43E-04 |
| Fluoranthene | 0.0145 | 33,700 | 4.30E-07 |
| Methylene Chloride | 0.00277 | 5130 | 5.40E-07 |
| Phenanthrene | 0.0134 | 25,300 | 5.30E-07 |
| Trichloroethene | 0.00294 | 36.5 | 8.05E-05 |
| | | **HI** | **0.001** |

*SSLs from NMED (2014, 600115).

**Table G-4.2-4**
**Residential Carcinogenic**
**Screening Evaluation for AOC 57-007**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 1.95 | 4.25 | 4.59E-06 |
| Chromium | 25.4 | 96.6 | 2.63E-06 |
| Bis(2-ethylhexyl)phthalate | 0.13 | 380 | 3.42E-09 |
| Butylbenzylphthalate | 0.339 | 2800[b] | 1.21E-09 |
| Dichlorobenzene[1,4-] | 0.00043 | 32.8 | 1.31E-10 |
| **Total Excess Cancer Risk** | | | **7E-06** |

[a] SSLs from NMED (2014, 600115) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table G-4.2-5**
**Residential Noncarcinogenic**
**Screening Evaluation for AOC 57-007**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | HQ |
|---|---|---|---|
| Antimony | 0.474 | 31.3 | 1.51E-02 |
| Barium | 102 | 15,600 | 6.54E-03 |
| Copper | 14.2 | 3130 | 4.54E-03 |
| Cyanide (Total) | 0.73 | 11.2 | 6.52E-02 |
| Lead | 13.5 | 400 | 3.37E-02 |
| Mercury | 3.56 | 23.5 | 1.51E-01 |
| Perchlorate | 0.00112 | 54.8 | 2.04E-05 |
| Selenium | 1.11(U) | 391 | 2.84E-03 |
| Silver | 1.62 | 391 | 4.13E-03 |
| Zinc | 58.6 | 23,500 | 2.49E-03 |
| Benzoic Acid | 2.83 | 250,000[b] | 1.13E-05 |
| Fluoranthene | 0.0145 | 2320 | 6.25E-06 |
| Methylene Chloride | 0.00299 | 409 | 7.31E-06 |
| Phenanthrene | 0.0134 | 1740 | 7.70E-06 |
| Trichloroethene | 0.00294 | 6.77 | 4.34E-04 |
| **HI** | | | **0.3** |

[a] SSLs from NMED (2014, 600115) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table G-4.3-1**
**Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 57-006**

| COPC | EPC[a] (mg/kg) | Vapor-Intrusion Risk-Based Concentration[b] (mg/kg) | HQ |
|---|---|---|---|
| Methylene chloride | 0.0028 | 62.7 | 4.47E-05 |
| Tricloroethene | 0.000726 | 0.209 | 3.47E-03 |
| | | **HI** | **0.004** |

[a] Maximum detected concentration.
[b] Vapor-intrusion risk values generated by the Johnson and Ettinger advanced soil model.

**Table G-4.3-2**
**Residential Carcinogenic Screening of Vapor Intrusion for AOC 57-007**

| COPC | EPC[a] (mg/kg) | Vapor-Intrusion Risk-Based Concentration[b] (mg/kg) | Cancer Risk |
|---|---|---|---|
| Dichlorobenzene[1,4-] | 0.00043 | 0.27 | 1.62E-08 |
| | | **Total Excess Cancer Risk** | **2E-08** |

[a] Maximum detected concentration.
[b] Vapor-intrusion risk values generated by the Johnson and Ettinger advanced soil model.

**Table G-4.3-3**
**Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 57-007**

| COPC | EPC[a] (mg/kg) | Vapor-Intrusion Risk-Based Concentration[b] (mg/kg) | HQ |
|---|---|---|---|
| Methylene chloride | 0.00299 | 89.9 | 3.32E-05 |
| Trichloroethene | 0.00294 | 0.687 | 4.28E-03 |
| | | **HI** | **0.004** |

[a] Maximum detected concentration.
[b] Vapor-intrusion risk values generated by the Johnson and Ettinger advanced soil model.

**Table G-5.4-1**
**ESLs for Terrestrial Receptors**

| COPC | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | |
| Antimony | 46 | na* | na | na | na | na | 2.6 | 2.6 | 2.4 | 78 | 11 |
| Arsenic | 820 | 850 | 120 | 42 | 26 | 18 | 140 | 15 | 32 | 6.8 | 18 |
| Barium | 41000 | 28000 | 8600 | 820 | 930 | 1000 | 2900 | 1300 | 1800 | 330 | 110 |
| Chromium | 1800 | 1000 | 200 | 68 | 40 | 28 | 750 | 45 | 110 | na | na |
| Copper | 4000 | 1300 | 92 | 38 | 22 | 15 | 240 | 38 | 64 | 80 | 70 |
| Cyanide | 2800 | 0.59 | 0.4 | 0.1 | 0.1 | 0.1 | 660 | 310 | 340 | na | na |
| Lead | 3700 | 630 | 95 | 21 | 16 | 14 | 330 | 72 | 120 | 1700 | 120 |
| Mercury | 61 | 0.29 | 0.066 | 0.07 | 0.022 | 0.013 | 20 | 1.7 | 3 | 0.05 | 34 |
| Selenium | 90 | 81 | 4.3 | 1 | 0.87 | 0.75 | 1.9 | 0.66 | 0.83 | 4.1 | 0.52 |
| Silver | 4300 | 670 | 14 | 11 | 4.3 | 2.6 | 140 | 14 | 24 | na | 560 |
| Zinc | 7800 | 2400 | 250 | 350 | 85 | 48 | 1600 | 98 | 170 | 120 | 160 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | |
| Benzoic acid | 1800 | na | na | na | na | na | 3.7 | 1 | 1.3 | na | na |
| Bis(2-ethylhexyl)phthalate | 380 | 8.1 | 0.1 | 20 | 0.04 | 0.02 | 2400 | 0.59 | 1.1 | na | na |
| Butylbenzylphthalate | 18000 | na | na | na | na | na | 2000 | 90 | 160 | na | na |
| Dichlorobenzene[1,4-] | 380 | na | na | na | na | na | 10 | 0.88 | 1.5 | 1.2 | na |
| Fluoranthene | 3300 | na | na | na | na | na | 230 | 22 | 38 | 10 | na |
| Methylene Chloride | 4200 | na | na | na | na | na | 3 | 9 | 2.6 | na | 1600 |
| Phenanthrene | 1700 | na | na | na | na | na | 52 | 10 | 15 | 5.5 | na |
| Trichloroethene | 37000 | na | na | na | na | na | 150 | 42 | 55 | na | na |

Note: ESLs from ECORISK Database, Version 3.2 (LANL 2014, 262559).
*na = Not available.

**Table G-5.4-2**
**Minimum ESL Comparison for AOC 57-006**

| COPC | EPC (mg/kg) | ESL (mg/kg) | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 1.1(U) | 2.4 | Deer mouse | **0.46** |
| Zinc | 53.6 | 48 | American Robin (insectivore) | **1.12** |
| **Organic Chemicals (mg/kg)** | | | | |
| Methylene Chloride | 0.00248 | 2.6 | Deer mouse | 0.001 |
| Trichloroethene | 0.000539 | 42 | Montane Shrew | 0.00001 |

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

**Table G-5.4-3**
**HI Analysis for AOC 57-006**

| COPEC | EPC (mg/kg) | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 1.1(U) | 0.024 | na* | na | na | na | na | **0.42** | **0.42** | **0.46** | 0.014 | 0.1 |
| Zinc | 53.6 | 0.007 | 0.022 | 0.21 | 0.15 | **0.63** | **1.12** | 0.034 | **0.55** | **0.32** | **0.45** | 0.34 |
| | **HI** | 0.03 | 0.02 | 0.2 | 0.2 | 0.6 | 1 | 0.5 | 1 | 0.8 | 0.5 | 0.4 |

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.0. Data qualifiers are defined in Appendix A.
*na = Not available.

**Table G-5.4-4**
**Minimum ESL Comparison for AOC 57-007**

| COPC | EPC (mg/kg) | ESL (mg/kg) | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 0.475 | 2.4 | Deer mouse | 0.2 |
| Arsenic | 1.80 | 6.8 | Earthworm | 0.27 |
| Barium | 109.6 | 110 | Plant | **1** |
| Chromium | 23.1 | 28 | American Robin (insectivore) | **0.82** |
| Copper | 15.7 | 15 | American Robin (insectivore) | **1.05** |
| Cyanide (Total) | 0.73 | 0.1 | American Robin (all diets) | **7.3** |
| Lead | 13.8 | 14 | American Robin (insectivore) | **0.99** |
| Mercury | 4.04 | 0.013 | American Robin (insectivore) | **311** |
| Selenium | 1.11(U) | 0.52 | Plant | **2.13** |
| Silver | 3.08 | 2.6 | American Robin (insectivore) | **1.18** |
| Zinc | 59.5 | 48 | American Robin (insectivore) | **1.24** |
| **Organic Chemicals (mg/kg)** | | | | |
| Benzoic Acid | 2.83 | 1 | Montane Shrew | **2.83** |
| Bis(2-ethylhexyl)phthalate | 0.13 | 0.02 | American Robin (insectivore) | **6.5** |
| Butylbenzylphthalate | 0.339 | 90 | Montane Shrew | 0.0038 |
| Dichlorobenzene[1,4-] | 0.00043 | 0.88 | Montane Shrew | 0.00049 |
| Fluoranthene | 0.0145 | 10 | Earthworm | 0.0015 |
| Methylene Chloride | 0.00299 | 2.6 | Deer mouse | 0.0012 |
| Phenanthrene | 0.0134 | 5.5 | Earthworm | 0.0024 |
| Trichloroethene | 0.00294 | 42 | Montane Shrew | 0.00007 |

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

**Table G-5.4-5**
**HI Analysis for AOC 57-007**

| COPEC | EPC (mg/kg) | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | 109.6 | 0.0027 | 0.0039 | 0.013 | 0.13 | 0.12 | 0.11 | 0.038 | 0.084 | 0.061 | **0.33** | **1** |
| Chromium | 23.1 | 0.013 | 0.023 | 0.12 | **0.34** | **0.58** | **0.82** | 0.031 | **0.51** | 0.21 | na* | na |
| Copper | 15.7 | 0.0039 | 0.012 | 0.17 | **0.41** | **0.71** | **1.05** | 0.066 | **0.41** | 0.25 | 0.2 | 0.22 |
| Cyanide (Total) | 0.73 | 0.0003 | **1.24** | **1.83** | **7.3** | **7.3** | **7.3** | 0.0011 | 0.0024 | 0.0021 | na | na |
| Lead | 13.8 | 0.0037 | 0.022 | 0.15 | **0.66** | **0.86** | **0.99** | 0.042 | 0.19 | 0.12 | 0.0081 | 0.12 |
| Mercury | 4.04 | 0.066 | **13.9** | **61** | **57.7** | **184** | **311** | 0.2 | **2.38** | **1.35** | **80.8** | 0.12 |
| Selenium | 1.11(U) | 0.012 | 0.014 | 0.26 | **1.11** | **1.28** | **1.48** | **0.58** | **1.68** | **1.34** | 0.27 | **2.13** |
| Silver | 3.08 | 0.0007 | 0.0046 | 0.22 | 0.28 | **0.72** | **1.18** | 0.022 | 0.22 | 0.13 | na | 0.0055 |
| Zinc | 59.5 | 0.0076 | 0.025 | 0.24 | 0.17 | **0.7** | **1.24** | 0.037 | **0.61** | **0.35** | **0.5** | **0.37** |
| Benzoic Acid | 2.83 | 0.0016 | na | na | na | na | na | **0.76** | **2.83** | **2.18** | na | na |
| Bis(2-ethylhexyl)phthalate | 0.13 | 0.0003 | 0.016 | **1.3** | 0.0065 | **3.25** | **6.5** | 0.0001 | 0.22 | 0.12 | na | na |
| | **HI** | 0.1 | **15** | **66** | **68** | **199** | **332** | **2** | **9** | **6** | **82** | **4** |

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.
*na = Not available.

**Table G-5.5-1**
**PAUFs for Ecological Receptors for AOC 57-006**

| Receptor | HR (ha)[a] | Population Area (ha) | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000000236 |
| American Robin | 0.42 | 16.8 | 0.0000595 |
| Deer Mouse | 0.077 | 3 | 0.000333 |
| Desert Cottontail | 3.1 | 124 | 0.00000806 |
| Montane Shrew | 0.39 | 15.6 | 0.0000641 |
| Red Fox | 1038 | 41,520 | 0.0000000241 |

[a] Values from EPA (1993, 059384).

[b] PAUF is calculated as the area of the site (0.001 ha) divided by the population area.

**Table G-5.5-2**
**Adjusted HIs at AOC 57-006**

| COPECs | EPC (mg/kg) | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 1.1(U) | 5.8E-10 | na* | na | na | na | na | 3.4E-06 | 2.7E-05 | 0.00015 | 0.014 | 0.1 |
| Zinc | 53.6 | 1.7E-10 | 5.3E-09 | 5.1E-08 | 9.1E-06 | 3.7E-05 | 6.6E-05 | 2.7E-07 | 3.5E-05 | 0.00011 | **0.45** | **0.34** |
| | **Adjusted HI** | 8E-10 | 5E-09 | 5E-08 | 9E-06 | 4E-05 | 7E-05 | 4E-06 | 6E-05 | 0.0003 | 0.5 | 0.4 |

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.
*na = Not available.

**Table G-5.5-3**
**PAUFs for Ecological Receptors for AOC 57-007**

| Receptor | HR (ha)[a] | Population Area (ha) | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.0000071 |
| American Robin | 0.42 | 16.8 | 0.00179 |
| Deer Mouse | 0.077 | 3 | 0.01 |
| Desert Cottontail | 3.1 | 124 | 0.000242 |
| Montane Shrew | 0.39 | 15.6 | 0.00192 |
| Red Fox | 1038 | 41,520 | 0.00000072 |

[a] Values from EPA (1993, 059384).

[b] PAUF is calculated as the area of the site (0.03 ha) divided by the population area.

**Table G-5.5-4**
**Adjusted HIs for AOC 57-007**

| COPECs | EPC (mg/kg) | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | 109.6 | 1.9E-09 | 2.8E-08 | 9.0E-08 | 0.00024 | 0.00021 | 0.0002 | 9.1E-06 | 1.6E-04 | 6.1E-04 | **0.33** | **1** |
| Chromium | 23.1 | 9.3E-09 | 1.6E-07 | 8.2E-07 | 0.00061 | 0.001 | 0.0015 | 7.4E-06 | 0.00099 | 0.0021 | na* | na |
| Copper | 15.7 | 2.8E-09 | 8.6E-08 | 1.2E-06 | 0.00074 | 0.0013 | 0.0019 | 1.6E-05 | 0.0008 | 0.0025 | 0.2 | 0.22 |
| Cyanide (Total) | 0.73 | 1.9E-10 | 8.8E-06 | 1.3E-05 | 0.013 | 0.013 | 0.013 | 2.7E-07 | 4.5E-06 | 2.2E-05 | na | na |
| Lead | 13.8 | 2.7E-09 | 1.6E-07 | 1.0E-06 | 0.0012 | 0.0015 | 0.0018 | 1.0E-05 | 0.00037 | 0.0012 | 0.0081 | 0.12 |
| Mercury | 4.04 | 4.8E-08 | 9.9E-05 | 0.00043 | 0.1 | **0.33** | **0.56** | 4.9E-05 | 0.0046 | 0.014 | **80.8** | 0.12 |
| Selenium | 1.11(U) | 8.9E-09 | 9.7E-08 | 1.8E-06 | 0.002 | 0.0023 | 0.0026 | 0.00014 | 0.0032 | 0.013 | 0.27 | **2.13** |
| Silver | 3.08 | 5.2E-10 | 3.3E-08 | 1.6E-06 | 0.0005 | 0.0013 | 0.0021 | 5.3E-06 | 0.00042 | 0.0013 | na | 0.0055 |
| Zinc | 59.5 | 5.5E-09 | 1.8E-07 | 1.7E-06 | 0.0003 | 0.0013 | 0.0022 | 9.0E-06 | 0.0012 | 0.0035 | **0.5** | **0.37** |
| Benzoic Acid | 2.83 | 1.1E-09 | na | na | na | na | na | 0.00019 | 0.0054 | 0.022 | na | na |
| Bis(2-ethylhexyl)phthalate | 0.13 | 2.5E-10 | 1.1E-07 | 9.2E-06 | 1.2E-05 | 0.0058 | 0.012 | 1.3E-08 | 0.00042 | 0.0012 | na | na |
| **Adjusted HI** | | 8E-08 | 0.0001 | 0.0005 | 0.1 | 0.4 | 0.6 | 0.0004 | 0.02 | 0.06 | **82** | **4** |

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.
*na = Not available.

**Table G-5.5-5**
**LOAEL-Based ESLs for Terrestrial Receptors**

| COPEC | Receptor | LOAEL–Based ESL* (mg/kg) |
|---|---|---|
| Barium | Earthworm | 3200 |
| | Plant | 260 |
| Mercury | Earthworm | 0.5 |
| Selenium | Plant | 3 |
| Zinc | Earthworm | 930 |
| | Plant | 810 |

*LOAEL-based ESLs from ECORISK Database, Version 3.2 (LANL 2014, 262559).

**Table G-5.5-6**
**HI Analysis Using LOAEL-Based ESLs at AOC 57-007**

| COPEC | EPC (mg/kg) | Earthworm | Plant |
|---|---|---|---|
| Barium | 109.6 | 0.03 | **0.42** |
| Mercury | 4.04 | **8.08** | n/a* |
| Selenium | 1.11(U) | n/a | **0.37** |
| Zinc | 59.5 | 0.06 | 0.07 |
| | **HI** | **8** | 0.9 |

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.
*n/a = Not applicable.

# Attachment G-1

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*ProUCL Files*
*(on CD included with this document)*

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | UCL Statistics for Data Sets with Non-Detects | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | User Selected Options | | | | | | | | | |
| 4 | | | Date/Time of Computation | | 12/19/2014 3:01:05 PM | | | | | | | |
| 5 | | | From File | | ProUCLinput_57-006_0-10.xls | | | | | | | |
| 6 | | | Full Precision | | OFF | | | | | | | |
| 7 | | | Confidence Coefficient | | 95% | | | | | | | |
| 8 | | | umber of Bootstrap Operations | | 2000 | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | Barium | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | General Statistics | | | | | | |
| 14 | | | | Total Number of Observations | | 12 | | | Number of Distinct Observations | | 12 | |
| 15 | | | | | | | | | Number of Missing Observations | | 0 | |
| 16 | | | | Minimum | | 42.6 | | | Mean | | 85.54 | |
| 17 | | | | Maximum | | 136 | | | Median | | 77.5 | |
| 18 | | | | SD | | 27.71 | | | Std. Error of Mean | | 8 | |
| 19 | | | | Coefficient of Variation | | 0.324 | | | Skewness | | 0.541 | |
| 20 | | | | | | | | | | | | |
| 21 | | | | | | Normal GOF Test | | | | | | |
| 22 | | | | Shapiro Wilk Test Statistic | | 0.924 | | | Shapiro Wilk GOF Test | | | |
| 23 | | | | 5% Shapiro Wilk Critical Value | | 0.859 | | | Data appear Normal at 5% Significance Level | | | |
| 24 | | | | Lilliefors Test Statistic | | 0.253 | | | Lilliefors GOF Test | | | |
| 25 | | | | 5% Lilliefors Critical Value | | 0.256 | | | Data appear Normal at 5% Significance Level | | | |
| 26 | | | | | | Data appear Normal at 5% Significance Level | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | Assuming Normal Distribution | | | | | | |
| 29 | | | | 95% Normal UCL | | | | | 95% UCLs (Adjusted for Skewness) | | | |
| 30 | | | | 95% Student's-t UCL | | 99.91 | | | 95% Adjusted-CLT UCL (Chen-1995) | | 100 | |
| 31 | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 100.1 | |
| 32 | | | | | | | | | | | | |
| 33 | | | | | | Gamma GOF Test | | | | | | |
| 34 | | | | A-D Test Statistic | | 0.439 | | | Anderson-Darling Gamma GOF Test | | | |
| 35 | | | | 5% A-D Critical Value | | 0.73 | | | Detected data appear Gamma Distributed at 5% Significance Leve | | | |
| 36 | | | | K-S Test Statistic | | 0.218 | | | Kolmogrov-Smirnoff Gamma GOF Test | | | |
| 37 | | | | 5% K-S Critical Value | | 0.245 | | | Detected data appear Gamma Distributed at 5% Significance Leve | | | |
| 38 | | | | | | Detected data appear Gamma Distributed at 5% Significance Level | | | | | | |
| 39 | | | | | | | | | | | | |
| 40 | | | | | | Gamma Statistics | | | | | | |
| 41 | | | | k hat (MLE) | | 10.4 | | | k star (bias corrected MLE) | | 7.853 | |
| 42 | | | | Theta hat (MLE) | | 8.228 | | | Theta star (bias corrected MLE) | | 10.89 | |
| 43 | | | | nu hat (MLE) | | 249.5 | | | nu star (bias corrected) | | 188.5 | |
| 44 | | | | MLE Mean (bias corrected) | | 85.54 | | | MLE Sd (bias corrected) | | 30.52 | |
| 45 | | | | | | | | | Approximate Chi Square Value (0.05) | | 157.7 | |
| 46 | | | | Adjusted Level of Significance | | 0.029 | | | Adjusted Chi Square Value | | 153.4 | |
| 47 | | | | | | | | | | | | |
| 48 | | | | | | Assuming Gamma Distribution | | | | | | |
| 49 | | | | 95% Approximate Gamma UCL (use when n>=50)) | | 102.2 | | | 95% Adjusted Gamma UCL (use when n<50) | | 105.1 | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | | | | | | | | |
| 51 | | | | | | **Lognormal GOF Test** | | | | | | |
| 52 | | | | | Shapiro Wilk Test Statistic | 0.941 | | **Shapiro Wilk Lognormal GOF Test** | | | | |
| 53 | | | | | 5% Shapiro Wilk Critical Value | 0.859 | | Data appear Lognormal at 5% Significance Level | | | | |
| 54 | | | | | Lilliefors Test Statistic | 0.21 | | **Lilliefors Lognormal GOF Test** | | | | |
| 55 | | | | | 5% Lilliefors Critical Value | 0.256 | | Data appear Lognormal at 5% Significance Level | | | | |
| 56 | | | | | **Data appear Lognormal at 5% Significance Level** | | | | | | | |
| 57 | | | | | | | | | | | | |
| 58 | | | | | | **Lognormal Statistics** | | | | | | |
| 59 | | | | | Minimum of Logged Data | 3.752 | | | | Mean of logged Data | 4.4 | |
| 60 | | | | | Maximum of Logged Data | 4.913 | | | | SD of logged Data | 0.33 | |
| 61 | | | | | | | | | | | | |
| 62 | | | | | | **Assuming Lognormal Distribution** | | | | | | |
| 63 | | | | | 95% H-UCL | 104.5 | | | | 90% Chebyshev (MVUE) UCL | 110.4 | |
| 64 | | | | | 95% Chebyshev (MVUE) UCL | 121.6 | | | | 97.5% Chebyshev (MVUE) UCL | 137.2 | |
| 65 | | | | | 99% Chebyshev (MVUE) UCL | 167.8 | | | | | | |
| 66 | | | | | | | | | | | | |
| 67 | | | | | | **Nonparametric Distribution Free UCL Statistics** | | | | | | |
| 68 | | | | | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | |
| 69 | | | | | | | | | | | | |
| 70 | | | | | | **Nonparametric Distribution Free UCLs** | | | | | | |
| 71 | | | | | 95% CLT UCL | 98.7 | | | | 95% Jackknife UCL | 99.91 | |
| 72 | | | | | 95% Standard Bootstrap UCL | 97.99 | | | | 95% Bootstrap-t UCL | 101.8 | |
| 73 | | | | | 95% Hall's Bootstrap UCL | 101 | | | | 95% Percentile Bootstrap UCL | 98.48 | |
| 74 | | | | | 95% BCA Bootstrap UCL | 98.77 | | | | | | |
| 75 | | | | | 90% Chebyshev(Mean, Sd) UCL | 109.5 | | | | 95% Chebyshev(Mean, Sd) UCL | 120.4 | |
| 76 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 135.5 | | | | 99% Chebyshev(Mean, Sd) UCL | 165.1 | |
| 77 | | | | | | | | | | | | |
| 78 | | | | | | **Suggested UCL to Use** | | | | | | |
| 79 | | | | | 95% Student's-t UCL | 99.91 | | | | | | |
| 80 | | | | | | | | | | | | |
| 81 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 82 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 83 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 84 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 85 | | | | | | | | | | | | |
| 86 | | | | | | | | | | | | |
| 87 | **Chromium** | | | | | | | | | | | |
| 88 | | | | | | | | | | | | |
| 89 | | | | | | **General Statistics** | | | | | | |
| 90 | | | | | Total Number of Observations | 12 | | | | Number of Distinct Observations | 12 | |
| 91 | | | | | | | | | | Number of Missing Observations | 0 | |
| 92 | | | | | Minimum | 3.37 | | | | Mean | 25.39 | |
| 93 | | | | | Maximum | 113 | | | | Median | 7.105 | |
| 94 | | | | | SD | 35.43 | | | | Std. Error of Mean | 10.23 | |
| 95 | | | | | Coefficient of Variation | 1.396 | | | | Skewness | 1.866 | |
| 96 | | | | | | | | | | | | |
| 97 | | | | | | **Normal GOF Test** | | | | | | |
| 98 | | | | | Shapiro Wilk Test Statistic | 0.687 | | **Shapiro Wilk GOF Test** | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 99 | | | 5% Shapiro Wilk Critical Value | | 0.859 | | Data Not Normal at 5% Significance Level | | | | |
| 100 | | | Lilliefors Test Statistic | | 0.302 | | **Lilliefors GOF Test** | | | | |
| 101 | | | 5% Lilliefors Critical Value | | 0.256 | | Data Not Normal at 5% Significance Level | | | | |
| 102 | | | **Data Not Normal at 5% Significance Level** | | | | | | | | |
| 103 | | | | | | | | | | | |
| 104 | | | **Assuming Normal Distribution** | | | | | | | | |
| 105 | | | **95% Normal UCL** | | | | **95% UCLs (Adjusted for Skewness)** | | | | |
| 106 | | | 95% Student's-t UCL | | 43.76 | | 95% Adjusted-CLT UCL (Chen-1995) | | | | 48.1 |
| 107 | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | | 44.68 |
| 108 | | | | | | | | | | | |
| 109 | | | **Gamma GOF Test** | | | | | | | | |
| 110 | | | A-D Test Statistic | | 1.007 | | **Anderson-Darling Gamma GOF Test** | | | | |
| 111 | | | 5% A-D Critical Value | | 0.765 | | Data Not Gamma Distributed at 5% Significance Level | | | | |
| 112 | | | K-S Test Statistic | | 0.247 | | **Kolmogrov-Smirnoff Gamma GOF Test** | | | | |
| 113 | | | 5% K-S Critical Value | | 0.255 | | Detected data appear Gamma Distributed at 5% Significance Leve | | | | |
| 114 | | | **Detected data follow Appr. Gamma Distribution at 5% Significance Level** | | | | | | | | |
| 115 | | | | | | | | | | | |
| 116 | | | **Gamma Statistics** | | | | | | | | |
| 117 | | | k hat (MLE) | | 0.769 | | k star (bias corrected MLE) | | | | 0.632 |
| 118 | | | Theta hat (MLE) | | 33.01 | | Theta star (bias corrected MLE) | | | | 40.14 |
| 119 | | | nu hat (MLE) | | 18.46 | | nu star (bias corrected) | | | | 15.18 |
| 120 | | | MLE Mean (bias corrected) | | 25.39 | | MLE Sd (bias corrected) | | | | 31.93 |
| 121 | | | | | | | Approximate Chi Square Value (0.05) | | | | 7.387 |
| 122 | | | Adjusted Level of Significance | | 0.029 | | Adjusted Chi Square Value | | | | 6.574 |
| 123 | | | | | | | | | | | |
| 124 | | | **Assuming Gamma Distribution** | | | | | | | | |
| 125 | | | 95% Approximate Gamma UCL (use when n>=50) | | 52.18 | | 95% Adjusted Gamma UCL (use when n<50) | | | | 58.63 |
| 126 | | | | | | | | | | | |
| 127 | | | **Lognormal GOF Test** | | | | | | | | |
| 128 | | | Shapiro Wilk Test Statistic | | 0.857 | | **Shapiro Wilk Lognormal GOF Test** | | | | |
| 129 | | | 5% Shapiro Wilk Critical Value | | 0.859 | | Data Not Lognormal at 5% Significance Level | | | | |
| 130 | | | Lilliefors Test Statistic | | 0.208 | | **Lilliefors Lognormal GOF Test** | | | | |
| 131 | | | 5% Lilliefors Critical Value | | 0.256 | | Data appear Lognormal at 5% Significance Level | | | | |
| 132 | | | **Data appear Approximate Lognormal at 5% Significance Level** | | | | | | | | |
| 133 | | | | | | | | | | | |
| 134 | | | **Lognormal Statistics** | | | | | | | | |
| 135 | | | Minimum of Logged Data | | 1.215 | | Mean of logged Data | | | | 2.459 |
| 136 | | | Maximum of Logged Data | | 4.727 | | SD of logged Data | | | | 1.245 |
| 137 | | | | | | | | | | | |
| 138 | | | **Assuming Lognormal Distribution** | | | | | | | | |
| 139 | | | 95% H-UCL | | 90.14 | | 90% Chebyshev (MVUE) UCL | | | | 49.88 |
| 140 | | | 95% Chebyshev (MVUE) UCL | | 62.06 | | 97.5% Chebyshev (MVUE) UCL | | | | 78.98 |
| 141 | | | 99% Chebyshev (MVUE) UCL | | 112.2 | | | | | | |
| 142 | | | | | | | | | | | |
| 143 | | | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | |
| 144 | | | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | | |
| 145 | | | | | | | | | | | |
| 146 | | | **Nonparametric Distribution Free UCLs** | | | | | | | | |
| 147 | | | 95% CLT UCL | | 42.22 | | 95% Jackknife UCL | | | | 43.76 |

| | | | | |
|---|---|---|---|---|
| 95% Standard Bootstrap UCL | 41.27 | | 95% Bootstrap-t UCL | 72.18 |
| 95% Hall's Bootstrap UCL | 91.19 | | 95% Percentile Bootstrap UCL | 41.7 |
| 95% BCA Bootstrap UCL | 48.43 | | | |
| 90% Chebyshev(Mean, Sd) UCL | 56.08 | | 95% Chebyshev(Mean, Sd) UCL | 69.98 |
| 97.5% Chebyshev(Mean, Sd) UCL | 89.27 | | 99% Chebyshev(Mean, Sd) UCL | 127.2 |

**Suggested UCL to Use**

| | |
|---|---|
| 95% Adjusted Gamma UCL | 58.63 |

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. For additional insight the user may want to consult a statistician.

**Copper**

**General Statistics**

| | | | |
|---|---|---|---|
| Total Number of Observations | 12 | Number of Distinct Observations | 12 |
| | | Number of Missing Observations | 0 |
| Minimum | 2.22 | Mean | 5.248 |
| Maximum | 26 | Median | 3.24 |
| SD | 6.587 | Std. Error of Mean | 1.901 |
| Coefficient of Variation | 1.255 | Skewness | 3.369 |

**Normal GOF Test**

| | | |
|---|---|---|
| Shapiro Wilk Test Statistic | 0.441 | **Shapiro Wilk GOF Test** |
| 5% Shapiro Wilk Critical Value | 0.859 | Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.435 | **Lilliefors GOF Test** |
| 5% Lilliefors Critical Value | 0.256 | Data Not Normal at 5% Significance Level |

**Data Not Normal at 5% Significance Level**

**Assuming Normal Distribution**

| **95% Normal UCL** | | **95% UCLs (Adjusted for Skewness)** | |
|---|---|---|---|
| 95% Student's-t UCL | 8.662 | 95% Adjusted-CLT UCL (Chen-1995) | 10.35 |
| | | 95% Modified-t UCL (Johnson-1978) | 8.97 |

**Gamma GOF Test**

| | | |
|---|---|---|
| A-D Test Statistic | 2.071 | **Anderson-Darling Gamma GOF Test** |
| 5% A-D Critical Value | 0.743 | Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.349 | **Kolmogrov-Smirnoff Gamma GOF Test** |
| 5% K-S Critical Value | 0.249 | Data Not Gamma Distributed at 5% Significance Level |

**Data Not Gamma Distributed at 5% Significance Level**

**Gamma Statistics**

| | | | |
|---|---|---|---|
| k hat (MLE) | 1.808 | k star (bias corrected MLE) | 1.412 |
| Theta hat (MLE) | 2.902 | Theta star (bias corrected MLE) | 3.717 |
| nu hat (MLE) | 43.39 | nu star (bias corrected) | 33.88 |
| MLE Mean (bias corrected) | 5.248 | MLE Sd (bias corrected) | 4.417 |

| | | | | |
|---|---|---|---|---|
| | | | Approximate Chi Square Value (0.05) | 21.57 |
| | Adjusted Level of Significance | 0.029 | Adjusted Chi Square Value | 20.08 |

**Assuming Gamma Distribution**

| | | | |
|---|---|---|---|
| 95% Approximate Gamma UCL (use when n>=50)) | 8.243 | 95% Adjusted Gamma UCL (use when n<50) | 8.854 |

**Lognormal GOF Test**

| | | | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.682 | **Shapiro Wilk Lognormal GOF Test** | |
| 5% Shapiro Wilk Critical Value | 0.859 | Data Not Lognormal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.271 | **Lilliefors Lognormal GOF Test** | |
| 5% Lilliefors Critical Value | 0.256 | Data Not Lognormal at 5% Significance Level | |

**Data Not Lognormal at 5% Significance Level**

**Lognormal Statistics**

| | | | |
|---|---|---|---|
| Minimum of Logged Data | 0.798 | Mean of logged Data | 1.356 |
| Maximum of Logged Data | 3.258 | SD of logged Data | 0.644 |

**Assuming Lognormal Distribution**

| | | | |
|---|---|---|---|
| 95% H-UCL | 7.516 | 90% Chebyshev (MVUE) UCL | 7.392 |
| 95% Chebyshev (MVUE) UCL | 8.619 | 97.5% Chebyshev (MVUE) UCL | 10.32 |
| 99% Chebyshev (MVUE) UCL | 13.67 | | |

**Nonparametric Distribution Free UCL Statistics**

**Data do not follow a Discernible Distribution (0.05)**

**Nonparametric Distribution Free UCLs**

| | | | |
|---|---|---|---|
| 95% CLT UCL | 8.375 | 95% Jackknife UCL | 8.662 |
| 95% Standard Bootstrap UCL | 8.232 | 95% Bootstrap-t UCL | 25.65 |
| 95% Hall's Bootstrap UCL | 21.37 | 95% Percentile Bootstrap UCL | 8.938 |
| 95% BCA Bootstrap UCL | 10.85 | | |
| 90% Chebyshev(Mean, Sd) UCL | 10.95 | 95% Chebyshev(Mean, Sd) UCL | 13.54 |
| 97.5% Chebyshev(Mean, Sd) UCL | 17.12 | 99% Chebyshev(Mean, Sd) UCL | 24.17 |

**Suggested UCL to Use**

| | |
|---|---|
| 95% Chebyshev (Mean, Sd) UCL | 13.54 |

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. For additional insight the user may want to consult a statistician.

**Zinc**

**General Statistics**

| | | | |
|---|---|---|---|
| Total Number of Observations | 12 | Number of Distinct Observations | 11 |
| | | Number of Missing Observations | 0 |
| Minimum | 44.5 | Mean | 58.78 |
| Maximum | 75.1 | Median | 59.65 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 246 | | | | | SD | 10.09 | | | | Std. Error of Mean | 2.912 |
| 247 | | | | | Coefficient of Variation | 0.172 | | | | Skewness | 0.124 |
| 248 | | | | | | | | | | | |
| 249 | | | | | | **Normal GOF Test** | | | | | |
| 250 | | | | | Shapiro Wilk Test Statistic | 0.957 | | **Shapiro Wilk GOF Test** | | | |
| 251 | | | | | 5% Shapiro Wilk Critical Value | 0.859 | | Data appear Normal at 5% Significance Level | | | |
| 252 | | | | | Lilliefors Test Statistic | 0.13 | | **Lilliefors GOF Test** | | | |
| 253 | | | | | 5% Lilliefors Critical Value | 0.256 | | Data appear Normal at 5% Significance Level | | | |
| 254 | | | | | **Data appear Normal at 5% Significance Level** | | | | | | |
| 255 | | | | | | | | | | | |
| 256 | | | | | | **Assuming Normal Distribution** | | | | | |
| 257 | | | | **95% Normal UCL** | | | | **95% UCLs (Adjusted for Skewness)** | | | |
| 258 | | | | | 95% Student's-t UCL | 64 | | 95% Adjusted-CLT UCL (Chen-1995) | | | 63.68 |
| 259 | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | 64.02 |
| 260 | | | | | | | | | | | |
| 261 | | | | | | **Gamma GOF Test** | | | | | |
| 262 | | | | | A-D Test Statistic | 0.239 | | **Anderson-Darling Gamma GOF Test** | | | |
| 263 | | | | | 5% A-D Critical Value | 0.731 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | |
| 264 | | | | | K-S Test Statistic | 0.136 | | **Kolmogrov-Smirnoff Gamma GOF Test** | | | |
| 265 | | | | | 5% K-S Critical Value | 0.245 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | |
| 266 | | | | | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | |
| 267 | | | | | | | | | | | |
| 268 | | | | | | **Gamma Statistics** | | | | | |
| 269 | | | | | k hat (MLE) | 36.72 | | k star (bias corrected MLE) | | | 27.59 |
| 270 | | | | | Theta hat (MLE) | 1.601 | | Theta star (bias corrected MLE) | | | 2.13 |
| 271 | | | | | nu hat (MLE) | 881.2 | | nu star (bias corrected) | | | 662.2 |
| 272 | | | | | MLE Mean (bias corrected) | 58.78 | | MLE Sd (bias corrected) | | | 11.19 |
| 273 | | | | | | | | Approximate Chi Square Value (0.05) | | | 603.5 |
| 274 | | | | | Adjusted Level of Significance | 0.029 | | Adjusted Chi Square Value | | | 595 |
| 275 | | | | | | | | | | | |
| 276 | | | | | | **Assuming Gamma Distribution** | | | | | |
| 277 | | | | | 95% Approximate Gamma UCL (use when n>=50)) | 64.49 | | 95% Adjusted Gamma UCL (use when n<50) | | | 65.42 |
| 278 | | | | | | | | | | | |
| 279 | | | | | | **Lognormal GOF Test** | | | | | |
| 280 | | | | | Shapiro Wilk Test Statistic | 0.955 | | **Shapiro Wilk Lognormal GOF Test** | | | |
| 281 | | | | | 5% Shapiro Wilk Critical Value | 0.859 | | Data appear Lognormal at 5% Significance Level | | | |
| 282 | | | | | Lilliefors Test Statistic | 0.124 | | **Lilliefors Lognormal GOF Test** | | | |
| 283 | | | | | 5% Lilliefors Critical Value | 0.256 | | Data appear Lognormal at 5% Significance Level | | | |
| 284 | | | | | **Data appear Lognormal at 5% Significance Level** | | | | | | |
| 285 | | | | | | | | | | | |
| 286 | | | | | | **Lognormal Statistics** | | | | | |
| 287 | | | | | Minimum of Logged Data | 3.795 | | Mean of logged Data | | | 4.06 |
| 288 | | | | | Maximum of Logged Data | 4.319 | | SD of logged Data | | | 0.173 |
| 289 | | | | | | | | | | | |
| 290 | | | | | | **Assuming Lognormal Distribution** | | | | | |
| 291 | | | | | 95% H-UCL | 64.74 | | 90% Chebyshev (MVUE) UCL | | | 67.64 |
| 292 | | | | | 95% Chebyshev (MVUE) UCL | 71.65 | | 97.5% Chebyshev (MVUE) UCL | | | 77.22 |
| 293 | | | | | 99% Chebyshev (MVUE) UCL | 88.16 | | | | | |
| 294 | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 295 | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | | |
| 296 | | | | | Data appear to follow a Discernible Distribution at 5% Significance Level | | | | | | | |
| 297 | | | | | | | | | | | | |
| 298 | | | | | Nonparametric Distribution Free UCLs | | | | | | | |
| 299 | | | | | 95% CLT UCL | 63.56 | | | 95% Jackknife UCL | | | 64 |
| 300 | | | | | 95% Standard Bootstrap UCL | 63.41 | | | 95% Bootstrap-t UCL | | | 64.21 |
| 301 | | | | | 95% Hall's Bootstrap UCL | 63.45 | | | 95% Percentile Bootstrap UCL | | | 63.54 |
| 302 | | | | | 95% BCA Bootstrap UCL | 63.6 | | | | | | |
| 303 | | | | | 90% Chebyshev(Mean, Sd) UCL | 67.51 | | | 95% Chebyshev(Mean, Sd) UCL | | | 71.47 |
| 304 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 76.96 | | | 99% Chebyshev(Mean, Sd) UCL | | | 87.75 |
| 305 | | | | | | | | | | | | |
| 306 | | | | | Suggested UCL to Use | | | | | | | |
| 307 | | | | | 95% Student's-t UCL | 64 | | | | | | |
| 308 | | | | | | | | | | | | |
| 309 | | | | | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | |
| 310 | | | | | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | |
| 311 | | | | | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | |
| 312 | | | | | For additional insight the user may want to consult a statistician. | | | | | | | |
| 313 | | | | | | | | | | | | |
| 314 | Uranium-235/236 | | | | | | | | | | | |
| 315 | | | | | | | | | | | | |
| 316 | | | | | General Statistics | | | | | | | |
| 317 | | | | | Total Number of Observations | 12 | | | Number of Distinct Observations | | | 11 |
| 318 | | | | | Number of Detects | 5 | | | Number of Non-Detects | | | 7 |
| 319 | | | | | Number of Distinct Detects | 5 | | | Number of Distinct Non-Detects | | | 7 |
| 320 | | | | | Minimum Detect | 0.0717 | | | Minimum Non-Detect | | | -0.0163 |
| 321 | | | | | Maximum Detect | 0.0956 | | | Maximum Non-Detect | | | 0.0717 |
| 322 | | | | | Variance Detects | 8.9043E-5 | | | Percent Non-Detects | | | 58.33% |
| 323 | | | | | Mean Detects | 0.0815 | | | SD Detects | | | 0.00944 |
| 324 | | | | | Median Detects | 0.0795 | | | CV Detects | | | 0.116 |
| 325 | | | | | Skewness Detects | 0.811 | | | Kurtosis Detects | | | -0.0563 |
| 326 | | | | | | | | | | | | |
| 327 | | | | | Normal GOF Test on Detects Only | | | | | | | |
| 328 | | | | | Shapiro Wilk Test Statistic | 0.952 | | | Shapiro Wilk GOF Test | | | |
| 329 | | | | | 5% Shapiro Wilk Critical Value | 0.762 | | | Detected Data appear Normal at 5% Significance Level | | | |
| 330 | | | | | Lilliefors Test Statistic | 0.186 | | | Lilliefors GOF Test | | | |
| 331 | | | | | 5% Lilliefors Critical Value | 0.396 | | | Detected Data appear Normal at 5% Significance Level | | | |
| 332 | | | | | Detected Data appear Normal at 5% Significance Level | | | | | | | |
| 333 | | | | | | | | | | | | |
| 334 | | | | | Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | | | | | |
| 335 | | | | | Mean | 0.0245 | | | Standard Error of Mean | | | 0.0157 |
| 336 | | | | | SD | 0.0485 | | | 95% KM (BCA) UCL | | | 0.0707 |
| 337 | | | | | 95% KM (t) UCL | 0.0526 | | | 95% KM (Percentile Bootstrap) UCL | | | 0.0681 |
| 338 | | | | | 95% KM (z) UCL | 0.0502 | | | 95% KM Bootstrap t UCL | | | 0.0339 |
| 339 | | | | | 90% KM Chebyshev UCL | 0.0715 | | | 95% KM Chebyshev UCL | | | 0.0928 |
| 340 | | | | | 97.5% KM Chebyshev UCL | 0.122 | | | 99% KM Chebyshev UCL | | | 0.18 |
| 341 | | | | | | | | | | | | |
| 342 | | | | | Gamma GOF Tests on Detected Observations Only | | | | | | | |
| 343 | | | | | A-D Test Statistic | 0.229 | | | Anderson-Darling GOF Test | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 344 | | | | | 5% A-D Critical Value | 0.678 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 345 | | | | | K-S Test Statistic | 0.184 | | | **Kolmogrov-Smirnoff GOF** | | | |
| 346 | | | | | 5% K-S Critical Value | 0.357 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 347 | | | | | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | |
| 348 | | | | | | | | | | | | |
| 349 | | | | | | **Gamma Statistics on Detected Data Only** | | | | | | |
| 350 | | | | | k hat (MLE) | 96.16 | | | k star (bias corrected MLE) | | | 38.6 |
| 351 | | | | | Theta hat (MLE) | 8.4798E-4 | | | Theta star (bias corrected MLE) | | | 0.00211 |
| 352 | | | | | nu hat (MLE) | 961.6 | | | nu star (bias corrected) | | | 386 |
| 353 | | | | | MLE Mean (bias corrected) | 0.0815 | | | MLE Sd (bias corrected) | | | 0.0131 |
| 354 | | | | | | | | | | | | |
| 355 | | | | | | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | |
| 356 | | | | | k hat (KM) | 0.254 | | | nu hat (KM) | | | 6.097 |
| 357 | | | | | | | | | Adjusted Level of Significance (β) | | | 0.029 |
| 358 | | | | | Approximate Chi Square Value (6.10, α) | 1.69 | | | Adjusted Chi Square Value (6.10, β) | | | 1.361 |
| 359 | 95% Gamma Approximate KM-UCL (use when n>=50) | | | | | 0.0883 | | 95% Gamma Adjusted KM-UCL (use when n<50) | | | | 0.11 |
| 360 | | | | | | | | | | | | |
| 361 | | | | | | **DL/2 Statistics** | | | | | | |
| 362 | | | | | Mean in Original Scale | 0.0478 | | | SD in Original Scale | | | 0.0324 |
| 363 | | | | | 95% t UCL (Assumes normality) | 0.0646 | | | | | | |
| 364 | | | | | **DL/2 is not a recommended method, provided for comparisons and historical reasons** | | | | | | | |
| 365 | | | | | | | | | | | | |
| 366 | | | | | | **Nonparametric Distribution Free UCL Statistics** | | | | | | |
| 367 | | | | | **Detected Data appear Normal Distributed at 5% Significance Level** | | | | | | | |
| 368 | | | | | | | | | | | | |
| 369 | | | | | | **Suggested UCL to Use** | | | | | | |
| 370 | | | | | 95% KM (t) UCL | 0.0526 | | | 95% KM (Percentile Bootstrap) UCL | | | 0.0681 |
| 371 | | | | | | | | | | | | |
| 372 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 373 | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | | | | | |
| 374 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 375 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statisticiar | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | **UCL Statistics for Data Sets with Non-Detects** | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | User Selected Options | | | | | | | | | | | |
| 4 | Date/Time of Computation | | | 12/19/2014 3:01:44 PM | | | | | | | | |
| 5 | From File | | | ProUCLinput_57-007_0-5.xls | | | | | | | | |
| 6 | Full Precision | | | OFF | | | | | | | | |
| 7 | Confidence Coefficient | | | 95% | | | | | | | | |
| 8 | umber of Bootstrap Operations | | | 2000 | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | **Aluminum** | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | **General Statistics** | | | | | | | | | | | |
| 14 | Total Number of Observations | | | | | 29 | Number of Distinct Observations | | | | | 28 |
| 15 | | | | | | | Number of Missing Observations | | | | | 0 |
| 16 | Minimum | | | | | 2540 | Mean | | | | | 5883 |
| 17 | Maximum | | | | | 29600 | Median | | | | | 4830 |
| 18 | SD | | | | | 4818 | Std. Error of Mean | | | | | 894.8 |
| 19 | Coefficient of Variation | | | | | 0.819 | Skewness | | | | | 4.54 |
| 20 | | | | | | | | | | | | |
| 21 | **Normal GOF Test** | | | | | | | | | | | |
| 22 | Shapiro Wilk Test Statistic | | | | | 0.474 | **Shapiro Wilk GOF Test** | | | | | |
| 23 | 5% Shapiro Wilk Critical Value | | | | | 0.926 | Data Not Normal at 5% Significance Level | | | | | |
| 24 | Lilliefors Test Statistic | | | | | 0.321 | **Lilliefors GOF Test** | | | | | |
| 25 | 5% Lilliefors Critical Value | | | | | 0.165 | Data Not Normal at 5% Significance Level | | | | | |
| 26 | **Data Not Normal at 5% Significance Level** | | | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | **Assuming Normal Distribution** | | | | | | | | | | | |
| 29 | **95% Normal UCL** | | | | | | **95% UCLs (Adjusted for Skewness)** | | | | | |
| 30 | 95% Student's-t UCL | | | | | 7406 | 95% Adjusted-CLT UCL (Chen-1995) | | | | | 8161 |
| 31 | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | | | 7531 |
| 32 | | | | | | | | | | | | |
| 33 | **Gamma GOF Test** | | | | | | | | | | | |
| 34 | A-D Test Statistic | | | | | 2.121 | **Anderson-Darling Gamma GOF Test** | | | | | |
| 35 | 5% A-D Critical Value | | | | | 0.751 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 36 | K-S Test Statistic | | | | | 0.249 | **Kolmogrov-Smirnoff Gamma GOF Test** | | | | | |
| 37 | 5% K-S Critical Value | | | | | 0.164 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 38 | **Data Not Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 39 | | | | | | | | | | | | |
| 40 | **Gamma Statistics** | | | | | | | | | | | |
| 41 | k hat (MLE) | | | | | 3.774 | k star (bias corrected MLE) | | | | | 3.407 |
| 42 | Theta hat (MLE) | | | | | 1559 | Theta star (bias corrected MLE) | | | | | 1727 |
| 43 | nu hat (MLE) | | | | | 218.9 | nu star (bias corrected) | | | | | 197.6 |
| 44 | MLE Mean (bias corrected) | | | | | 5883 | MLE Sd (bias corrected) | | | | | 3188 |
| 45 | | | | | | | Approximate Chi Square Value (0.05) | | | | | 166.1 |
| 46 | Adjusted Level of Significance | | | | | 0.0407 | Adjusted Chi Square Value | | | | | 164.3 |
| 47 | | | | | | | | | | | | |
| 48 | **Assuming Gamma Distribution** | | | | | | | | | | | |
| 49 | 95% Approximate Gamma UCL (use when n>=50)) | | | | | 7000 | 95% Adjusted Gamma UCL (use when n<50) | | | | | 7074 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | | | | | | | | |
| 51 | | | | | | Lognormal GOF Test | | | | | | |
| 52 | | | | | Shapiro Wilk Test Statistic | 0.841 | Shapiro Wilk Lognormal GOF Test | | | | | |
| 53 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | Data Not Lognormal at 5% Significance Level | | | | | |
| 54 | | | | | Lilliefors Test Statistic | 0.197 | Lilliefors Lognormal GOF Test | | | | | |
| 55 | | | | | 5% Lilliefors Critical Value | 0.165 | Data Not Lognormal at 5% Significance Level | | | | | |
| 56 | | | | | Data Not Lognormal at 5% Significance Level | | | | | | | |
| 57 | | | | | | | | | | | | |
| 58 | | | | | Lognormal Statistics | | | | | | | |
| 59 | | | | | Minimum of Logged Data | 7.84 | | | | Mean of logged Data | | 8.542 |
| 60 | | | | | Maximum of Logged Data | 10.3 | | | | SD of logged Data | | 0.452 |
| 61 | | | | | | | | | | | | |
| 62 | | | | | Assuming Lognormal Distribution | | | | | | | |
| 63 | | | | | 95% H-UCL | 6681 | | | | 90% Chebyshev (MVUE) UCL | | 7129 |
| 64 | | | | | 95% Chebyshev (MVUE) UCL | 7797 | | | | 97.5% Chebyshev (MVUE) UCL | | 8725 |
| 65 | | | | | 99% Chebyshev (MVUE) UCL | 10547 | | | | | | |
| 66 | | | | | | | | | | | | |
| 67 | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | | |
| 68 | | | | | Data do not follow a Discernible Distribution (0.05) | | | | | | | |
| 69 | | | | | | | | | | | | |
| 70 | | | | | Nonparametric Distribution Free UCLs | | | | | | | |
| 71 | | | | | 95% CLT UCL | 7355 | | | | 95% Jackknife UCL | | 7406 |
| 72 | | | | | 95% Standard Bootstrap UCL | 7331 | | | | 95% Bootstrap-t UCL | | 10091 |
| 73 | | | | | 95% Hall's Bootstrap UCL | 13176 | | | | 95% Percentile Bootstrap UCL | | 7576 |
| 74 | | | | | 95% BCA Bootstrap UCL | 8611 | | | | | | |
| 75 | | | | | 90% Chebyshev(Mean, Sd) UCL | 8568 | | | | 95% Chebyshev(Mean, Sd) UCL | | 9784 |
| 76 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 11471 | | | | 99% Chebyshev(Mean, Sd) UCL | | 14786 |
| 77 | | | | | | | | | | | | |
| 78 | | | | | Suggested UCL to Use | | | | | | | |
| 79 | | | | | 95% Student's-t UCL | 7406 | | | | or 95% Modified-t UCL | | 7531 |
| 80 | | | | | | | | | | | | |
| 81 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 82 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 83 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 84 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 85 | | | | | | | | | | | | |
| 86 | Antimony | | | | | | | | | | | |
| 87 | | | | | | | | | | | | |
| 88 | | | | | General Statistics | | | | | | | |
| 89 | | | | | Total Number of Observations | 29 | | | | Number of Distinct Observations | | 22 |
| 90 | | | | | Number of Detects | 6 | | | | Number of Non-Detects | | 23 |
| 91 | | | | | Number of Distinct Detects | 6 | | | | Number of Distinct Non-Detects | | 16 |
| 92 | | | | | Minimum Detect | 0.361 | | | | Minimum Non-Detect | | 0.875 |
| 93 | | | | | Maximum Detect | 0.488 | | | | Maximum Non-Detect | | 1.15 |
| 94 | | | | | Variance Detects | 0.00252 | | | | Percent Non-Detects | | 79.31% |
| 95 | | | | | Mean Detects | 0.44 | | | | SD Detects | | 0.0502 |
| 96 | | | | | Median Detects | 0.451 | | | | CV Detects | | 0.114 |
| 97 | | | | | Skewness Detects | -0.766 | | | | Kurtosis Detects | | -0.618 |
| 98 | | | | | Mean of Logged Detects | -0.826 | | | | SD of Logged Detects | | 0.118 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 99 | | | | | | | | | | | | |
| 100 | **Normal GOF Test on Detects Only** | | | | | | | | | | | |
| 101 | | | | | Shapiro Wilk Test Statistic | 0.912 | **Shapiro Wilk GOF Test** | | | | | |
| 102 | | | | | 5% Shapiro Wilk Critical Value | 0.788 | Detected Data appear Normal at 5% Significance Level | | | | | |
| 103 | | | | | Lilliefors Test Statistic | 0.19 | **Lilliefors GOF Test** | | | | | |
| 104 | | | | | 5% Lilliefors Critical Value | 0.362 | Detected Data appear Normal at 5% Significance Level | | | | | |
| 105 | **Detected Data appear Normal at 5% Significance Level** | | | | | | | | | | | |
| 106 | | | | | | | | | | | | |
| 107 | **Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs** | | | | | | | | | | | |
| 108 | | | | | Mean | 0.44 | | | Standard Error of Mean | | | 0.0205 |
| 109 | | | | | SD | 0.0458 | | | 95% KM (BCA) UCL | | | 0.473 |
| 110 | | | | | 95% KM (t) UCL | 0.475 | | | 95% KM (Percentile Bootstrap) UCL | | | 0.473 |
| 111 | | | | | 95% KM (z) UCL | 0.474 | | | 95% KM Bootstrap t UCL | | | 0.474 |
| 112 | | | | | 90% KM Chebyshev UCL | 0.502 | | | 95% KM Chebyshev UCL | | | 0.529 |
| 113 | | | | | 97.5% KM Chebyshev UCL | 0.568 | | | 99% KM Chebyshev UCL | | | 0.644 |
| 114 | | | | | | | | | | | | |
| 115 | **Gamma GOF Tests on Detected Observations Only** | | | | | | | | | | | |
| 116 | | | | | A-D Test Statistic | 0.344 | **Anderson-Darling GOF Test** | | | | | |
| 117 | | | | | 5% A-D Critical Value | 0.696 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 118 | | | | | K-S Test Statistic | 0.211 | **Kolmogrov-Smirnoff GOF** | | | | | |
| 119 | | | | | 5% K-S Critical Value | 0.332 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 120 | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 121 | | | | | | | | | | | | |
| 122 | **Gamma Statistics on Detected Data Only** | | | | | | | | | | | |
| 123 | | | | | k hat (MLE) | 88.06 | | | k star (bias corrected MLE) | | | 44.14 |
| 124 | | | | | Theta hat (MLE) | 0.005 | | | Theta star (bias corrected MLE) | | | 0.00997 |
| 125 | | | | | nu hat (MLE) | 1057 | | | nu star (bias corrected) | | | 529.7 |
| 126 | | | | | MLE Mean (bias corrected) | 0.44 | | | MLE Sd (bias corrected) | | | 0.0663 |
| 127 | | | | | | | | | | | | |
| 128 | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | | | | | |
| 129 | | | | | k hat (KM) | 92.33 | | | nu hat (KM) | | | 5355 |
| 130 | | | | | Approximate Chi Square Value (N/A, α) | 5186 | | | Adjusted Chi Square Value (N/A, β) | | | 5176 |
| 131 | | | | | 95% Gamma Approximate KM-UCL (use when n>=50) | 0.455 | | | 95% Gamma Adjusted KM-UCL (use when n<50) | | | 0.455 |
| 132 | | | | | | | | | | | | |
| 133 | **Gamma ROS Statistics using Imputed Non-Detects** | | | | | | | | | | | |
| 134 | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | | | | | |
| 135 | GROS may not be used when kstar of detected data is small such as < 0.1 | | | | | | | | | | | |
| 136 | For such situations, GROS method tends to yield inflated values of UCLs and BTVs | | | | | | | | | | | |
| 137 | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | | | | | |
| 138 | | | | | Minimum | 0.361 | | | Mean | | | 0.439 |
| 139 | | | | | Maximum | 0.488 | | | Median | | | 0.439 |
| 140 | | | | | SD | 0.0284 | | | CV | | | 0.0647 |
| 141 | | | | | k hat (MLE) | 240.9 | | | k star (bias corrected MLE) | | | 216 |
| 142 | | | | | Theta hat (MLE) | 0.00182 | | | Theta star (bias corrected MLE) | | | 0.00203 |
| 143 | | | | | nu hat (MLE) | 13972 | | | nu star (bias corrected) | | | 12528 |
| 144 | | | | | MLE Mean (bias corrected) | 0.439 | | | MLE Sd (bias corrected) | | | 0.0299 |
| 145 | | | | | | | | | Adjusted Level of Significance (β) | | | 0.0407 |
| 146 | | | | | Approximate Chi Square Value (N/A, α) | 12269 | | | Adjusted Chi Square Value (N/A, β) | | | 12254 |
| 147 | | | | | 95% Gamma Approximate UCL (use when n>=50) | 0.449 | | | 95% Gamma Adjusted UCL (use when n<50) | | | 0.449 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 148 | | | | | | | | | | | | |
| 149 | | | | | | Lognormal GOF Test on Detected Observations Only | | | | | | |
| 150 | | | | | Shapiro Wilk Test Statistic | 0.901 | | | Shapiro Wilk GOF Test | | | |
| 151 | | | | | 5% Shapiro Wilk Critical Value | 0.788 | | | Detected Data appear Lognormal at 5% Significance Level | | | |
| 152 | | | | | Lilliefors Test Statistic | 0.196 | | | Lilliefors GOF Test | | | |
| 153 | | | | | 5% Lilliefors Critical Value | 0.362 | | | Detected Data appear Lognormal at 5% Significance Level | | | |
| 154 | | | | | | Detected Data appear Lognormal at 5% Significance Level | | | | | | |
| 155 | | | | | | | | | | | | |
| 156 | | | | | | Lognormal ROS Statistics Using Imputed Non-Detects | | | | | | |
| 157 | | | | | Mean in Original Scale | 0.439 | | | Mean in Log Scale | | | -0.826 |
| 158 | | | | | SD in Original Scale | 0.0289 | | | SD in Log Scale | | | 0.067 |
| 159 | | | | | 95% t UCL (assumes normality of ROS data) | 0.448 | | | 95% Percentile Bootstrap UCL | | | 0.447 |
| 160 | | | | | 95% BCA Bootstrap UCL | 0.447 | | | 95% Bootstrap t UCL | | | 0.447 |
| 161 | | | | | 95% H-UCL (Log ROS) | N/A | | | | | | |
| 162 | | | | | | | | | | | | |
| 163 | | | | | | UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed | | | | | | |
| 164 | | | | | KM Mean (logged) | -0.826 | | | 95% H-UCL (KM -Log) | | | 0.456 |
| 165 | | | | | KM SD (logged) | 0.108 | | | 95% Critical H Value (KM-Log) | | | 1.711 |
| 166 | | | | | KM Standard Error of Mean (logged) | 0.0483 | | | | | | |
| 167 | | | | | | | | | | | | |
| 168 | | | | | | DL/2 Statistics | | | | | | |
| 169 | | | | | DL/2 Normal | | | | DL/2 Log-Transformed | | | |
| 170 | | | | | Mean in Original Scale | 0.495 | | | Mean in Log Scale | | | -0.707 |
| 171 | | | | | SD in Original Scale | 0.0427 | | | SD in Log Scale | | | 0.0923 |
| 172 | | | | | 95% t UCL (Assumes normality) | 0.509 | | | 95% H-Stat UCL | | | N/A |
| 173 | | | | | | DL/2 is not a recommended method, provided for comparisons and historical reasons | | | | | | |
| 174 | | | | | | | | | | | | |
| 175 | | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | |
| 176 | | | | | | Detected Data appear Normal Distributed at 5% Significance Level | | | | | | |
| 177 | | | | | | | | | | | | |
| 178 | | | | | | Suggested UCL to Use | | | | | | |
| 179 | | | | | 95% KM (t) UCL | 0.475 | | | 95% KM (Percentile Bootstrap) UCL | | | 0.473 |
| 180 | | | | | | | | | | | | |
| 181 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 182 | | | | | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | |
| 183 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 184 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statisticiar | | | | | | | | | | | |
| 185 | | | | | | | | | | | | |
| 186 | | | | | | | | | | | | |
| 187 | Arsenic | | | | | | | | | | | |
| 188 | | | | | | | | | | | | |
| 189 | | | | | | General Statistics | | | | | | |
| 190 | | | | | Total Number of Observations | 31 | | | Number of Distinct Observations | | | 31 |
| 191 | | | | | | | | | Number of Missing Observations | | | 0 |
| 192 | | | | | Minimum | 0.527 | | | Mean | | | 1.591 |
| 193 | | | | | Maximum | 3.85 | | | Median | | | 1.55 |
| 194 | | | | | SD | 0.697 | | | Std. Error of Mean | | | 0.125 |
| 195 | | | | | Coefficient of Variation | 0.438 | | | Skewness | | | 1.019 |
| 196 | | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 197 | **Normal GOF Test** | | | | | | | | | | | |
| 198 | | | | | Shapiro Wilk Test Statistic | 0.939 | **Shapiro Wilk GOF Test** | | | | | |
| 199 | | | | | 5% Shapiro Wilk Critical Value | 0.929 | Data appear Normal at 5% Significance Level | | | | | |
| 200 | | | | | Lilliefors Test Statistic | 0.0948 | **Lilliefors GOF Test** | | | | | |
| 201 | | | | | 5% Lilliefors Critical Value | 0.159 | Data appear Normal at 5% Significance Level | | | | | |
| 202 | **Data appear Normal at 5% Significance Level** | | | | | | | | | | | |
| 203 | | | | | | | | | | | | |
| 204 | **Assuming Normal Distribution** | | | | | | | | | | | |
| 205 | | | **95% Normal UCL** | | | | **95% UCLs (Adjusted for Skewness)** | | | | | |
| 206 | | | | | 95% Student's-t UCL | 1.803 | | | 95% Adjusted-CLT UCL (Chen-1995) | | | 1.821 |
| 207 | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | 1.807 |
| 208 | | | | | | | | | | | | |
| 209 | **Gamma GOF Test** | | | | | | | | | | | |
| 210 | | | | | A-D Test Statistic | 0.256 | **Anderson-Darling Gamma GOF Test** | | | | | |
| 211 | | | | | 5% A-D Critical Value | 0.747 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 212 | | | | | K-S Test Statistic | 0.0963 | **Kolmogrov-Smirnoff Gamma GOF Test** | | | | | |
| 213 | | | | | 5% K-S Critical Value | 0.158 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 214 | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 215 | | | | | | | | | | | | |
| 216 | **Gamma Statistics** | | | | | | | | | | | |
| 217 | | | | | k hat (MLE) | 5.428 | | | k star (bias corrected MLE) | | | 4.924 |
| 218 | | | | | Theta hat (MLE) | 0.293 | | | Theta star (bias corrected MLE) | | | 0.323 |
| 219 | | | | | nu hat (MLE) | 336.5 | | | nu star (bias corrected) | | | 305.3 |
| 220 | | | | | MLE Mean (bias corrected) | 1.591 | | | MLE Sd (bias corrected) | | | 0.717 |
| 221 | | | | | | | | | Approximate Chi Square Value (0.05) | | | 265.8 |
| 222 | | | | | Adjusted Level of Significance | 0.0413 | | | Adjusted Chi Square Value | | | 263.8 |
| 223 | | | | | | | | | | | | |
| 224 | **Assuming Gamma Distribution** | | | | | | | | | | | |
| 225 | | | | | 95% Approximate Gamma UCL (use when n>=50)) | 1.827 | | | 95% Adjusted Gamma UCL (use when n<50) | | | 1.841 |
| 226 | | | | | | | | | | | | |
| 227 | **Lognormal GOF Test** | | | | | | | | | | | |
| 228 | | | | | Shapiro Wilk Test Statistic | 0.972 | **Shapiro Wilk Lognormal GOF Test** | | | | | |
| 229 | | | | | 5% Shapiro Wilk Critical Value | 0.929 | Data appear Lognormal at 5% Significance Level | | | | | |
| 230 | | | | | Lilliefors Test Statistic | 0.124 | **Lilliefors Lognormal GOF Test** | | | | | |
| 231 | | | | | 5% Lilliefors Critical Value | 0.159 | Data appear Lognormal at 5% Significance Level | | | | | |
| 232 | **Data appear Lognormal at 5% Significance Level** | | | | | | | | | | | |
| 233 | | | | | | | | | | | | |
| 234 | **Lognormal Statistics** | | | | | | | | | | | |
| 235 | | | | | Minimum of Logged Data | -0.641 | | | Mean of logged Data | | | 0.369 |
| 236 | | | | | Maximum of Logged Data | 1.348 | | | SD of logged Data | | | 0.455 |
| 237 | | | | | | | | | | | | |
| 238 | **Assuming Lognormal Distribution** | | | | | | | | | | | |
| 239 | | | | | 95% H-UCL | 1.879 | | | 90% Chebyshev (MVUE) UCL | | | 2.006 |
| 240 | | | | | 95% Chebyshev (MVUE) UCL | 2.19 | | | 97.5% Chebyshev (MVUE) UCL | | | 2.446 |
| 241 | | | | | 99% Chebyshev (MVUE) UCL | 2.949 | | | | | | |
| 242 | | | | | | | | | | | | |
| 243 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 244 | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | | | | | |
| 245 | | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 246 | **Nonparametric Distribution Free UCLs** | | | | | | | | | | | |
| 247 | | | | | 95% CLT UCL | 1.797 | | | | 95% Jackknife UCL | | 1.803 |
| 248 | | | | | 95% Standard Bootstrap UCL | 1.793 | | | | 95% Bootstrap-t UCL | | 1.819 |
| 249 | | | | | 95% Hall's Bootstrap UCL | 1.864 | | | | 95% Percentile Bootstrap UCL | | 1.805 |
| 250 | | | | | 95% BCA Bootstrap UCL | 1.808 | | | | | | |
| 251 | | | | | 90% Chebyshev(Mean, Sd) UCL | 1.966 | | | | 95% Chebyshev(Mean, Sd) UCL | | 2.137 |
| 252 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 2.373 | | | | 99% Chebyshev(Mean, Sd) UCL | | 2.837 |
| 253 | | | | | | | | | | | | |
| 254 | **Suggested UCL to Use** | | | | | | | | | | | |
| 255 | | | | | 95% Student's-t UCL | 1.803 | | | | | | |
| 256 | | | | | | | | | | | | |
| 257 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 258 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 259 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 260 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 261 | | | | | | | | | | | | |
| 262 | | | | | | | | | | | | |
| 263 | **Barium** | | | | | | | | | | | |
| 264 | | | | | | | | | | | | |
| 265 | **General Statistics** | | | | | | | | | | | |
| 266 | | | | | Total Number of Observations | 29 | | | | Number of Distinct Observations | | 28 |
| 267 | | | | | | | | | | Number of Missing Observations | | 0 |
| 268 | | | | | Minimum | 19.6 | | | | Mean | | 87.7 |
| 269 | | | | | Maximum | 384 | | | | Median | | 70.5 |
| 270 | | | | | SD | 69.32 | | | | Std. Error of Mean | | 12.87 |
| 271 | | | | | Coefficient of Variation | 0.79 | | | | Skewness | | 2.922 |
| 272 | | | | | | | | | | | | |
| 273 | **Normal GOF Test** | | | | | | | | | | | |
| 274 | | | | | Shapiro Wilk Test Statistic | 0.725 | | | | **Shapiro Wilk GOF Test** | | |
| 275 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | | Data Not Normal at 5% Significance Level | | |
| 276 | | | | | Lilliefors Test Statistic | 0.163 | | | | **Lilliefors GOF Test** | | |
| 277 | | | | | 5% Lilliefors Critical Value | 0.165 | | | | Data appear Normal at 5% Significance Level | | |
| 278 | **Data appear Approximate Normal at 5% Significance Level** | | | | | | | | | | | |
| 279 | | | | | | | | | | | | |
| 280 | **Assuming Normal Distribution** | | | | | | | | | | | |
| 281 | **95% Normal UCL** | | | | | | **95% UCLs (Adjusted for Skewness)** | | | | | |
| 282 | | | | | 95% Student's-t UCL | 109.6 | | | | 95% Adjusted-CLT UCL (Chen-1995) | | 116.3 |
| 283 | | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 110.8 |
| 284 | | | | | | | | | | | | |
| 285 | **Gamma GOF Test** | | | | | | | | | | | |
| 286 | | | | | A-D Test Statistic | 0.374 | | | | **Anderson-Darling Gamma GOF Test** | | |
| 287 | | | | | 5% A-D Critical Value | 0.755 | | | | Detected data appear Gamma Distributed at 5% Significance Leve | | |
| 288 | | | | | K-S Test Statistic | 0.0966 | | | | **Kolmogrov-Smirnoff Gamma GOF Test** | | |
| 289 | | | | | 5% K-S Critical Value | 0.164 | | | | Detected data appear Gamma Distributed at 5% Significance Leve | | |
| 290 | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 291 | | | | | | | | | | | | |
| 292 | **Gamma Statistics** | | | | | | | | | | | |
| 293 | | | | | k hat (MLE) | 2.469 | | | | k star (bias corrected MLE) | | 2.237 |
| 294 | | | | | Theta hat (MLE) | 35.51 | | | | Theta star (bias corrected MLE) | | 39.2 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 295 | | | | | nu hat (MLE) | 143.2 | | | | nu star (bias corrected) | | 129.7 |
| 296 | | | | | MLE Mean (bias corrected) | 87.7 | | | | MLE Sd (bias corrected) | | 58.63 |
| 297 | | | | | | | | | | Approximate Chi Square Value (0.05) | | 104.4 |
| 298 | | | | | Adjusted Level of Significance | 0.0407 | | | | Adjusted Chi Square Value | | 103.1 |
| 299 | | | | | | | | | | | | |
| 300 | | | | | **Assuming Gamma Distribution** | | | | | | | |
| 301 | | | | | 95% Approximate Gamma UCL (use when n>=50)) | 109 | | | | 95% Adjusted Gamma UCL (use when n<50) | | 110.4 |
| 302 | | | | | | | | | | | | |
| 303 | | | | | **Lognormal GOF Test** | | | | | | | |
| 304 | | | | | Shapiro Wilk Test Statistic | 0.978 | | | | **Shapiro Wilk Lognormal GOF Test** | | |
| 305 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | | Data appear Lognormal at 5% Significance Level | | |
| 306 | | | | | Lilliefors Test Statistic | 0.0962 | | | | **Lilliefors Lognormal GOF Test** | | |
| 307 | | | | | 5% Lilliefors Critical Value | 0.165 | | | | Data appear Lognormal at 5% Significance Level | | |
| 308 | | | | | **Data appear Lognormal at 5% Significance Level** | | | | | | | |
| 309 | | | | | | | | | | | | |
| 310 | | | | | **Lognormal Statistics** | | | | | | | |
| 311 | | | | | Minimum of Logged Data | 2.976 | | | | Mean of logged Data | | 4.258 |
| 312 | | | | | Maximum of Logged Data | 5.951 | | | | SD of logged Data | | 0.656 |
| 313 | | | | | | | | | | | | |
| 314 | | | | | **Assuming Lognormal Distribution** | | | | | | | |
| 315 | | | | | 95% H-UCL | 113.4 | | | | 90% Chebyshev (MVUE) UCL | | 120.8 |
| 316 | | | | | 95% Chebyshev (MVUE) UCL | 136.2 | | | | 97.5% Chebyshev (MVUE) UCL | | 157.6 |
| 317 | | | | | 99% Chebyshev (MVUE) UCL | 199.5 | | | | | | |
| 318 | | | | | | | | | | | | |
| 319 | | | | | **Nonparametric Distribution Free UCL Statistics** | | | | | | | |
| 320 | | | | | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | |
| 321 | | | | | | | | | | | | |
| 322 | | | | | **Nonparametric Distribution Free UCLs** | | | | | | | |
| 323 | | | | | 95% CLT UCL | 108.9 | | | | 95% Jackknife UCL | | 109.6 |
| 324 | | | | | 95% Standard Bootstrap UCL | 108.5 | | | | 95% Bootstrap-t UCL | | 123.4 |
| 325 | | | | | 95% Hall's Bootstrap UCL | 209.3 | | | | 95% Percentile Bootstrap UCL | | 108.4 |
| 326 | | | | | 95% BCA Bootstrap UCL | 119.4 | | | | | | |
| 327 | | | | | 90% Chebyshev(Mean, Sd) UCL | 126.3 | | | | 95% Chebyshev(Mean, Sd) UCL | | 143.8 |
| 328 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 168.1 | | | | 99% Chebyshev(Mean, Sd) UCL | | 215.8 |
| 329 | | | | | | | | | | | | |
| 330 | | | | | **Suggested UCL to Use** | | | | | | | |
| 331 | | | | | 95% Student's-t UCL | 109.6 | | | | | | |
| 332 | | | | | | | | | | | | |
| 333 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 334 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 335 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 336 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 337 | | | | | | | | | | | | |
| 338 | | | | | | | | | | | | |
| 339 | **Chromium** | | | | | | | | | | | |
| 340 | | | | | | | | | | | | |
| 341 | | | | | **General Statistics** | | | | | | | |
| 342 | | | | | Total Number of Observations | 29 | | | | Number of Distinct Observations | | 29 |
| 343 | | | | | | | | | | Number of Missing Observations | | 0 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 344 | | | | | Minimum | 2.92 | | | | | Mean | 11.13 |
| 345 | | | | | Maximum | 68.3 | | | | | Median | 4.49 |
| 346 | | | | | SD | 14.75 | | | | | Std. Error of Mean | 2.739 |
| 347 | | | | | Coefficient of Variation | 1.326 | | | | | Skewness | 2.797 |
| 348 | | | | | | | | | | | | |
| 349 | | | | | **Normal GOF Test** | | | | | | | |
| 350 | | | | | Shapiro Wilk Test Statistic | 0.597 | | | **Shapiro Wilk GOF Test** | | | |
| 351 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | Data Not Normal at 5% Significance Level | | | |
| 352 | | | | | Lilliefors Test Statistic | 0.289 | | | **Lilliefors GOF Test** | | | |
| 353 | | | | | 5% Lilliefors Critical Value | 0.165 | | | Data Not Normal at 5% Significance Level | | | |
| 354 | | | | | **Data Not Normal at 5% Significance Level** | | | | | | | |
| 355 | | | | | | | | | | | | |
| 356 | | | | | **Assuming Normal Distribution** | | | | | | | |
| 357 | | | | | **95% Normal UCL** | | | | **95% UCLs (Adjusted for Skewness)** | | | |
| 358 | | | | | 95% Student's-t UCL | 15.79 | | | 95% Adjusted-CLT UCL (Chen-1995) | | | 17.15 |
| 359 | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | 16.02 |
| 360 | | | | | | | | | | | | |
| 361 | | | | | **Gamma GOF Test** | | | | | | | |
| 362 | | | | | A-D Test Statistic | 2.684 | | | **Anderson-Darling Gamma GOF Test** | | | |
| 363 | | | | | 5% A-D Critical Value | 0.77 | | | Data Not Gamma Distributed at 5% Significance Level | | | |
| 364 | | | | | K-S Test Statistic | 0.258 | | | **Kolmogrov-Smirnoff Gamma GOF Test** | | | |
| 365 | | | | | 5% K-S Critical Value | 0.167 | | | Data Not Gamma Distributed at 5% Significance Level | | | |
| 366 | | | | | **Data Not Gamma Distributed at 5% Significance Level** | | | | | | | |
| 367 | | | | | | | | | | | | |
| 368 | | | | | **Gamma Statistics** | | | | | | | |
| 369 | | | | | k hat (MLE) | 1.18 | | | k star (bias corrected MLE) | | | 1.081 |
| 370 | | | | | Theta hat (MLE) | 9.433 | | | Theta star (bias corrected MLE) | | | 10.3 |
| 371 | | | | | nu hat (MLE) | 68.42 | | | nu star (bias corrected) | | | 62.68 |
| 372 | | | | | MLE Mean (bias corrected) | 11.13 | | | MLE Sd (bias corrected) | | | 10.7 |
| 373 | | | | | | | | | Approximate Chi Square Value (0.05) | | | 45.47 |
| 374 | | | | | Adjusted Level of Significance | 0.0407 | | | Adjusted Chi Square Value | | | 44.59 |
| 375 | | | | | | | | | | | | |
| 376 | | | | | **Assuming Gamma Distribution** | | | | | | | |
| 377 | | | | | 95% Approximate Gamma UCL (use when n>=50)) | 15.34 | | | 95% Adjusted Gamma UCL (use when n<50) | | | 15.64 |
| 378 | | | | | | | | | | | | |
| 379 | | | | | **Lognormal GOF Test** | | | | | | | |
| 380 | | | | | Shapiro Wilk Test Statistic | 0.826 | | | **Shapiro Wilk Lognormal GOF Test** | | | |
| 381 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | Data Not Lognormal at 5% Significance Level | | | |
| 382 | | | | | Lilliefors Test Statistic | 0.23 | | | **Lilliefors Lognormal GOF Test** | | | |
| 383 | | | | | 5% Lilliefors Critical Value | 0.165 | | | Data Not Lognormal at 5% Significance Level | | | |
| 384 | | | | | **Data Not Lognormal at 5% Significance Level** | | | | | | | |
| 385 | | | | | | | | | | | | |
| 386 | | | | | **Lognormal Statistics** | | | | | | | |
| 387 | | | | | Minimum of Logged Data | 1.072 | | | Mean of logged Data | | | 1.929 |
| 388 | | | | | Maximum of Logged Data | 4.224 | | | SD of logged Data | | | 0.879 |
| 389 | | | | | | | | | | | | |
| 390 | | | | | **Assuming Lognormal Distribution** | | | | | | | |
| 391 | | | | | 95% H-UCL | 14.91 | | | 90% Chebyshev (MVUE) UCL | | | 15.41 |
| 392 | | | | | 95% Chebyshev (MVUE) UCL | 17.88 | | | 97.5% Chebyshev (MVUE) UCL | | | 21.32 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 393 | | | | | 99% Chebyshev (MVUE) UCL | 28.06 | | | | | | |
| 394 | | | | | | | | | | | | |
| 395 | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | | |
| 396 | | | | | Data do not follow a Discernible Distribution (0.05) | | | | | | | |
| 397 | | | | | | | | | | | | |
| 398 | | | | | Nonparametric Distribution Free UCLs | | | | | | | |
| 399 | | | | | 95% CLT UCL | 15.63 | | | | 95% Jackknife UCL | | 15.79 |
| 400 | | | | | 95% Standard Bootstrap UCL | 15.67 | | | | 95% Bootstrap-t UCL | | 20.18 |
| 401 | | | | | 95% Hall's Bootstrap UCL | 32.39 | | | | 95% Percentile Bootstrap UCL | | 15.97 |
| 402 | | | | | 95% BCA Bootstrap UCL | 17.29 | | | | | | |
| 403 | | | | | 90% Chebyshev(Mean, Sd) UCL | 19.35 | | | | 95% Chebyshev(Mean, Sd) UCL | | 23.07 |
| 404 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 28.23 | | | | 99% Chebyshev(Mean, Sd) UCL | | 38.38 |
| 405 | | | | | | | | | | | | |
| 406 | | | | | Suggested UCL to Use | | | | | | | |
| 407 | | | | | 95% Chebyshev (Mean, Sd) UCL | 23.07 | | | | | | |
| 408 | | | | | | | | | | | | |
| 409 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 410 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 411 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 412 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 413 | | | | | | | | | | | | |
| 414 | | | | | | | | | | | | |
| 415 | Copper | | | | | | | | | | | |
| 416 | | | | | | | | | | | | |
| 417 | | | | | General Statistics | | | | | | | |
| 418 | | | | | Total Number of Observations | 29 | | | | Number of Distinct Observations | | 29 |
| 419 | | | | | | | | | | Number of Missing Observations | | 0 |
| 420 | | | | | Minimum | 1.28 | | | | Mean | | 6.294 |
| 421 | | | | | Maximum | 65.1 | | | | Median | | 3.35 |
| 422 | | | | | SD | 11.63 | | | | Std. Error of Mean | | 2.16 |
| 423 | | | | | Coefficient of Variation | 1.848 | | | | Skewness | | 4.953 |
| 424 | | | | | | | | | | | | |
| 425 | | | | | Normal GOF Test | | | | | | | |
| 426 | | | | | Shapiro Wilk Test Statistic | 0.35 | | | | Shapiro Wilk GOF Test | | |
| 427 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | | Data Not Normal at 5% Significance Level | | |
| 428 | | | | | Lilliefors Test Statistic | 0.384 | | | | Lilliefors GOF Test | | |
| 429 | | | | | 5% Lilliefors Critical Value | 0.165 | | | | Data Not Normal at 5% Significance Level | | |
| 430 | | | | | Data Not Normal at 5% Significance Level | | | | | | | |
| 431 | | | | | | | | | | | | |
| 432 | | | | | Assuming Normal Distribution | | | | | | | |
| 433 | | | | | 95% Normal UCL | | | | | 95% UCLs (Adjusted for Skewness) | | |
| 434 | | | | | 95% Student's-t UCL | 9.968 | | | | 95% Adjusted-CLT UCL (Chen-1995) | | 11.97 |
| 435 | | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 10.3 |
| 436 | | | | | | | | | | | | |
| 437 | | | | | Gamma GOF Test | | | | | | | |
| 438 | | | | | A-D Test Statistic | 3.534 | | | | Anderson-Darling Gamma GOF Test | | |
| 439 | | | | | 5% A-D Critical Value | 0.768 | | | | Data Not Gamma Distributed at 5% Significance Level | | |
| 440 | | | | | K-S Test Statistic | 0.335 | | | | Kolmogrov-Smirnoff Gamma GOF Test | | |
| 441 | | | | | 5% K-S Critical Value | 0.166 | | | | Data Not Gamma Distributed at 5% Significance Level | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 442 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 443 | | | | | | | | | | | | |
| 444 | Gamma Statistics | | | | | | | | | | | |
| 445 | | | | | k hat (MLE) | 1.25 | | | k star (bias corrected MLE) | | | 1.144 |
| 446 | | | | | Theta hat (MLE) | 5.033 | | | Theta star (bias corrected MLE) | | | 5.501 |
| 447 | | | | | nu hat (MLE) | 72.53 | | | nu star (bias corrected) | | | 66.36 |
| 448 | | | | | MLE Mean (bias corrected) | 6.294 | | | MLE Sd (bias corrected) | | | 5.884 |
| 449 | | | | | | | | | Approximate Chi Square Value (0.05) | | | 48.61 |
| 450 | | | | | Adjusted Level of Significance | 0.0407 | | | Adjusted Chi Square Value | | | 47.7 |
| 451 | | | | | | | | | | | | |
| 452 | Assuming Gamma Distribution | | | | | | | | | | | |
| 453 | | | | | 95% Approximate Gamma UCL (use when n>=50)) | 8.591 | | | 95% Adjusted Gamma UCL (use when n<50) | | | 8.755 |
| 454 | | | | | | | | | | | | |
| 455 | Lognormal GOF Test | | | | | | | | | | | |
| 456 | | | | | Shapiro Wilk Test Statistic | 0.822 | | | Shapiro Wilk Lognormal GOF Test | | | |
| 457 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | Data Not Lognormal at 5% Significance Level | | | |
| 458 | | | | | Lilliefors Test Statistic | 0.25 | | | Lilliefors Lognormal GOF Test | | | |
| 459 | | | | | 5% Lilliefors Critical Value | 0.165 | | | Data Not Lognormal at 5% Significance Level | | | |
| 460 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 461 | | | | | | | | | | | | |
| 462 | Lognormal Statistics | | | | | | | | | | | |
| 463 | | | | | Minimum of Logged Data | 0.247 | | | Mean of logged Data | | | 1.389 |
| 464 | | | | | Maximum of Logged Data | 4.176 | | | SD of logged Data | | | 0.737 |
| 465 | | | | | | | | | | | | |
| 466 | Assuming Lognormal Distribution | | | | | | | | | | | |
| 467 | | | | | 95% H-UCL | 7.12 | | | 90% Chebyshev (MVUE) UCL | | | 7.53 |
| 468 | | | | | 95% Chebyshev (MVUE) UCL | 8.584 | | | 97.5% Chebyshev (MVUE) UCL | | | 10.05 |
| 469 | | | | | 99% Chebyshev (MVUE) UCL | 12.92 | | | | | | |
| 470 | | | | | | | | | | | | |
| 471 | Nonparametric Distribution Free UCL Statistics | | | | | | | | | | | |
| 472 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 473 | | | | | | | | | | | | |
| 474 | Nonparametric Distribution Free UCLs | | | | | | | | | | | |
| 475 | | | | | 95% CLT UCL | 9.846 | | | 95% Jackknife UCL | | | 9.968 |
| 476 | | | | | 95% Standard Bootstrap UCL | 9.758 | | | 95% Bootstrap-t UCL | | | 22.52 |
| 477 | | | | | 95% Hall's Bootstrap UCL | 21.52 | | | 95% Percentile Bootstrap UCL | | | 10.39 |
| 478 | | | | | 95% BCA Bootstrap UCL | 12.72 | | | | | | |
| 479 | | | | | 90% Chebyshev(Mean, Sd) UCL | 12.77 | | | 95% Chebyshev(Mean, Sd) UCL | | | 15.71 |
| 480 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 19.78 | | | 99% Chebyshev(Mean, Sd) UCL | | | 27.78 |
| 481 | | | | | | | | | | | | |
| 482 | Suggested UCL to Use | | | | | | | | | | | |
| 483 | | | | | 95% Chebyshev (Mean, Sd) UCL | 15.71 | | | | | | |
| 484 | | | | | | | | | | | | |
| 485 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 486 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 487 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 488 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 489 | | | | | | | | | | | | |
| 490 | | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 491 | Lead | | | | | | | | | | | |
| 492 | | | | | | | | | | | | |
| 493 | | | | | General Statistics | | | | | | | |
| 494 | | | | | Total Number of Observations | 29 | | | | Number of Distinct Observations | | 28 |
| 495 | | | | | | | | | | Number of Missing Observations | | 0 |
| 496 | | | | | Minimum | 7.74 | | | | Mean | | 12.38 |
| 497 | | | | | Maximum | 33.6 | | | | Median | | 11.5 |
| 498 | | | | | SD | 4.859 | | | | Std. Error of Mean | | 0.902 |
| 499 | | | | | Coefficient of Variation | 0.392 | | | | Skewness | | 3.171 |
| 500 | | | | | | | | | | | | |
| 501 | | | | | Normal GOF Test | | | | | | | |
| 502 | | | | | Shapiro Wilk Test Statistic | 0.693 | | | | Shapiro Wilk GOF Test | | |
| 503 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | | Data Not Normal at 5% Significance Level | | |
| 504 | | | | | Lilliefors Test Statistic | 0.202 | | | | Lilliefors GOF Test | | |
| 505 | | | | | 5% Lilliefors Critical Value | 0.165 | | | | Data Not Normal at 5% Significance Level | | |
| 506 | | | | | Data Not Normal at 5% Significance Level | | | | | | | |
| 507 | | | | | | | | | | | | |
| 508 | | | | | Assuming Normal Distribution | | | | | | | |
| 509 | | | | | 95% Normal UCL | | | | | 95% UCLs (Adjusted for Skewness) | | |
| 510 | | | | | 95% Student's-t UCL | 13.92 | | | | 95% Adjusted-CLT UCL (Chen-1995) | | 14.43 |
| 511 | | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 14.01 |
| 512 | | | | | | | | | | | | |
| 513 | | | | | Gamma GOF Test | | | | | | | |
| 514 | | | | | A-D Test Statistic | 1.063 | | | | Anderson-Darling Gamma GOF Test | | |
| 515 | | | | | 5% A-D Critical Value | 0.746 | | | | Data Not Gamma Distributed at 5% Significance Level | | |
| 516 | | | | | K-S Test Statistic | 0.144 | | | | Kolmogrov-Smirnoff Gamma GOF Test | | |
| 517 | | | | | 5% K-S Critical Value | 0.162 | | | | Detected data appear Gamma Distributed at 5% Significance Leve | | |
| 518 | | | | | Detected data follow Appr. Gamma Distribution at 5% Significance Level | | | | | | | |
| 519 | | | | | | | | | | | | |
| 520 | | | | | Gamma Statistics | | | | | | | |
| 521 | | | | | k hat (MLE) | 10.14 | | | | k star (bias corrected MLE) | | 9.112 |
| 522 | | | | | Theta hat (MLE) | 1.221 | | | | Theta star (bias corrected MLE) | | 1.359 |
| 523 | | | | | nu hat (MLE) | 588 | | | | nu star (bias corrected) | | 528.5 |
| 524 | | | | | MLE Mean (bias corrected) | 12.38 | | | | MLE Sd (bias corrected) | | 4.102 |
| 525 | | | | | | | | | | Approximate Chi Square Value (0.05) | | 476.2 |
| 526 | | | | | Adjusted Level of Significance | 0.0407 | | | | Adjusted Chi Square Value | | 473.2 |
| 527 | | | | | | | | | | | | |
| 528 | | | | | Assuming Gamma Distribution | | | | | | | |
| 529 | | | | | 95% Approximate Gamma UCL (use when n>=50) | 13.74 | | | | 95% Adjusted Gamma UCL (use when n<50) | | 13.83 |
| 530 | | | | | | | | | | | | |
| 531 | | | | | Lognormal GOF Test | | | | | | | |
| 532 | | | | | Shapiro Wilk Test Statistic | 0.891 | | | | Shapiro Wilk Lognormal GOF Test | | |
| 533 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | | Data Not Lognormal at 5% Significance Level | | |
| 534 | | | | | Lilliefors Test Statistic | 0.116 | | | | Lilliefors Lognormal GOF Test | | |
| 535 | | | | | 5% Lilliefors Critical Value | 0.165 | | | | Data appear Lognormal at 5% Significance Level | | |
| 536 | | | | | Data appear Approximate Lognormal at 5% Significance Level | | | | | | | |
| 537 | | | | | | | | | | | | |
| 538 | | | | | Lognormal Statistics | | | | | | | |
| 539 | | | | | Minimum of Logged Data | 2.046 | | | | Mean of logged Data | | 2.466 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 540 | | | | | Maximum of Logged Data | 3.515 | | | | SD of logged Data | | 0.298 |
| 541 | | | | | | | | | | | | |
| 542 | | | | | Assuming Lognormal Distribution | | | | | | | |
| 543 | | | | | 95% H-UCL | 13.62 | | | | 90% Chebyshev (MVUE) UCL | | 14.36 |
| 544 | | | | 95% Chebyshev (MVUE) UCL | | 15.3 | | | | 97.5% Chebyshev (MVUE) UCL | | 16.6 |
| 545 | | | | 99% Chebyshev (MVUE) UCL | | 19.15 | | | | | | |
| 546 | | | | | | | | | | | | |
| 547 | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | | |
| 548 | | | | | Data appear to follow a Discernible Distribution at 5% Significance Level | | | | | | | |
| 549 | | | | | | | | | | | | |
| 550 | | | | | Nonparametric Distribution Free UCLs | | | | | | | |
| 551 | | | | | 95% CLT UCL | 13.87 | | | | 95% Jackknife UCL | | 13.92 |
| 552 | | | | 95% Standard Bootstrap UCL | | 13.86 | | | | 95% Bootstrap-t UCL | | 15.06 |
| 553 | | | | 95% Hall's Bootstrap UCL | | 20.67 | | | | 95% Percentile Bootstrap UCL | | 13.86 |
| 554 | | | | 95% BCA Bootstrap UCL | | 14.52 | | | | | | |
| 555 | | | | 90% Chebyshev(Mean, Sd) UCL | | 15.09 | | | | 95% Chebyshev(Mean, Sd) UCL | | 16.32 |
| 556 | | | | 97.5% Chebyshev(Mean, Sd) UCL | | 18.02 | | | | 99% Chebyshev(Mean, Sd) UCL | | 21.36 |
| 557 | | | | | | | | | | | | |
| 558 | | | | | Suggested UCL to Use | | | | | | | |
| 559 | | | | | 95% Adjusted Gamma UCL | 13.83 | | | | | | |
| 560 | | | | | | | | | | | | |
| 561 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 562 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 563 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 564 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 565 | | | | | | | | | | | | |
| 566 | | | | | | | | | | | | |
| 567 | Manganese | | | | | | | | | | | |
| 568 | | | | | | | | | | | | |
| 569 | | | | | General Statistics | | | | | | | |
| 570 | | | | | Total Number of Observations | 29 | | | | Number of Distinct Observations | | 28 |
| 571 | | | | | | | | | | Number of Missing Observations | | 0 |
| 572 | | | | | Minimum | 92.5 | | | | Mean | | 351.5 |
| 573 | | | | | Maximum | 578 | | | | Median | | 376 |
| 574 | | | | | SD | 140.2 | | | | Std. Error of Mean | | 26.03 |
| 575 | | | | | Coefficient of Variation | 0.399 | | | | Skewness | | -0.268 |
| 576 | | | | | | | | | | | | |
| 577 | | | | | Normal GOF Test | | | | | | | |
| 578 | | | | | Shapiro Wilk Test Statistic | 0.946 | | | | Shapiro Wilk GOF Test | | |
| 579 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | | | | Data appear Normal at 5% Significance Level | | |
| 580 | | | | | Lilliefors Test Statistic | 0.11 | | | | Lilliefors GOF Test | | |
| 581 | | | | | 5% Lilliefors Critical Value | 0.165 | | | | Data appear Normal at 5% Significance Level | | |
| 582 | | | | | Data appear Normal at 5% Significance Level | | | | | | | |
| 583 | | | | | | | | | | | | |
| 584 | | | | | Assuming Normal Distribution | | | | | | | |
| 585 | | | | | 95% Normal UCL | | | | | 95% UCLs (Adjusted for Skewness) | | |
| 586 | | | | | 95% Student's-t UCL | 395.8 | | | | 95% Adjusted-CLT UCL (Chen-1995) | | 392.9 |
| 587 | | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 395.6 |
| 588 | | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 589 | **Gamma GOF Test** | | | | | | | | | | | |
| 590 | | | | | A-D Test Statistic | 1.008 | **Anderson-Darling Gamma GOF Test** | | | | | |
| 591 | | | | | 5% A-D Critical Value | 0.748 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 592 | | | | | K-S Test Statistic | 0.154 | **Kolmogrov-Smirnoff Gamma GOF Test** | | | | | |
| 593 | | | | | 5% K-S Critical Value | 0.163 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 594 | **Detected data follow Appr. Gamma Distribution at 5% Significance Level** | | | | | | | | | | | |
| 595 | | | | | | | | | | | | |
| 596 | **Gamma Statistics** | | | | | | | | | | | |
| 597 | | | | | k hat (MLE) | 5.058 | k star (bias corrected MLE) | | | | | 4.558 |
| 598 | | | | | Theta hat (MLE) | 69.5 | Theta star (bias corrected MLE) | | | | | 77.12 |
| 599 | | | | | nu hat (MLE) | 293.4 | nu star (bias corrected) | | | | | 264.3 |
| 600 | | | | | MLE Mean (bias corrected) | 351.5 | MLE Sd (bias corrected) | | | | | 164.6 |
| 601 | | | | | | | Approximate Chi Square Value (0.05) | | | | | 227.7 |
| 602 | | | | | Adjusted Level of Significance | 0.0407 | Adjusted Chi Square Value | | | | | 225.7 |
| 603 | | | | | | | | | | | | |
| 604 | **Assuming Gamma Distribution** | | | | | | | | | | | |
| 605 | | | | | 95% Approximate Gamma UCL (use when n>=50)) | 408.1 | 95% Adjusted Gamma UCL (use when n<50) | | | | | 411.7 |
| 606 | | | | | | | | | | | | |
| 607 | **Lognormal GOF Test** | | | | | | | | | | | |
| 608 | | | | | Shapiro Wilk Test Statistic | 0.88 | **Shapiro Wilk Lognormal GOF Test** | | | | | |
| 609 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | Data Not Lognormal at 5% Significance Level | | | | | |
| 610 | | | | | Lilliefors Test Statistic | 0.179 | **Lilliefors Lognormal GOF Test** | | | | | |
| 611 | | | | | 5% Lilliefors Critical Value | 0.165 | Data Not Lognormal at 5% Significance Level | | | | | |
| 612 | **Data Not Lognormal at 5% Significance Level** | | | | | | | | | | | |
| 613 | | | | | | | | | | | | |
| 614 | **Lognormal Statistics** | | | | | | | | | | | |
| 615 | | | | | Minimum of Logged Data | 4.527 | Mean of logged Data | | | | | 5.76 |
| 616 | | | | | Maximum of Logged Data | 6.36 | SD of logged Data | | | | | 0.499 |
| 617 | | | | | | | | | | | | |
| 618 | **Assuming Lognormal Distribution** | | | | | | | | | | | |
| 619 | | | | | 95% H-UCL | 432 | 90% Chebyshev (MVUE) UCL | | | | | 461.7 |
| 620 | | | | | 95% Chebyshev (MVUE) UCL | 508.7 | 97.5% Chebyshev (MVUE) UCL | | | | | 574 |
| 621 | | | | | 99% Chebyshev (MVUE) UCL | 702.3 | | | | | | |
| 622 | | | | | | | | | | | | |
| 623 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 624 | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | | | | | |
| 625 | | | | | | | | | | | | |
| 626 | **Nonparametric Distribution Free UCLs** | | | | | | | | | | | |
| 627 | | | | | 95% CLT UCL | 394.3 | 95% Jackknife UCL | | | | | 395.8 |
| 628 | | | | | 95% Standard Bootstrap UCL | 393.8 | 95% Bootstrap-t UCL | | | | | 394.3 |
| 629 | | | | | 95% Hall's Bootstrap UCL | 390.8 | 95% Percentile Bootstrap UCL | | | | | 393.1 |
| 630 | | | | | 95% BCA Bootstrap UCL | 391.7 | | | | | | |
| 631 | | | | | 90% Chebyshev(Mean, Sd) UCL | 429.6 | 95% Chebyshev(Mean, Sd) UCL | | | | | 465 |
| 632 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 514.1 | 99% Chebyshev(Mean, Sd) UCL | | | | | 610.5 |
| 633 | | | | | | | | | | | | |
| 634 | **Suggested UCL to Use** | | | | | | | | | | | |
| 635 | | | | | 95% Student's-t UCL | 395.8 | | | | | | |
| 636 | | | | | | | | | | | | |
| 637 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

**Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.**

**Mercury**

**General Statistics**

| | | | |
|---|---|---|---|
| Total Number of Observations | 29 | Number of Distinct Observations | 28 |
| | | Number of Missing Observations | 0 |
| Minimum | 0.00703 | Mean | 0.911 |
| Maximum | 20.6 | Median | 0.0158 |
| SD | 3.868 | Std. Error of Mean | 0.718 |
| Coefficient of Variation | 4.245 | Skewness | 5.072 |

**Normal GOF Test**

| | | |
|---|---|---|
| Shapiro Wilk Test Statistic | 0.257 | **Shapiro Wilk GOF Test** |
| 5% Shapiro Wilk Critical Value | 0.926 | Data Not Normal at 5% Significance Level |
| Lilliefors Test Statistic | 0.464 | **Lilliefors GOF Test** |
| 5% Lilliefors Critical Value | 0.165 | Data Not Normal at 5% Significance Level |

**Data Not Normal at 5% Significance Level**

**Assuming Normal Distribution**

| **95% Normal UCL** | | **95% UCLs (Adjusted for Skewness)** | |
|---|---|---|---|
| 95% Student's-t UCL | 2.133 | 95% Adjusted-CLT UCL (Chen-1995) | 2.815 |
| | | 95% Modified-t UCL (Johnson-1978) | 2.246 |

**Gamma GOF Test**

| | | |
|---|---|---|
| A-D Test Statistic | 7.251 | **Anderson-Darling Gamma GOF Test** |
| 5% A-D Critical Value | 0.896 | Data Not Gamma Distributed at 5% Significance Level |
| K-S Test Statistic | 0.436 | **Kolmogrov-Smirnoff Gamma GOF Test** |
| 5% K-S Critical Value | 0.18 | Data Not Gamma Distributed at 5% Significance Level |

**Data Not Gamma Distributed at 5% Significance Level**

**Gamma Statistics**

| | | | |
|---|---|---|---|
| k hat (MLE) | 0.215 | k star (bias corrected MLE) | 0.216 |
| Theta hat (MLE) | 4.232 | Theta star (bias corrected MLE) | 4.218 |
| nu hat (MLE) | 12.49 | nu star (bias corrected) | 12.53 |
| MLE Mean (bias corrected) | 0.911 | MLE Sd (bias corrected) | 1.961 |
| | | Approximate Chi Square Value (0.05) | 5.577 |
| Adjusted Level of Significance | 0.0407 | Adjusted Chi Square Value | 5.301 |

**Assuming Gamma Distribution**

| | | | |
|---|---|---|---|
| 95% Approximate Gamma UCL (use when n>=50)) | 2.047 | 95% Adjusted Gamma UCL (use when n<50) | 2.153 |

**Lognormal GOF Test**

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 687 | | | | | Shapiro Wilk Test Statistic | 0.638 | **Shapiro Wilk Lognormal GOF Test** | | | | | |
| 688 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | Data Not Lognormal at 5% Significance Level | | | | | |
| 689 | | | | | Lilliefors Test Statistic | 0.299 | **Lilliefors Lognormal GOF Test** | | | | | |
| 690 | | | | | 5% Lilliefors Critical Value | 0.165 | Data Not Lognormal at 5% Significance Level | | | | | |
| 691 | | | | | **Data Not Lognormal at 5% Significance Level** | | | | | | | |
| 692 | | | | | | | | | | | | |
| 693 | | | | | **Lognormal Statistics** | | | | | | | |
| 694 | | | | | Minimum of Logged Data | -4.958 | | | Mean of logged Data | | | -3.472 |
| 695 | | | | | Maximum of Logged Data | 3.025 | | | SD of logged Data | | | 1.882 |
| 696 | | | | | | | | | | | | |
| 697 | | | | | **Assuming Lognormal Distribution** | | | | | | | |
| 698 | | | | | 95% H-UCL | 0.686 | | | 90% Chebyshev (MVUE) UCL | | | 0.375 |
| 699 | | | | | 95% Chebyshev (MVUE) UCL | 0.474 | | | 97.5% Chebyshev (MVUE) UCL | | | 0.611 |
| 700 | | | | | 99% Chebyshev (MVUE) UCL | 0.88 | | | | | | |
| 701 | | | | | | | | | | | | |
| 702 | | | | | **Nonparametric Distribution Free UCL Statistics** | | | | | | | |
| 703 | | | | | **Data do not follow a Discernible Distribution (0.05)** | | | | | | | |
| 704 | | | | | | | | | | | | |
| 705 | | | | | **Nonparametric Distribution Free UCLs** | | | | | | | |
| 706 | | | | | 95% CLT UCL | 2.093 | | | 95% Jackknife UCL | | | 2.133 |
| 707 | | | | | 95% Standard Bootstrap UCL | 2.081 | | | 95% Bootstrap-t UCL | | | 46.12 |
| 708 | | | | | 95% Hall's Bootstrap UCL | 21.55 | | | 95% Percentile Bootstrap UCL | | | 2.29 |
| 709 | | | | | 95% BCA Bootstrap UCL | 3.239 | | | | | | |
| 710 | | | | | 90% Chebyshev(Mean, Sd) UCL | 3.066 | | | 95% Chebyshev(Mean, Sd) UCL | | | 4.042 |
| 711 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 5.396 | | | 99% Chebyshev(Mean, Sd) UCL | | | 8.057 |
| 712 | | | | | | | | | | | | |
| 713 | | | | | **Suggested UCL to Use** | | | | | | | |
| 714 | | | | | 95% Chebyshev (Mean, Sd) UCL | 4.042 | | | | | | |
| 715 | | | | | | | | | | | | |
| 716 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 717 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 718 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 719 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 720 | | | | | | | | | | | | |
| 721 | **Perchlorate** | | | | | | | | | | | |
| 722 | | | | | | | | | | | | |
| 723 | | | | | **General Statistics** | | | | | | | |
| 724 | | | | | Total Number of Observations | 29 | | | Number of Distinct Observations | | | 22 |
| 725 | | | | | Number of Detects | 7 | | | Number of Non-Detects | | | 22 |
| 726 | | | | | Number of Distinct Detects | 7 | | | Number of Distinct Non-Detects | | | 15 |
| 727 | | | | | Minimum Detect | 5.8200E-4 | | | Minimum Non-Detect | | | 0.00204 |
| 728 | | | | | Maximum Detect | 0.00159 | | | Maximum Non-Detect | | | 0.00225 |
| 729 | | | | | Variance Detects | 1.0755E-7 | | | Percent Non-Detects | | | 75.86% |
| 730 | | | | | Mean Detects | 9.6529E-4 | | | SD Detects | | | 3.2795E-4 |
| 731 | | | | | Median Detects | 8.4100E-4 | | | CV Detects | | | 0.34 |
| 732 | | | | | Skewness Detects | 1.176 | | | Kurtosis Detects | | | 1.725 |
| 733 | | | | | Mean of Logged Detects | -6.989 | | | SD of Logged Detects | | | 0.322 |
| 734 | | | | | | | | | | | | |
| 735 | | | | | **Normal GOF Test on Detects Only** | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 736 | | | | | Shapiro Wilk Test Statistic | 0.902 | **Shapiro Wilk GOF Test** | | | | | |
| 737 | | | | | 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Normal at 5% Significance Level | | | | | |
| 738 | | | | | Lilliefors Test Statistic | 0.219 | **Lilliefors GOF Test** | | | | | |
| 739 | | | | | 5% Lilliefors Critical Value | 0.335 | Detected Data appear Normal at 5% Significance Level | | | | | |
| 740 | **Detected Data appear Normal at 5% Significance Level** | | | | | | | | | | | |
| 741 | | | | | | | | | | | | |
| 742 | **Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs** | | | | | | | | | | | |
| 743 | | | | | Mean | 9.6529E-4 | | | | Standard Error of Mean | | 1.2395E-4 |
| 744 | | | | | SD | 3.0362E-4 | | | | 95% KM (BCA) UCL | | 0.00116 |
| 745 | | | | | 95% KM (t) UCL | 0.00118 | | | | 95% KM (Percentile Bootstrap) UCL | | 0.00119 |
| 746 | | | | | 95% KM (z) UCL | 0.00117 | | | | 95% KM Bootstrap t UCL | | 0.00135 |
| 747 | | | | | 90% KM Chebyshev UCL | 0.00134 | | | | 95% KM Chebyshev UCL | | 0.00151 |
| 748 | | | | | 97.5% KM Chebyshev UCL | 0.00174 | | | | 99% KM Chebyshev UCL | | 0.0022 |
| 749 | | | | | | | | | | | | |
| 750 | **Gamma GOF Tests on Detected Observations Only** | | | | | | | | | | | |
| 751 | | | | | A-D Test Statistic | 0.311 | **Anderson-Darling GOF Test** | | | | | |
| 752 | | | | | 5% A-D Critical Value | 0.708 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 753 | | | | | K-S Test Statistic | 0.208 | **Kolmogrov-Smirnoff GOF** | | | | | |
| 754 | | | | | 5% K-S Critical Value | 0.312 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 755 | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 756 | | | | | | | | | | | | |
| 757 | **Gamma Statistics on Detected Data Only** | | | | | | | | | | | |
| 758 | | | | | k hat (MLE) | 11.12 | | | | k star (bias corrected MLE) | | 6.449 |
| 759 | | | | | Theta hat (MLE) | 8.6812E-5 | | | | Theta star (bias corrected MLE) | | 1.4968E-4 |
| 760 | | | | | nu hat (MLE) | 155.7 | | | | nu star (bias corrected) | | 90.29 |
| 761 | | | | | MLE Mean (bias corrected) | 9.6529E-4 | | | | MLE Sd (bias corrected) | | 3.8011E-4 |
| 762 | | | | | | | | | | | | |
| 763 | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | | | | | |
| 764 | | | | | k hat (KM) | 10.11 | | | | nu hat (KM) | | 586.2 |
| 765 | | | | | Approximate Chi Square Value (586.23, α) | 531.1 | | | | Adjusted Chi Square Value (586.23, β) | | 527.9 |
| 766 | | | | | 95% Gamma Approximate KM-UCL (use when n>=50) | 0.00107 | | | | 95% Gamma Adjusted KM-UCL (use when n<50) | | 0.00107 |
| 767 | | | | | | | | | | | | |
| 768 | **Gamma ROS Statistics using Imputed Non-Detects** | | | | | | | | | | | |
| 769 | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | | | | | |
| 770 | GROS may not be used when kstar of detected data is small such as < 0.1 | | | | | | | | | | | |
| 771 | For such situations, GROS method tends to yield inflated values of UCLs and BTVs | | | | | | | | | | | |
| 772 | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | | | | | |
| 773 | | | | | Minimum | 5.8200E-4 | | | | Mean | | 0.00782 |
| 774 | | | | | Maximum | 0.01 | | | | Median | | 0.01 |
| 775 | | | | | SD | 0.00394 | | | | CV | | 0.504 |
| 776 | | | | | k hat (MLE) | 1.665 | | | | k star (bias corrected MLE) | | 1.516 |
| 777 | | | | | Theta hat (MLE) | 0.0047 | | | | Theta star (bias corrected MLE) | | 0.00516 |
| 778 | | | | | nu hat (MLE) | 96.59 | | | | nu star (bias corrected) | | 87.93 |
| 779 | | | | | MLE Mean (bias corrected) | 0.00782 | | | | MLE Sd (bias corrected) | | 0.00635 |
| 780 | | | | | | | | | | Adjusted Level of Significance (β) | | 0.0407 |
| 781 | | | | | Approximate Chi Square Value (87.93, α) | 67.31 | | | | Adjusted Chi Square Value (87.93, β) | | 66.24 |
| 782 | | | | | 95% Gamma Approximate UCL (use when n>=50) | 0.0102 | | | | 95% Gamma Adjusted UCL (use when n<50) | | 0.0104 |
| 783 | | | | | | | | | | | | |
| 784 | **Lognormal GOF Test on Detected Observations Only** | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 785 | | | | | Shapiro Wilk Test Statistic | 0.958 | Shapiro Wilk GOF Test | | | | | |
| 786 | | | | | 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Lognormal at 5% Significance Level | | | | | |
| 787 | | | | | Lilliefors Test Statistic | 0.184 | Lilliefors GOF Test | | | | | |
| 788 | | | | | 5% Lilliefors Critical Value | 0.335 | Detected Data appear Lognormal at 5% Significance Level | | | | | |
| 789 | Detected Data appear Lognormal at 5% Significance Level | | | | | | | | | | | |
| 790 | | | | | | | | | | | | |
| 791 | Lognormal ROS Statistics Using Imputed Non-Detects | | | | | | | | | | | |
| 792 | | | | | Mean in Original Scale | 9.4030E-4 | | | | Mean in Log Scale | | -6.989 |
| 793 | | | | | SD in Original Scale | 1.9580E-4 | | | | SD in Log Scale | | 0.198 |
| 794 | | | | 95% t UCL (assumes normality of ROS data) | | 0.001 | | | | 95% Percentile Bootstrap UCL | | 0.001 |
| 795 | | | | | 95% BCA Bootstrap UCL | 0.001 | | | | 95% Bootstrap t UCL | | 0.00101 |
| 796 | | | | | 95% H-UCL (Log ROS) | 0.001 | | | | | | |
| 797 | | | | | | | | | | | | |
| 798 | UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed | | | | | | | | | | | |
| 799 | | | | | KM Mean (logged) | -6.989 | | | | 95% H-UCL (KM -Log) | | 0.00107 |
| 800 | | | | | KM SD (logged) | 0.298 | | | | 95% Critical H Value (KM-Log) | | 1.804 |
| 801 | | | | | KM Standard Error of Mean (logged) | 0.122 | | | | | | |
| 802 | | | | | | | | | | | | |
| 803 | DL/2 Statistics | | | | | | | | | | | |
| 804 | | | DL/2 Normal | | | | | | DL/2 Log-Transformed | | | |
| 805 | | | | | Mean in Original Scale | 0.00104 | | | | Mean in Log Scale | | -6.881 |
| 806 | | | | | SD in Original Scale | 1.5974E-4 | | | | SD in Log Scale | | 0.163 |
| 807 | | | | | 95% t UCL (Assumes normality) | 0.00109 | | | | 95% H-Stat UCL | | 0.0011 |
| 808 | DL/2 is not a recommended method, provided for comparisons and historical reasons | | | | | | | | | | | |
| 809 | | | | | | | | | | | | |
| 810 | Nonparametric Distribution Free UCL Statistics | | | | | | | | | | | |
| 811 | Detected Data appear Normal Distributed at 5% Significance Level | | | | | | | | | | | |
| 812 | | | | | | | | | | | | |
| 813 | Suggested UCL to Use | | | | | | | | | | | |
| 814 | | | | | 95% KM (t) UCL | 0.00118 | | | | 95% KM (Percentile Bootstrap) UCL | | 0.00119 |
| 815 | | | | | | | | | | | | |
| 816 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 817 | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | | | | | |
| 818 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 819 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician | | | | | | | | | | | |
| 820 | | | | | | | | | | | | |
| 821 | Silver | | | | | | | | | | | |
| 822 | | | | | | | | | | | | |
| 823 | General Statistics | | | | | | | | | | | |
| 824 | | | | | Total Number of Observations | 29 | | | | Number of Distinct Observations | | 28 |
| 825 | | | | | Number of Detects | 16 | | | | Number of Non-Detects | | 13 |
| 826 | | | | | Number of Distinct Detects | 16 | | | | Number of Distinct Non-Detects | | 12 |
| 827 | | | | | Minimum Detect | 0.105 | | | | Minimum Non-Detect | | 0.438 |
| 828 | | | | | Maximum Detect | 15.2 | | | | Maximum Non-Detect | | 0.56 |
| 829 | | | | | Variance Detects | 14.05 | | | | Percent Non-Detects | | 44.83% |
| 830 | | | | | Mean Detects | 1.267 | | | | SD Detects | | 3.748 |
| 831 | | | | | Median Detects | 0.196 | | | | CV Detects | | 2.958 |
| 832 | | | | | Skewness Detects | 3.889 | | | | Kurtosis Detects | | 15.32 |
| 833 | | | | | Mean of Logged Detects | -1.263 | | | | SD of Logged Detects | | 1.308 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 834 | | | | | | | | | | | | |
| 835 | **Normal GOF Test on Detects Only** | | | | | | | | | | | |
| 836 | | | | | Shapiro Wilk Test Statistic | 0.342 | **Shapiro Wilk GOF Test** | | | | | |
| 837 | | | | | 5% Shapiro Wilk Critical Value | 0.887 | Detected Data Not Normal at 5% Significance Level | | | | | |
| 838 | | | | | Lilliefors Test Statistic | 0.441 | **Lilliefors GOF Test** | | | | | |
| 839 | | | | | 5% Lilliefors Critical Value | 0.222 | Detected Data Not Normal at 5% Significance Level | | | | | |
| 840 | **Detected Data Not Normal at 5% Significance Level** | | | | | | | | | | | |
| 841 | | | | | | | | | | | | |
| 842 | **Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs** | | | | | | | | | | | |
| 843 | | | | | Mean | 0.778 | | | Standard Error of Mean | | | 0.528 |
| 844 | | | | | SD | 2.75 | | | 95% KM (BCA) UCL | | | 1.793 |
| 845 | | | | | 95% KM (t) UCL | 1.676 | | | 95% KM (Percentile Bootstrap) UCL | | | 1.793 |
| 846 | | | | | 95% KM (z) UCL | 1.646 | | | 95% KM Bootstrap t UCL | | | 15.17 |
| 847 | | | | | 90% KM Chebyshev UCL | 2.361 | | | 95% KM Chebyshev UCL | | | 3.078 |
| 848 | | | | | 97.5% KM Chebyshev UCL | 4.073 | | | 99% KM Chebyshev UCL | | | 6.027 |
| 849 | | | | | | | | | | | | |
| 850 | **Gamma GOF Tests on Detected Observations Only** | | | | | | | | | | | |
| 851 | | | | | A-D Test Statistic | 3.254 | **Anderson-Darling GOF Test** | | | | | |
| 852 | | | | | 5% A-D Critical Value | 0.81 | Detected Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 853 | | | | | K-S Test Statistic | 0.428 | **Kolmogrov-Smirnoff GOF** | | | | | |
| 854 | | | | | 5% K-S Critical Value | 0.229 | Detected Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 855 | **Detected Data Not Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 856 | | | | | | | | | | | | |
| 857 | **Gamma Statistics on Detected Data Only** | | | | | | | | | | | |
| 858 | | | | | k hat (MLE) | 0.433 | | | k star (bias corrected MLE) | | | 0.394 |
| 859 | | | | | Theta hat (MLE) | 2.925 | | | Theta star (bias corrected MLE) | | | 3.219 |
| 860 | | | | | nu hat (MLE) | 13.86 | | | nu star (bias corrected) | | | 12.59 |
| 861 | | | | | MLE Mean (bias corrected) | 1.267 | | | MLE Sd (bias corrected) | | | 2.02 |
| 862 | | | | | | | | | | | | |
| 863 | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | | | | | |
| 864 | | | | | k hat (KM) | 0.0801 | | | nu hat (KM) | | | 4.644 |
| 865 | | | | | Approximate Chi Square Value (4.64, α) | 0.991 | | | Adjusted Chi Square Value (4.64, β) | | | 0.897 |
| 866 | | | | | 95% Gamma Approximate KM-UCL (use when n>=50) | 3.645 | | | 95% Gamma Adjusted KM-UCL (use when n<50) | | | 4.029 |
| 867 | Gamma (KM) may not be used when k hat (KM) is < 0.1 | | | | | | | | | | | |
| 868 | | | | | | | | | | | | |
| 869 | **Gamma ROS Statistics using Imputed Non-Detects** | | | | | | | | | | | |
| 870 | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | | | | | |
| 871 | GROS may not be used when kstar of detected data is small such as < 0.1 | | | | | | | | | | | |
| 872 | For such situations, GROS method tends to yield inflated values of UCLs and BTVs | | | | | | | | | | | |
| 873 | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | | | | | |
| 874 | | | | | Minimum | 0.01 | | | Mean | | | 0.712 |
| 875 | | | | | Maximum | 15.2 | | | Median | | | 0.115 |
| 876 | | | | | SD | 2.815 | | | CV | | | 3.952 |
| 877 | | | | | k hat (MLE) | 0.299 | | | k star (bias corrected MLE) | | | 0.291 |
| 878 | | | | | Theta hat (MLE) | 2.384 | | | Theta star (bias corrected MLE) | | | 2.449 |
| 879 | | | | | nu hat (MLE) | 17.33 | | | nu star (bias corrected) | | | 16.87 |
| 880 | | | | | MLE Mean (bias corrected) | 0.712 | | | MLE Sd (bias corrected) | | | 1.321 |
| 881 | | | | | | | | | Adjusted Level of Significance (β) | | | 0.0407 |
| 882 | | | | | Approximate Chi Square Value (16.87, α) | 8.579 | | | Adjusted Chi Square Value (16.87, β) | | | 8.226 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 883 | 95% Gamma Approximate UCL (use when n>=50) | | | | | 1.4 | 95% Gamma Adjusted UCL (use when n<50) | | | | | 1.46 |
| 884 | | | | | | | | | | | | |
| 885 | **Lognormal GOF Test on Detected Observations Only** | | | | | | | | | | | |
| 886 | Shapiro Wilk Test Statistic | | | | | 0.701 | **Shapiro Wilk GOF Test** | | | | | |
| 887 | 5% Shapiro Wilk Critical Value | | | | | 0.887 | Detected Data Not Lognormal at 5% Significance Level | | | | | |
| 888 | Lilliefors Test Statistic | | | | | 0.34 | **Lilliefors GOF Test** | | | | | |
| 889 | 5% Lilliefors Critical Value | | | | | 0.222 | Detected Data Not Lognormal at 5% Significance Level | | | | | |
| 890 | **Detected Data Not Lognormal at 5% Significance Level** | | | | | | | | | | | |
| 891 | | | | | | | | | | | | |
| 892 | **Lognormal ROS Statistics Using Imputed Non-Detects** | | | | | | | | | | | |
| 893 | Mean in Original Scale | | | | | 0.791 | Mean in Log Scale | | | | | -1.411 |
| 894 | SD in Original Scale | | | | | 2.796 | SD in Log Scale | | | | | 0.979 |
| 895 | 95% t UCL (assumes normality of ROS data) | | | | | 1.675 | 95% Percentile Bootstrap UCL | | | | | 1.783 |
| 896 | 95% BCA Bootstrap UCL | | | | | 2.415 | 95% Bootstrap t UCL | | | | | 27.93 |
| 897 | 95% H-UCL (Log ROS) | | | | | 0.618 | | | | | | |
| 898 | | | | | | | | | | | | |
| 899 | **DL/2 Statistics** | | | | | | | | | | | |
| 900 | **DL/2 Normal** | | | | | | **DL/2 Log-Transformed** | | | | | |
| 901 | Mean in Original Scale | | | | | 0.812 | Mean in Log Scale | | | | | -1.316 |
| 902 | SD in Original Scale | | | | | 2.791 | SD in Log Scale | | | | | 0.96 |
| 903 | 95% t UCL (Assumes normality) | | | | | 1.694 | 95% H-Stat UCL | | | | | 0.66 |
| 904 | **DL/2 is not a recommended method, provided for comparisons and historical reasons** | | | | | | | | | | | |
| 905 | | | | | | | | | | | | |
| 906 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 907 | **Data do not follow a Discernible Distribution at 5% Significance Level** | | | | | | | | | | | |
| 908 | | | | | | | | | | | | |
| 909 | **Suggested UCL to Use** | | | | | | | | | | | |
| 910 | 97.5% KM (Chebyshev) UCL | | | | | 4.073 | | | | | | |
| 911 | | | | | | | | | | | | |
| 912 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 913 | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | | | | | |
| 914 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 915 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statisticiar | | | | | | | | | | | |
| 916 | | | | | | | | | | | | |
| 917 | | | | | | | | | | | | |
| 918 | **Zinc** | | | | | | | | | | | |
| 919 | | | | | | | | | | | | |
| 920 | **General Statistics** | | | | | | | | | | | |
| 921 | Total Number of Observations | | | | | 29 | Number of Distinct Observations | | | | | 28 |
| 922 | | | | | | | Number of Missing Observations | | | | | 0 |
| 923 | Minimum | | | | | 39 | Mean | | | | | 54.57 |
| 924 | Maximum | | | | | 113 | Median | | | | | 50.4 |
| 925 | SD | | | | | 15.55 | Std. Error of Mean | | | | | 2.888 |
| 926 | Coefficient of Variation | | | | | 0.285 | Skewness | | | | | 2.079 |
| 927 | | | | | | | | | | | | |
| 928 | **Normal GOF Test** | | | | | | | | | | | |
| 929 | Shapiro Wilk Test Statistic | | | | | 0.805 | **Shapiro Wilk GOF Test** | | | | | |
| 930 | 5% Shapiro Wilk Critical Value | | | | | 0.926 | Data Not Normal at 5% Significance Level | | | | | |
| 931 | Lilliefors Test Statistic | | | | | 0.163 | **Lilliefors GOF Test** | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 932 | | | | | 5% Lilliefors Critical Value | 0.165 | Data appear Normal at 5% Significance Level | | | | | |
| 933 | **Data appear Approximate Normal at 5% Significance Level** | | | | | | | | | | | |
| 934 | | | | | | | | | | | | |
| 935 | **Assuming Normal Distribution** | | | | | | | | | | | |
| 936 | **95% Normal UCL** | | | | | | **95% UCLs (Adjusted for Skewness)** | | | | | |
| 937 | | | | | 95% Student's-t UCL | 59.48 | | | 95% Adjusted-CLT UCL (Chen-1995) | | | 60.51 |
| 938 | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | 59.67 |
| 939 | | | | | | | | | | | | |
| 940 | **Gamma GOF Test** | | | | | | | | | | | |
| 941 | | | | | A-D Test Statistic | 0.945 | **Anderson-Darling Gamma GOF Test** | | | | | |
| 942 | | | | | 5% A-D Critical Value | 0.745 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 943 | | | | | K-S Test Statistic | 0.165 | **Kolmogrov-Smirnoff Gamma GOF Test** | | | | | |
| 944 | | | | | 5% K-S Critical Value | 0.162 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 945 | **Data Not Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 946 | | | | | | | | | | | | |
| 947 | **Gamma Statistics** | | | | | | | | | | | |
| 948 | | | | | k hat (MLE) | 15.96 | | | k star (bias corrected MLE) | | | 14.34 |
| 949 | | | | | Theta hat (MLE) | 3.418 | | | Theta star (bias corrected MLE) | | | 3.807 |
| 950 | | | | | nu hat (MLE) | 925.9 | | | nu star (bias corrected) | | | 831.4 |
| 951 | | | | | MLE Mean (bias corrected) | 54.57 | | | MLE Sd (bias corrected) | | | 14.41 |
| 952 | | | | | | | | | Approximate Chi Square Value (0.05) | | | 765.5 |
| 953 | | | | | Adjusted Level of Significance | 0.0407 | | | Adjusted Chi Square Value | | | 761.8 |
| 954 | | | | | | | | | | | | |
| 955 | **Assuming Gamma Distribution** | | | | | | | | | | | |
| 956 | 95% Approximate Gamma UCL (use when n>=50)) | | | | | 59.27 | | | 95% Adjusted Gamma UCL (use when n<50) | | | 59.56 |
| 957 | | | | | | | | | | | | |
| 958 | **Lognormal GOF Test** | | | | | | | | | | | |
| 959 | | | | | Shapiro Wilk Test Statistic | 0.902 | **Shapiro Wilk Lognormal GOF Test** | | | | | |
| 960 | | | | | 5% Shapiro Wilk Critical Value | 0.926 | Data Not Lognormal at 5% Significance Level | | | | | |
| 961 | | | | | Lilliefors Test Statistic | 0.158 | **Lilliefors Lognormal GOF Test** | | | | | |
| 962 | | | | | 5% Lilliefors Critical Value | 0.165 | Data appear Lognormal at 5% Significance Level | | | | | |
| 963 | **Data appear Approximate Lognormal at 5% Significance Level** | | | | | | | | | | | |
| 964 | | | | | | | | | | | | |
| 965 | **Lognormal Statistics** | | | | | | | | | | | |
| 966 | | | | | Minimum of Logged Data | 3.664 | | | Mean of logged Data | | | 3.968 |
| 967 | | | | | Maximum of Logged Data | 4.727 | | | SD of logged Data | | | 0.245 |
| 968 | | | | | | | | | | | | |
| 969 | **Assuming Lognormal Distribution** | | | | | | | | | | | |
| 970 | | | | | 95% H-UCL | 59.13 | | | 90% Chebyshev (MVUE) UCL | | | 61.91 |
| 971 | | | | | 95% Chebyshev (MVUE) UCL | 65.31 | | | 97.5% Chebyshev (MVUE) UCL | | | 70.02 |
| 972 | | | | | 99% Chebyshev (MVUE) UCL | 79.28 | | | | | | |
| 973 | | | | | | | | | | | | |
| 974 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 975 | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | | | | | |
| 976 | | | | | | | | | | | | |
| 977 | **Nonparametric Distribution Free UCLs** | | | | | | | | | | | |
| 978 | | | | | 95% CLT UCL | 59.32 | | | 95% Jackknife UCL | | | 59.48 |
| 979 | | | | | 95% Standard Bootstrap UCL | 59.15 | | | 95% Bootstrap-t UCL | | | 61.39 |
| 980 | | | | | 95% Hall's Bootstrap UCL | 63.66 | | | 95% Percentile Bootstrap UCL | | | 59.75 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 981 | | | | | 95% BCA Bootstrap UCL | 60.51 | | | | | | |
| 982 | | | | 90% Chebyshev(Mean, Sd) UCL | | 63.23 | | | | 95% Chebyshev(Mean, Sd) UCL | | 67.16 |
| 983 | | | | 97.5% Chebyshev(Mean, Sd) UCL | | 72.6 | | | | 99% Chebyshev(Mean, Sd) UCL | | 83.3 |
| 984 | | | | | | | | | | | | |
| 985 | | | | | Suggested UCL to Use | | | | | | | |
| 986 | | | | | 95% Student's-t UCL | 59.48 | | | | | | |
| 987 | | | | | | | | | | | | |
| 988 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 989 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 990 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 991 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 992 | | | | | | | | | | | | |
| 993 | Uranium-235/236 | | | | | | | | | | | |
| 994 | | | | | | | | | | | | |
| 995 | | | | | General Statistics | | | | | | | |
| 996 | | | | | Total Number of Observations | 29 | | | | Number of Distinct Observations | | 28 |
| 997 | | | | | Number of Detects | 11 | | | | Number of Non-Detects | | 18 |
| 998 | | | | | Number of Distinct Detects | 11 | | | | Number of Distinct Non-Detects | | 18 |
| 999 | | | | | Minimum Detect | 0.0577 | | | | Minimum Non-Detect | | 0.0346 |
| 1000 | | | | | Maximum Detect | 0.115 | | | | Maximum Non-Detect | | 0.0864 |
| 1001 | | | | | Variance Detects | 2.7101E-4 | | | | Percent Non-Detects | | 62.07% |
| 1002 | | | | | Mean Detects | 0.0885 | | | | SD Detects | | 0.0165 |
| 1003 | | | | | Median Detects | 0.0848 | | | | CV Detects | | 0.186 |
| 1004 | | | | | Skewness Detects | -0.106 | | | | Kurtosis Detects | | 0.119 |
| 1005 | | | | | Mean of Logged Detects | -2.441 | | | | SD of Logged Detects | | 0.195 |
| 1006 | | | | | | | | | | | | |
| 1007 | | | | | Normal GOF Test on Detects Only | | | | | | | |
| 1008 | | | | | Shapiro Wilk Test Statistic | 0.954 | | | | Shapiro Wilk GOF Test | | |
| 1009 | | | | | 5% Shapiro Wilk Critical Value | 0.85 | | | | Detected Data appear Normal at 5% Significance Level | | |
| 1010 | | | | | Lilliefors Test Statistic | 0.195 | | | | Lilliefors GOF Test | | |
| 1011 | | | | | 5% Lilliefors Critical Value | 0.267 | | | | Detected Data appear Normal at 5% Significance Level | | |
| 1012 | | | | | Detected Data appear Normal at 5% Significance Level | | | | | | | |
| 1013 | | | | | | | | | | | | |
| 1014 | | | | | Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | | | | | |
| 1015 | | | | | Mean | 0.0574 | | | | Standard Error of Mean | | 0.00573 |
| 1016 | | | | | SD | 0.0273 | | | | 95% KM (BCA) UCL | | 0.0713 |
| 1017 | | | | | 95% KM (t) UCL | 0.0671 | | | | 95% KM (Percentile Bootstrap) UCL | | 0.069 |
| 1018 | | | | | 95% KM (z) UCL | 0.0668 | | | | 95% KM Bootstrap t UCL | | 0.067 |
| 1019 | | | | | 90% KM Chebyshev UCL | 0.0746 | | | | 95% KM Chebyshev UCL | | 0.0824 |
| 1020 | | | | | 97.5% KM Chebyshev UCL | 0.0932 | | | | 99% KM Chebyshev UCL | | 0.114 |
| 1021 | | | | | | | | | | | | |
| 1022 | | | | | Gamma GOF Tests on Detected Observations Only | | | | | | | |
| 1023 | | | | | A-D Test Statistic | 0.366 | | | | Anderson-Darling GOF Test | | |
| 1024 | | | | | 5% A-D Critical Value | 0.729 | | | | Detected data appear Gamma Distributed at 5% Significance Leve | | |
| 1025 | | | | | K-S Test Statistic | 0.204 | | | | Kolmogrov-Smirnoff GOF | | |
| 1026 | | | | | 5% K-S Critical Value | 0.255 | | | | Detected data appear Gamma Distributed at 5% Significance Leve | | |
| 1027 | | | | | Detected data appear Gamma Distributed at 5% Significance Level | | | | | | | |
| 1028 | | | | | | | | | | | | |
| 1029 | | | | | Gamma Statistics on Detected Data Only | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1030 | | | | | k hat (MLE) | 30.26 | | | | | k star (bias corrected MLE) | 22.07 |
| 1031 | | | | | Theta hat (MLE) | 0.00293 | | | | | Theta star (bias corrected MLE) | 0.00401 |
| 1032 | | | | | nu hat (MLE) | 665.7 | | | | | nu star (bias corrected) | 485.5 |
| 1033 | | | | | MLE Mean (bias corrected) | 0.0885 | | | | | MLE Sd (bias corrected) | 0.0188 |
| 1034 | | | | | | | | | | | | |
| 1035 | | | | | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | |
| 1036 | | | | | k hat (KM) | 4.42 | | | | | nu hat (KM) | 256.4 |
| 1037 | | | | | Approximate Chi Square Value (256.38, α) | 220.3 | | | | | Adjusted Chi Square Value (256.38, β) | 218.3 |
| 1038 | 95% Gamma Approximate KM-UCL (use when n>=50) | | | | | 0.0668 | | | | | 95% Gamma Adjusted KM-UCL (use when n<50) | 0.0674 |
| 1039 | | | | | | | | | | | | |
| 1040 | | | | | **Gamma ROS Statistics using Imputed Non-Detects** | | | | | | | |
| 1041 | | | | | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | |
| 1042 | | | | | GROS may not be used when kstar of detected data is small such as < 0.1 | | | | | | | |
| 1043 | | | | | For such situations, GROS method tends to yield inflated values of UCLs and BTVs | | | | | | | |
| 1044 | | | | | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | |
| 1045 | | | | | Minimum | 0.0448 | | | | | Mean | 0.0635 |
| 1046 | | | | | Maximum | 0.115 | | | | | Median | 0.0502 |
| 1047 | | | | | SD | 0.0223 | | | | | CV | 0.351 |
| 1048 | | | | | k hat (MLE) | 9.759 | | | | | k star (bias corrected MLE) | 8.772 |
| 1049 | | | | | Theta hat (MLE) | 0.00651 | | | | | Theta star (bias corrected MLE) | 0.00724 |
| 1050 | | | | | nu hat (MLE) | 566 | | | | | nu star (bias corrected) | 508.8 |
| 1051 | | | | | MLE Mean (bias corrected) | 0.0635 | | | | | MLE Sd (bias corrected) | 0.0215 |
| 1052 | | | | | | | | | | | Adjusted Level of Significance (β) | 0.0407 |
| 1053 | | | | | Approximate Chi Square Value (508.79, α) | 457.5 | | | | | Adjusted Chi Square Value (508.79, β) | 454.6 |
| 1054 | | | | | 95% Gamma Approximate UCL (use when n>=50) | 0.0707 | | | | | 95% Gamma Adjusted UCL (use when n<50) | 0.0711 |
| 1055 | | | | | | | | | | | | |
| 1056 | | | | | **Lognormal GOF Test on Detected Observations Only** | | | | | | | |
| 1057 | | | | | Shapiro Wilk Test Statistic | 0.935 | | | | | **Shapiro Wilk GOF Test** | |
| 1058 | | | | | 5% Shapiro Wilk Critical Value | 0.85 | | | | | Detected Data appear Lognormal at 5% Significance Level | |
| 1059 | | | | | Lilliefors Test Statistic | 0.221 | | | | | **Lilliefors GOF Test** | |
| 1060 | | | | | 5% Lilliefors Critical Value | 0.267 | | | | | Detected Data appear Lognormal at 5% Significance Level | |
| 1061 | | | | | **Detected Data appear Lognormal at 5% Significance Level** | | | | | | | |
| 1062 | | | | | | | | | | | | |
| 1063 | | | | | **Lognormal ROS Statistics Using Imputed Non-Detects** | | | | | | | |
| 1064 | | | | | Mean in Original Scale | 0.0662 | | | | | Mean in Log Scale | -2.755 |
| 1065 | | | | | SD in Original Scale | 0.0204 | | | | | SD in Log Scale | 0.277 |
| 1066 | | | | | 95% t UCL (assumes normality of ROS data) | 0.0726 | | | | | 95% Percentile Bootstrap UCL | 0.0727 |
| 1067 | | | | | 95% BCA Bootstrap UCL | 0.0729 | | | | | 95% Bootstrap t UCL | 0.0741 |
| 1068 | | | | | 95% H-UCL (Log ROS) | 0.0726 | | | | | | |
| 1069 | | | | | | | | | | | | |
| 1070 | | | | | **UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed** | | | | | | | |
| 1071 | | | | | KM Mean (logged) | -2.965 | | | | | 95% H-UCL (KM -Log) | 0.0673 |
| 1072 | | | | | KM SD (logged) | 0.453 | | | | | 95% Critical H Value (KM-Log) | 1.91 |
| 1073 | | | | | KM Standard Error of Mean (logged) | 0.0996 | | | | | | |
| 1074 | | | | | | | | | | | | |
| 1075 | | | | | **DL/2 Statistics** | | | | | | | |
| 1076 | | | | | **DL/2 Normal** | | | | | | **DL/2 Log-Transformed** | |
| 1077 | | | | | Mean in Original Scale | 0.053 | | | | | Mean in Log Scale | -3.092 |
| 1078 | | | | | SD in Original Scale | 0.0304 | | | | | SD in Log Scale | 0.563 |

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| 1079 | | | | 95% t UCL (Assumes normality) | | 0.0626 | | | | 95% H-Stat UCL | | 0.0658 |
| 1080 | **DL/2 is not a recommended method, provided for comparisons and historical reasons** | | | | | | | | | | | |
| 1081 | | | | | | | | | | | | |
| 1082 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 1083 | **Detected Data appear Normal Distributed at 5% Significance Level** | | | | | | | | | | | |
| 1084 | | | | | | | | | | | | |
| 1085 | **Suggested UCL to Use** | | | | | | | | | | | |
| 1086 | | | | 95% KM (t) UCL | | 0.0671 | | | | 95% KM (Percentile Bootstrap) UCL | | 0.069 |
| 1087 | | | | | | | | | | | | |
| 1088 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 1089 | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | | | | | |
| 1090 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 1091 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | UCL Statistics for Data Sets with Non-Detects | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | User Selected Options | | | | | | | | | | | |
| 4 | Date/Time of Computation | | | 12/19/2014 3:02:10 PM | | | | | | | | |
| 5 | From File | | | ProUCLinput_57-007_0-10.xls | | | | | | | | |
| 6 | Full Precision | | | OFF | | | | | | | | |
| 7 | Confidence Coefficient | | | 95% | | | | | | | | |
| 8 | umber of Bootstrap Operations | | | 2000 | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | Aluminum | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | General Statistics | | | | | | | | | | | |
| 14 | Total Number of Observations | | | | | 33 | Number of Distinct Observations | | | | | 31 |
| 15 | | | | | | | Number of Missing Observations | | | | | 0 |
| 16 | Minimum | | | | | 2540 | Mean | | | | | 5825 |
| 17 | Maximum | | | | | 29600 | Median | | | | | 4830 |
| 18 | SD | | | | | 4531 | Std. Error of Mean | | | | | 788.8 |
| 19 | Coefficient of Variation | | | | | 0.778 | Skewness | | | | | 4.774 |
| 20 | | | | | | | | | | | | |
| 21 | Normal GOF Test | | | | | | | | | | | |
| 22 | Shapiro Wilk Test Statistic | | | | | 0.472 | Shapiro Wilk GOF Test | | | | | |
| 23 | 5% Shapiro Wilk Critical Value | | | | | 0.931 | Data Not Normal at 5% Significance Level | | | | | |
| 24 | Lilliefors Test Statistic | | | | | 0.306 | Lilliefors GOF Test | | | | | |
| 25 | 5% Lilliefors Critical Value | | | | | 0.154 | Data Not Normal at 5% Significance Level | | | | | |
| 26 | Data Not Normal at 5% Significance Level | | | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | Assuming Normal Distribution | | | | | | | | | | | |
| 29 | 95% Normal UCL | | | | | | 95% UCLs (Adjusted for Skewness) | | | | | |
| 30 | 95% Student's-t UCL | | | | | 7162 | 95% Adjusted-CLT UCL (Chen-1995) | | | | | 7823 |
| 31 | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | | | 7271 |
| 32 | | | | | | | | | | | | |
| 33 | Gamma GOF Test | | | | | | | | | | | |
| 34 | A-D Test Statistic | | | | | 2.276 | Anderson-Darling Gamma GOF Test | | | | | |
| 35 | 5% A-D Critical Value | | | | | 0.751 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 36 | K-S Test Statistic | | | | | 0.235 | Kolmogrov-Smirnoff Gamma GOF Test | | | | | |
| 37 | 5% K-S Critical Value | | | | | 0.154 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 38 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 39 | | | | | | | | | | | | |
| 40 | Gamma Statistics | | | | | | | | | | | |
| 41 | k hat (MLE) | | | | | 4.164 | k star (bias corrected MLE) | | | | | 3.806 |
| 42 | Theta hat (MLE) | | | | | 1399 | Theta star (bias corrected MLE) | | | | | 1531 |
| 43 | nu hat (MLE) | | | | | 274.8 | nu star (bias corrected) | | | | | 251.2 |
| 44 | MLE Mean (bias corrected) | | | | | 5825 | MLE Sd (bias corrected) | | | | | 2986 |
| 45 | | | | | | | Approximate Chi Square Value (0.05) | | | | | 215.5 |
| 46 | Adjusted Level of Significance | | | | | 0.0419 | Adjusted Chi Square Value | | | | | 213.8 |
| 47 | | | | | | | | | | | | |
| 48 | Assuming Gamma Distribution | | | | | | | | | | | |
| 49 | 95% Approximate Gamma UCL (use when n>=50)) | | | | | 6790 | 95% Adjusted Gamma UCL (use when n<50) | | | | | 6844 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | | | | | | | | | | | | |
| 51 | | | | | Lognormal GOF Test | | | | | | | |
| 52 | | | | | Shapiro Wilk Test Statistic | 0.845 | Shapiro Wilk Lognormal GOF Test | | | | | |
| 53 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | Data Not Lognormal at 5% Significance Level | | | | | |
| 54 | | | | | Lilliefors Test Statistic | 0.184 | Lilliefors Lognormal GOF Test | | | | | |
| 55 | | | | | 5% Lilliefors Critical Value | 0.154 | Data Not Lognormal at 5% Significance Level | | | | | |
| 56 | | | | | Data Not Lognormal at 5% Significance Level | | | | | | | |
| 57 | | | | | | | | | | | | |
| 58 | | | | | Lognormal Statistics | | | | | | | |
| 59 | | | | | Minimum of Logged Data | 7.84 | | | | Mean of logged Data | | 8.545 |
| 60 | | | | | Maximum of Logged Data | 10.3 | | | | SD of logged Data | | 0.43 |
| 61 | | | | | | | | | | | | |
| 62 | | | | | Assuming Lognormal Distribution | | | | | | | |
| 63 | | | | | 95% H-UCL | 6508 | | | | 90% Chebyshev (MVUE) UCL | | 6928 |
| 64 | | | | | 95% Chebyshev (MVUE) UCL | 7520 | | | | 97.5% Chebyshev (MVUE) UCL | | 8340 |
| 65 | | | | | 99% Chebyshev (MVUE) UCL | 9953 | | | | | | |
| 66 | | | | | | | | | | | | |
| 67 | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | | |
| 68 | | | | | Data do not follow a Discernible Distribution (0.05) | | | | | | | |
| 69 | | | | | | | | | | | | |
| 70 | | | | | Nonparametric Distribution Free UCLs | | | | | | | |
| 71 | | | | | 95% CLT UCL | 7123 | | | | 95% Jackknife UCL | | 7162 |
| 72 | | | | | 95% Standard Bootstrap UCL | 7079 | | | | 95% Bootstrap-t UCL | | 9269 |
| 73 | | | | | 95% Hall's Bootstrap UCL | 12209 | | | | 95% Percentile Bootstrap UCL | | 7279 |
| 74 | | | | | 95% BCA Bootstrap UCL | 8167 | | | | | | |
| 75 | | | | | 90% Chebyshev(Mean, Sd) UCL | 8192 | | | | 95% Chebyshev(Mean, Sd) UCL | | 9264 |
| 76 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 10752 | | | | 99% Chebyshev(Mean, Sd) UCL | | 13674 |
| 77 | | | | | | | | | | | | |
| 78 | | | | | Suggested UCL to Use | | | | | | | |
| 79 | | | | | 95% Student's-t UCL | 7162 | | | | or 95% Modified-t UCL | | 7271 |
| 80 | | | | | | | | | | | | |
| 81 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 82 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 83 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 84 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 85 | | | | | | | | | | | | |
| 86 | Antimony | | | | | | | | | | | |
| 87 | | | | | | | | | | | | |
| 88 | | | | | General Statistics | | | | | | | |
| 89 | | | | | Total Number of Observations | 33 | | | | Number of Distinct Observations | | 24 |
| 90 | | | | | Number of Detects | 7 | | | | Number of Non-Detects | | 26 |
| 91 | | | | | Number of Distinct Detects | 6 | | | | Number of Distinct Non-Detects | | 18 |
| 92 | | | | | Minimum Detect | 0.361 | | | | Minimum Non-Detect | | 0.875 |
| 93 | | | | | Maximum Detect | 0.488 | | | | Maximum Non-Detect | | 1.15 |
| 94 | | | | | Variance Detects | 0.00219 | | | | Percent Non-Detects | | 78.79% |
| 95 | | | | | Mean Detects | 0.444 | | | | SD Detects | | 0.0468 |
| 96 | | | | | Median Detects | 0.465 | | | | CV Detects | | 0.105 |
| 97 | | | | | Skewness Detects | -1.02 | | | | Kurtosis Detects | | 0.139 |
| 98 | | | | | Mean of Logged Detects | -0.818 | | | | SD of Logged Detects | | 0.11 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 99 | | | | | | | | | | | | |
| 100 | **Normal GOF Test on Detects Only** | | | | | | | | | | | |
| 101 | | | | | Shapiro Wilk Test Statistic | 0.888 | **Shapiro Wilk GOF Test** | | | | | |
| 102 | | | | | 5% Shapiro Wilk Critical Value | 0.803 | Detected Data appear Normal at 5% Significance Level | | | | | |
| 103 | | | | | Lilliefors Test Statistic | 0.247 | **Lilliefors GOF Test** | | | | | |
| 104 | | | | | 5% Lilliefors Critical Value | 0.335 | Detected Data appear Normal at 5% Significance Level | | | | | |
| 105 | **Detected Data appear Normal at 5% Significance Level** | | | | | | | | | | | |
| 106 | | | | | | | | | | | | |
| 107 | **Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs** | | | | | | | | | | | |
| 108 | | | | | Mean | 0.444 | | | | Standard Error of Mean | | 0.0177 |
| 109 | | | | | SD | 0.0433 | | | | 95% KM (BCA) UCL | | 0.471 |
| 110 | | | | | 95% KM (t) UCL | 0.474 | | | | 95% KM (Percentile Bootstrap) UCL | | 0.471 |
| 111 | | | | | 95% KM (z) UCL | 0.473 | | | | 95% KM Bootstrap t UCL | | 0.47 |
| 112 | | | | | 90% KM Chebyshev UCL | 0.497 | | | | 95% KM Chebyshev UCL | | 0.521 |
| 113 | | | | | 97.5% KM Chebyshev UCL | 0.554 | | | | 99% KM Chebyshev UCL | | 0.62 |
| 114 | | | | | | | | | | | | |
| 115 | **Gamma GOF Tests on Detected Observations Only** | | | | | | | | | | | |
| 116 | | | | | A-D Test Statistic | 0.456 | **Anderson-Darling GOF Test** | | | | | |
| 117 | | | | | 5% A-D Critical Value | 0.708 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 118 | | | | | K-S Test Statistic | 0.264 | **Kolmogrov-Smirnoff GOF** | | | | | |
| 119 | | | | | 5% K-S Critical Value | 0.311 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 120 | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 121 | | | | | | | | | | | | |
| 122 | **Gamma Statistics on Detected Data Only** | | | | | | | | | | | |
| 123 | | | | | k hat (MLE) | 98.92 | | | | k star (bias corrected MLE) | | 56.62 |
| 124 | | | | | Theta hat (MLE) | 0.00449 | | | | Theta star (bias corrected MLE) | | 0.00784 |
| 125 | | | | | nu hat (MLE) | 1385 | | | | nu star (bias corrected) | | 792.7 |
| 126 | | | | | MLE Mean (bias corrected) | 0.444 | | | | MLE Sd (bias corrected) | | 0.059 |
| 127 | | | | | | | | | | | | |
| 128 | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | | | | | |
| 129 | | | | | k hat (KM) | 105 | | | | nu hat (KM) | | 6933 |
| 130 | | | | | Approximate Chi Square Value (N/A, α) | 6741 | | | | Adjusted Chi Square Value (N/A, β) | | 6731 |
| 131 | | | | | 95% Gamma Approximate KM-UCL (use when n>=50) | 0.456 | | | | 95% Gamma Adjusted KM-UCL (use when n<50) | | 0.457 |
| 132 | | | | | | | | | | | | |
| 133 | **Gamma ROS Statistics using Imputed Non-Detects** | | | | | | | | | | | |
| 134 | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | | | | | |
| 135 | GROS may not be used when kstar of detected data is small such as < 0.1 | | | | | | | | | | | |
| 136 | For such situations, GROS method tends to yield inflated values of UCLs and BTVs | | | | | | | | | | | |
| 137 | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | | | | | |
| 138 | | | | | Minimum | 0.361 | | | | Mean | | 0.443 |
| 139 | | | | | Maximum | 0.488 | | | | Median | | 0.443 |
| 140 | | | | | SD | 0.0267 | | | | CV | | 0.0602 |
| 141 | | | | | k hat (MLE) | 274.9 | | | | k star (bias corrected MLE) | | 249.9 |
| 142 | | | | | Theta hat (MLE) | 0.00161 | | | | Theta star (bias corrected MLE) | | 0.00177 |
| 143 | | | | | nu hat (MLE) | 18141 | | | | nu star (bias corrected) | | 16493 |
| 144 | | | | | MLE Mean (bias corrected) | 0.443 | | | | MLE Sd (bias corrected) | | 0.028 |
| 145 | | | | | | | | | | Adjusted Level of Significance (β) | | 0.0419 |
| 146 | | | | | Approximate Chi Square Value (N/A, α) | 16195 | | | | Adjusted Chi Square Value (N/A, β) | | 16180 |
| 147 | | | | | 95% Gamma Approximate UCL (use when n>=50) | 0.451 | | | | 95% Gamma Adjusted UCL (use when n<50) | | 0.452 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 148 | | | | | | | | | | | | |
| 149 | | | | | | Lognormal GOF Test on Detected Observations Only | | | | | | |
| 150 | | | | | Shapiro Wilk Test Statistic | 0.872 | | | Shapiro Wilk GOF Test | | | |
| 151 | | | | | 5% Shapiro Wilk Critical Value | 0.803 | | | Detected Data appear Lognormal at 5% Significance Level | | | |
| 152 | | | | | Lilliefors Test Statistic | 0.252 | | | Lilliefors GOF Test | | | |
| 153 | | | | | 5% Lilliefors Critical Value | 0.335 | | | Detected Data appear Lognormal at 5% Significance Level | | | |
| 154 | | | | | | Detected Data appear Lognormal at 5% Significance Level | | | | | | |
| 155 | | | | | | | | | | | | |
| 156 | | | | | | Lognormal ROS Statistics Using Imputed Non-Detects | | | | | | |
| 157 | | | | | Mean in Original Scale | 0.442 | | | Mean in Log Scale | | | -0.818 |
| 158 | | | | | SD in Original Scale | 0.0272 | | | SD in Log Scale | | | 0.0629 |
| 159 | | | | | 95% t UCL (assumes normality of ROS data) | 0.45 | | | 95% Percentile Bootstrap UCL | | | 0.45 |
| 160 | | | | | 95% BCA Bootstrap UCL | 0.45 | | | 95% Bootstrap t UCL | | | 0.45 |
| 161 | | | | | 95% H-UCL (Log ROS) | N/A | | | | | | |
| 162 | | | | | | | | | | | | |
| 163 | | | | | | UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed | | | | | | |
| 164 | | | | | KM Mean (logged) | -0.818 | | | 95% H-UCL (KM -Log) | | | 0.458 |
| 165 | | | | | KM SD (logged) | 0.102 | | | 95% Critical H Value (KM-Log) | | | 1.704 |
| 166 | | | | | KM Standard Error of Mean (logged) | 0.0417 | | | | | | |
| 167 | | | | | | | | | | | | |
| 168 | | | | | | DL/2 Statistics | | | | | | |
| 169 | | | | | DL/2 Normal | | | | DL/2 Log-Transformed | | | |
| 170 | | | | | Mean in Original Scale | 0.494 | | | Mean in Log Scale | | | -0.708 |
| 171 | | | | | SD in Original Scale | 0.0408 | | | SD in Log Scale | | | 0.0881 |
| 172 | | | | | 95% t UCL (Assumes normality) | 0.506 | | | 95% H-Stat UCL | | | N/A |
| 173 | | | | | | DL/2 is not a recommended method, provided for comparisons and historical reasons | | | | | | |
| 174 | | | | | | | | | | | | |
| 175 | | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | |
| 176 | | | | | | Detected Data appear Normal Distributed at 5% Significance Level | | | | | | |
| 177 | | | | | | | | | | | | |
| 178 | | | | | | Suggested UCL to Use | | | | | | |
| 179 | | | | | 95% KM (t) UCL | 0.474 | | | 95% KM (Percentile Bootstrap) UCL | | | 0.471 |
| 180 | | | | | | | | | | | | |
| 181 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 182 | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | | | | | |
| 183 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 184 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statisticiar | | | | | | | | | | | |
| 185 | | | | | | | | | | | | |
| 186 | | | | | | | | | | | | |
| 187 | Arsenic | | | | | | | | | | | |
| 188 | | | | | | | | | | | | |
| 189 | | | | | | General Statistics | | | | | | |
| 190 | | | | | Total Number of Observations | 37 | | | Number of Distinct Observations | | | 36 |
| 191 | | | | | | | | | Number of Missing Observations | | | 0 |
| 192 | | | | | Minimum | 0.527 | | | Mean | | | 1.689 |
| 193 | | | | | Maximum | 5.12 | | | Median | | | 1.55 |
| 194 | | | | | SD | 0.885 | | | Std. Error of Mean | | | 0.145 |
| 195 | | | | | Coefficient of Variation | 0.524 | | | Skewness | | | 1.937 |
| 196 | | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 197 | **Normal GOF Test** | | | | | | | | | | | |
| 198 | | | | | Shapiro Wilk Test Statistic | 0.848 | **Shapiro Wilk GOF Test** | | | | | |
| 199 | | | | | 5% Shapiro Wilk Critical Value | 0.936 | Data Not Normal at 5% Significance Level | | | | | |
| 200 | | | | | Lilliefors Test Statistic | 0.155 | **Lilliefors GOF Test** | | | | | |
| 201 | | | | | 5% Lilliefors Critical Value | 0.146 | Data Not Normal at 5% Significance Level | | | | | |
| 202 | **Data Not Normal at 5% Significance Level** | | | | | | | | | | | |
| 203 | | | | | | | | | | | | |
| 204 | **Assuming Normal Distribution** | | | | | | | | | | | |
| 205 | | | **95% Normal UCL** | | | | **95% UCLs (Adjusted for Skewness)** | | | | | |
| 206 | | | | | 95% Student's-t UCL | 1.935 | | | 95% Adjusted-CLT UCL (Chen-1995) | | | 1.978 |
| 207 | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | 1.943 |
| 208 | | | | | | | | | | | | |
| 209 | **Gamma GOF Test** | | | | | | | | | | | |
| 210 | | | | | A-D Test Statistic | 0.386 | **Anderson-Darling Gamma GOF Test** | | | | | |
| 211 | | | | | 5% A-D Critical Value | 0.751 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 212 | | | | | K-S Test Statistic | 0.0915 | **Kolmogrov-Smirnoff Gamma GOF Test** | | | | | |
| 213 | | | | | 5% K-S Critical Value | 0.146 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 214 | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 215 | | | | | | | | | | | | |
| 216 | **Gamma Statistics** | | | | | | | | | | | |
| 217 | | | | | k hat (MLE) | 4.536 | | | k star (bias corrected MLE) | | | 4.186 |
| 218 | | | | | Theta hat (MLE) | 0.372 | | | Theta star (bias corrected MLE) | | | 0.404 |
| 219 | | | | | nu hat (MLE) | 335.7 | | | nu star (bias corrected) | | | 309.8 |
| 220 | | | | | MLE Mean (bias corrected) | 1.689 | | | MLE Sd (bias corrected) | | | 0.826 |
| 221 | | | | | | | | | Approximate Chi Square Value (0.05) | | | 270 |
| 222 | | | | | Adjusted Level of Significance | 0.0431 | | | Adjusted Chi Square Value | | | 268.4 |
| 223 | | | | | | | | | | | | |
| 224 | **Assuming Gamma Distribution** | | | | | | | | | | | |
| 225 | | | 95% Approximate Gamma UCL (use when n>=50) | | | 1.938 | | | 95% Adjusted Gamma UCL (use when n<50) | | | 1.95 |
| 226 | | | | | | | | | | | | |
| 227 | **Lognormal GOF Test** | | | | | | | | | | | |
| 228 | | | | | Shapiro Wilk Test Statistic | 0.978 | **Shapiro Wilk Lognormal GOF Test** | | | | | |
| 229 | | | | | 5% Shapiro Wilk Critical Value | 0.936 | Data appear Lognormal at 5% Significance Level | | | | | |
| 230 | | | | | Lilliefors Test Statistic | 0.0975 | **Lilliefors Lognormal GOF Test** | | | | | |
| 231 | | | | | 5% Lilliefors Critical Value | 0.146 | Data appear Lognormal at 5% Significance Level | | | | | |
| 232 | **Data appear Lognormal at 5% Significance Level** | | | | | | | | | | | |
| 233 | | | | | | | | | | | | |
| 234 | **Lognormal Statistics** | | | | | | | | | | | |
| 235 | | | | | Minimum of Logged Data | -0.641 | | | Mean of logged Data | | | 0.41 |
| 236 | | | | | Maximum of Logged Data | 1.633 | | | SD of logged Data | | | 0.483 |
| 237 | | | | | | | | | | | | |
| 238 | **Assuming Lognormal Distribution** | | | | | | | | | | | |
| 239 | | | | | 95% H-UCL | 1.973 | | | 90% Chebyshev (MVUE) UCL | | | 2.107 |
| 240 | | | | | 95% Chebyshev (MVUE) UCL | 2.298 | | | 97.5% Chebyshev (MVUE) UCL | | | 2.561 |
| 241 | | | | | 99% Chebyshev (MVUE) UCL | 3.08 | | | | | | |
| 242 | | | | | | | | | | | | |
| 243 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 244 | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | | | | | |
| 245 | | | | | | | | | | | | |

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| 246 | **Nonparametric Distribution Free UCLs** | | | | | | | | | | | |
| 247 | | | | | 95% CLT UCL | 1.928 | | | | 95% Jackknife UCL | | 1.935 |
| 248 | | | | | 95% Standard Bootstrap UCL | 1.931 | | | | 95% Bootstrap-t UCL | | 2.006 |
| 249 | | | | | 95% Hall's Bootstrap UCL | 2.101 | | | | 95% Percentile Bootstrap UCL | | 1.926 |
| 250 | | | | | 95% BCA Bootstrap UCL | 1.989 | | | | | | |
| 251 | | | | | 90% Chebyshev(Mean, Sd) UCL | 2.126 | | | | 95% Chebyshev(Mean, Sd) UCL | | 2.323 |
| 252 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 2.598 | | | | 99% Chebyshev(Mean, Sd) UCL | | 3.136 |
| 253 | | | | | | | | | | | | |
| 254 | **Suggested UCL to Use** | | | | | | | | | | | |
| 255 | | | | | 95% Adjusted Gamma UCL | 1.95 | | | | | | |
| 256 | | | | | | | | | | | | |
| 257 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 258 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 259 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 260 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 261 | | | | | | | | | | | | |
| 262 | | | | | | | | | | | | |
| 263 | **Barium** | | | | | | | | | | | |
| 264 | | | | | | | | | | | | |
| 265 | **General Statistics** | | | | | | | | | | | |
| 266 | | | | | Total Number of Observations | 33 | | | | Number of Distinct Observations | | 32 |
| 267 | | | | | | | | | | Number of Missing Observations | | 0 |
| 268 | | | | | Minimum | 19.6 | | | | Mean | | 82.58 |
| 269 | | | | | Maximum | 384 | | | | Median | | 60.5 |
| 270 | | | | | SD | 66.51 | | | | Std. Error of Mean | | 11.58 |
| 271 | | | | | Coefficient of Variation | 0.805 | | | | Skewness | | 3.069 |
| 272 | | | | | | | | | | | | |
| 273 | **Normal GOF Test** | | | | | | | | | | | |
| 274 | | | | | Shapiro Wilk Test Statistic | 0.713 | | | | **Shapiro Wilk GOF Test** | | |
| 275 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | | Data Not Normal at 5% Significance Level | | |
| 276 | | | | | Lilliefors Test Statistic | 0.172 | | | | **Lilliefors GOF Test** | | |
| 277 | | | | | 5% Lilliefors Critical Value | 0.154 | | | | Data Not Normal at 5% Significance Level | | |
| 278 | **Data Not Normal at 5% Significance Level** | | | | | | | | | | | |
| 279 | | | | | | | | | | | | |
| 280 | **Assuming Normal Distribution** | | | | | | | | | | | |
| 281 | **95% Normal UCL** | | | | | | **95% UCLs (Adjusted for Skewness)** | | | | | |
| 282 | | | | | 95% Student's-t UCL | 102.2 | | | | 95% Adjusted-CLT UCL (Chen-1995) | | 108.2 |
| 283 | | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 103.2 |
| 284 | | | | | | | | | | | | |
| 285 | **Gamma GOF Test** | | | | | | | | | | | |
| 286 | | | | | A-D Test Statistic | 0.487 | | | | **Anderson-Darling Gamma GOF Test** | | |
| 287 | | | | | 5% A-D Critical Value | 0.756 | | | | Detected data appear Gamma Distributed at 5% Significance Leve | | |
| 288 | | | | | K-S Test Statistic | 0.127 | | | | **Kolmogrov-Smirnoff Gamma GOF Test** | | |
| 289 | | | | | 5% K-S Critical Value | 0.155 | | | | Detected data appear Gamma Distributed at 5% Significance Leve | | |
| 290 | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 291 | | | | | | | | | | | | |
| 292 | **Gamma Statistics** | | | | | | | | | | | |
| 293 | | | | | k hat (MLE) | 2.476 | | | | k star (bias corrected MLE) | | 2.271 |
| 294 | | | | | Theta hat (MLE) | 33.35 | | | | Theta star (bias corrected MLE) | | 36.36 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 295 | | | | | nu hat (MLE) | 163.4 | | | | nu star (bias corrected) | | 149.9 |
| 296 | | | | | MLE Mean (bias corrected) | 82.58 | | | | MLE Sd (bias corrected) | | 54.8 |
| 297 | | | | | | | | | | Approximate Chi Square Value (0.05) | | 122.6 |
| 298 | | | | | Adjusted Level of Significance | 0.0419 | | | | Adjusted Chi Square Value | | 121.3 |
| 299 | | | | | | | | | | | | |
| 300 | | | | | **Assuming Gamma Distribution** | | | | | | | |
| 301 | | | | | 95% Approximate Gamma UCL (use when n>=50) | 101 | | | | 95% Adjusted Gamma UCL (use when n<50) | | 102 |
| 302 | | | | | | | | | | | | |
| 303 | | | | | **Lognormal GOF Test** | | | | | | | |
| 304 | | | | | Shapiro Wilk Test Statistic | 0.977 | | | | **Shapiro Wilk Lognormal GOF Test** | | |
| 305 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | | Data appear Lognormal at 5% Significance Level | | |
| 306 | | | | | Lilliefors Test Statistic | 0.0904 | | | | **Lilliefors Lognormal GOF Test** | | |
| 307 | | | | | 5% Lilliefors Critical Value | 0.154 | | | | Data appear Lognormal at 5% Significance Level | | |
| 308 | | | | | **Data appear Lognormal at 5% Significance Level** | | | | | | | |
| 309 | | | | | | | | | | | | |
| 310 | | | | | **Lognormal Statistics** | | | | | | | |
| 311 | | | | | Minimum of Logged Data | 2.976 | | | | Mean of logged Data | | 4.198 |
| 312 | | | | | Maximum of Logged Data | 5.951 | | | | SD of logged Data | | 0.645 |
| 313 | | | | | | | | | | | | |
| 314 | | | | | **Assuming Lognormal Distribution** | | | | | | | |
| 315 | | | | | 95% H-UCL | 103.6 | | | | 90% Chebyshev (MVUE) UCL | | 110.7 |
| 316 | | | | | 95% Chebyshev (MVUE) UCL | 124 | | | | 97.5% Chebyshev (MVUE) UCL | | 142.5 |
| 317 | | | | | 99% Chebyshev (MVUE) UCL | 178.8 | | | | | | |
| 318 | | | | | | | | | | | | |
| 319 | | | | | **Nonparametric Distribution Free UCL Statistics** | | | | | | | |
| 320 | | | | | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | |
| 321 | | | | | | | | | | | | |
| 322 | | | | | **Nonparametric Distribution Free UCLs** | | | | | | | |
| 323 | | | | | 95% CLT UCL | 101.6 | | | | 95% Jackknife UCL | | 102.2 |
| 324 | | | | | 95% Standard Bootstrap UCL | 101.3 | | | | 95% Bootstrap-t UCL | | 113.1 |
| 325 | | | | | 95% Hall's Bootstrap UCL | 190.1 | | | | 95% Percentile Bootstrap UCL | | 102.6 |
| 326 | | | | | 95% BCA Bootstrap UCL | 110.4 | | | | | | |
| 327 | | | | | 90% Chebyshev(Mean, Sd) UCL | 117.3 | | | | 95% Chebyshev(Mean, Sd) UCL | | 133.1 |
| 328 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 154.9 | | | | 99% Chebyshev(Mean, Sd) UCL | | 197.8 |
| 329 | | | | | | | | | | | | |
| 330 | | | | | **Suggested UCL to Use** | | | | | | | |
| 331 | | | | | 95% Adjusted Gamma UCL | 102 | | | | | | |
| 332 | | | | | | | | | | | | |
| 333 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 334 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 335 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 336 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 337 | | | | | | | | | | | | |
| 338 | | | | | | | | | | | | |
| 339 | **Chromium** | | | | | | | | | | | |
| 340 | | | | | | | | | | | | |
| 341 | | | | | **General Statistics** | | | | | | | |
| 342 | | | | | Total Number of Observations | 33 | | | | Number of Distinct Observations | | 33 |
| 343 | | | | | | | | | | Number of Missing Observations | | 0 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 344 | | | | | Minimum | 2.92 | | | | | Mean | 12.8 |
| 345 | | | | | Maximum | 68.3 | | | | | Median | 4.97 |
| 346 | | | | | SD | 16.63 | | | | | Std. Error of Mean | 2.894 |
| 347 | | | | | Coefficient of Variation | 1.299 | | | | | Skewness | 2.286 |
| 348 | | | | | | | | | | | | |
| 349 | | | | | **Normal GOF Test** | | | | | | | |
| 350 | | | | | Shapiro Wilk Test Statistic | 0.631 | | | **Shapiro Wilk GOF Test** | | | |
| 351 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | Data Not Normal at 5% Significance Level | | | |
| 352 | | | | | Lilliefors Test Statistic | 0.28 | | | **Lilliefors GOF Test** | | | |
| 353 | | | | | 5% Lilliefors Critical Value | 0.154 | | | Data Not Normal at 5% Significance Level | | | |
| 354 | | | | | **Data Not Normal at 5% Significance Level** | | | | | | | |
| 355 | | | | | | | | | | | | |
| 356 | | | | | **Assuming Normal Distribution** | | | | | | | |
| 357 | | | **95% Normal UCL** | | | | | | **95% UCLs (Adjusted for Skewness)** | | | |
| 358 | | | | | 95% Student's-t UCL | 17.7 | | | 95% Adjusted-CLT UCL (Chen-1995) | | | 18.79 |
| 359 | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | 17.9 |
| 360 | | | | | | | | | | | | |
| 361 | | | | | **Gamma GOF Test** | | | | | | | |
| 362 | | | | | A-D Test Statistic | 2.985 | | | **Anderson-Darling Gamma GOF Test** | | | |
| 363 | | | | | 5% A-D Critical Value | 0.774 | | | Data Not Gamma Distributed at 5% Significance Level | | | |
| 364 | | | | | K-S Test Statistic | 0.243 | | | **Kolmogrov-Smirnoff Gamma GOF Test** | | | |
| 365 | | | | | 5% K-S Critical Value | 0.157 | | | Data Not Gamma Distributed at 5% Significance Level | | | |
| 366 | | | | | **Data Not Gamma Distributed at 5% Significance Level** | | | | | | | |
| 367 | | | | | | | | | | | | |
| 368 | | | | | **Gamma Statistics** | | | | | | | |
| 369 | | | | | k hat (MLE) | 1.078 | | | k star (bias corrected MLE) | | | 1 |
| 370 | | | | | Theta hat (MLE) | 11.88 | | | Theta star (bias corrected MLE) | | | 12.8 |
| 371 | | | | | nu hat (MLE) | 71.14 | | | nu star (bias corrected) | | | 66 |
| 372 | | | | | MLE Mean (bias corrected) | 12.8 | | | MLE Sd (bias corrected) | | | 12.8 |
| 373 | | | | | | | | | Approximate Chi Square Value (0.05) | | | 48.31 |
| 374 | | | | | Adjusted Level of Significance | 0.0419 | | | Adjusted Chi Square Value | | | 47.53 |
| 375 | | | | | | | | | | | | |
| 376 | | | | | **Assuming Gamma Distribution** | | | | | | | |
| 377 | | | | | 95% Approximate Gamma UCL (use when n>=50)) | 17.49 | | | 95% Adjusted Gamma UCL (use when n<50) | | | 17.78 |
| 378 | | | | | | | | | | | | |
| 379 | | | | | **Lognormal GOF Test** | | | | | | | |
| 380 | | | | | Shapiro Wilk Test Statistic | 0.827 | | | **Shapiro Wilk Lognormal GOF Test** | | | |
| 381 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | Data Not Lognormal at 5% Significance Level | | | |
| 382 | | | | | Lilliefors Test Statistic | 0.215 | | | **Lilliefors Lognormal GOF Test** | | | |
| 383 | | | | | 5% Lilliefors Critical Value | 0.154 | | | Data Not Lognormal at 5% Significance Level | | | |
| 384 | | | | | **Data Not Lognormal at 5% Significance Level** | | | | | | | |
| 385 | | | | | | | | | | | | |
| 386 | | | | | **Lognormal Statistics** | | | | | | | |
| 387 | | | | | Minimum of Logged Data | 1.072 | | | Mean of logged Data | | | 2.019 |
| 388 | | | | | Maximum of Logged Data | 4.224 | | | SD of logged Data | | | 0.943 |
| 389 | | | | | | | | | | | | |
| 390 | | | | | **Assuming Lognormal Distribution** | | | | | | | |
| 391 | | | | | 95% H-UCL | 17.45 | | | 90% Chebyshev (MVUE) UCL | | | 18.01 |
| 392 | | | | | 95% Chebyshev (MVUE) UCL | 20.94 | | | 97.5% Chebyshev (MVUE) UCL | | | 25.01 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 393 | | | | | 99% Chebyshev (MVUE) UCL | 33.01 | | | | | | |
| 394 | | | | | | | | | | | | |
| 395 | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | | |
| 396 | | | | | Data do not follow a Discernible Distribution (0.05) | | | | | | | |
| 397 | | | | | | | | | | | | |
| 398 | | | | | Nonparametric Distribution Free UCLs | | | | | | | |
| 399 | | | | | 95% CLT UCL | 17.56 | | | | 95% Jackknife UCL | | 17.7 |
| 400 | | | | | 95% Standard Bootstrap UCL | 17.42 | | | | 95% Bootstrap-t UCL | | 20.34 |
| 401 | | | | | 95% Hall's Bootstrap UCL | 19.16 | | | | 95% Percentile Bootstrap UCL | | 17.8 |
| 402 | | | | | 95% BCA Bootstrap UCL | 18.86 | | | | | | |
| 403 | | | | | 90% Chebyshev(Mean, Sd) UCL | 21.48 | | | | 95% Chebyshev(Mean, Sd) UCL | | 25.42 |
| 404 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 30.88 | | | | 99% Chebyshev(Mean, Sd) UCL | | 41.6 |
| 405 | | | | | | | | | | | | |
| 406 | | | | | Suggested UCL to Use | | | | | | | |
| 407 | | | | | 95% Chebyshev (Mean, Sd) UCL | 25.42 | | | | | | |
| 408 | | | | | | | | | | | | |
| 409 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 410 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 411 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 412 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 413 | | | | | | | | | | | | |
| 414 | | | | | | | | | | | | |
| 415 | Copper | | | | | | | | | | | |
| 416 | | | | | | | | | | | | |
| 417 | | | | | General Statistics | | | | | | | |
| 418 | | | | | Total Number of Observations | 33 | | | | Number of Distinct Observations | | 33 |
| 419 | | | | | | | | | | Number of Missing Observations | | 0 |
| 420 | | | | | Minimum | 1.28 | | | | Mean | | 5.911 |
| 421 | | | | | Maximum | 65.1 | | | | Median | | 3.35 |
| 422 | | | | | SD | 10.93 | | | | Std. Error of Mean | | 1.903 |
| 423 | | | | | Coefficient of Variation | 1.849 | | | | Skewness | | 5.283 |
| 424 | | | | | | | | | | | | |
| 425 | | | | | Normal GOF Test | | | | | | | |
| 426 | | | | | Shapiro Wilk Test Statistic | 0.332 | | | | Shapiro Wilk GOF Test | | |
| 427 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | | Data Not Normal at 5% Significance Level | | |
| 428 | | | | | Lilliefors Test Statistic | 0.395 | | | | Lilliefors GOF Test | | |
| 429 | | | | | 5% Lilliefors Critical Value | 0.154 | | | | Data Not Normal at 5% Significance Level | | |
| 430 | | | | | Data Not Normal at 5% Significance Level | | | | | | | |
| 431 | | | | | | | | | | | | |
| 432 | | | | | Assuming Normal Distribution | | | | | | | |
| 433 | | | | | 95% Normal UCL | | | | | 95% UCLs (Adjusted for Skewness) | | |
| 434 | | | | | 95% Student's-t UCL | 9.134 | | | | 95% Adjusted-CLT UCL (Chen-1995) | | 10.91 |
| 435 | | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 9.426 |
| 436 | | | | | | | | | | | | |
| 437 | | | | | Gamma GOF Test | | | | | | | |
| 438 | | | | | A-D Test Statistic | 4.284 | | | | Anderson-Darling Gamma GOF Test | | |
| 439 | | | | | 5% A-D Critical Value | 0.769 | | | | Data Not Gamma Distributed at 5% Significance Level | | |
| 440 | | | | | K-S Test Statistic | 0.339 | | | | Kolmogrov-Smirnoff Gamma GOF Test | | |
| 441 | | | | | 5% K-S Critical Value | 0.157 | | | | Data Not Gamma Distributed at 5% Significance Level | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 442 | Data Not Gamma Distributed at 5% Significance Level | | | | | | | | | | | |
| 443 | | | | | | | | | | | | |
| 444 | Gamma Statistics | | | | | | | | | | | |
| 445 | | | | | k hat (MLE) | 1.337 | | | k star (bias corrected MLE) | | | 1.236 |
| 446 | | | | | Theta hat (MLE) | 4.42 | | | Theta star (bias corrected MLE) | | | 4.782 |
| 447 | | | | | nu hat (MLE) | 88.27 | | | nu star (bias corrected) | | | 81.58 |
| 448 | | | | | MLE Mean (bias corrected) | 5.911 | | | MLE Sd (bias corrected) | | | 5.317 |
| 449 | | | | | | | | | Approximate Chi Square Value (0.05) | | | 61.77 |
| 450 | | | | | Adjusted Level of Significance | 0.0419 | | | Adjusted Chi Square Value | | | 60.88 |
| 451 | | | | | | | | | | | | |
| 452 | Assuming Gamma Distribution | | | | | | | | | | | |
| 453 | | | | | 95% Approximate Gamma UCL (use when n>=50)) | 7.807 | | | 95% Adjusted Gamma UCL (use when n<50) | | | 7.921 |
| 454 | | | | | | | | | | | | |
| 455 | Lognormal GOF Test | | | | | | | | | | | |
| 456 | | | | | Shapiro Wilk Test Statistic | 0.8 | | | Shapiro Wilk Lognormal GOF Test | | | |
| 457 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | Data Not Lognormal at 5% Significance Level | | | |
| 458 | | | | | Lilliefors Test Statistic | 0.25 | | | Lilliefors Lognormal GOF Test | | | |
| 459 | | | | | 5% Lilliefors Critical Value | 0.154 | | | Data Not Lognormal at 5% Significance Level | | | |
| 460 | Data Not Lognormal at 5% Significance Level | | | | | | | | | | | |
| 461 | | | | | | | | | | | | |
| 462 | Lognormal Statistics | | | | | | | | | | | |
| 463 | | | | | Minimum of Logged Data | 0.247 | | | Mean of logged Data | | | 1.359 |
| 464 | | | | | Maximum of Logged Data | 4.176 | | | SD of logged Data | | | 0.696 |
| 465 | | | | | | | | | | | | |
| 466 | Assuming Lognormal Distribution | | | | | | | | | | | |
| 467 | | | | | 95% H-UCL | 6.426 | | | 90% Chebyshev (MVUE) UCL | | | 6.848 |
| 468 | | | | | 95% Chebyshev (MVUE) UCL | 7.724 | | | 97.5% Chebyshev (MVUE) UCL | | | 8.941 |
| 469 | | | | | 99% Chebyshev (MVUE) UCL | 11.33 | | | | | | |
| 470 | | | | | | | | | | | | |
| 471 | Nonparametric Distribution Free UCL Statistics | | | | | | | | | | | |
| 472 | Data do not follow a Discernible Distribution (0.05) | | | | | | | | | | | |
| 473 | | | | | | | | | | | | |
| 474 | Nonparametric Distribution Free UCLs | | | | | | | | | | | |
| 475 | | | | | 95% CLT UCL | 9.041 | | | 95% Jackknife UCL | | | 9.134 |
| 476 | | | | | 95% Standard Bootstrap UCL | 8.88 | | | 95% Bootstrap-t UCL | | | 20.43 |
| 477 | | | | | 95% Hall's Bootstrap UCL | 19.16 | | | 95% Percentile Bootstrap UCL | | | 9.604 |
| 478 | | | | | 95% BCA Bootstrap UCL | 12.29 | | | | | | |
| 479 | | | | | 90% Chebyshev(Mean, Sd) UCL | 11.62 | | | 95% Chebyshev(Mean, Sd) UCL | | | 14.2 |
| 480 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 17.79 | | | 99% Chebyshev(Mean, Sd) UCL | | | 24.84 |
| 481 | | | | | | | | | | | | |
| 482 | Suggested UCL to Use | | | | | | | | | | | |
| 483 | | | | | 95% Chebyshev (Mean, Sd) UCL | 14.2 | | | | | | |
| 484 | | | | | | | | | | | | |
| 485 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 486 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 487 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 488 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 489 | | | | | | | | | | | | |
| 490 | | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 491 | Lead | | | | | | | | | | | |
| 492 | | | | | | | | | | | | |
| 493 | | | | | | General Statistics | | | | | | |
| 494 | | | | | Total Number of Observations | 33 | | | | Number of Distinct Observations | | 32 |
| 495 | | | | | | | | | | Number of Missing Observations | | 0 |
| 496 | | | | | Minimum | 7.74 | | | | Mean | | 12.22 |
| 497 | | | | | Maximum | 33.6 | | | | Median | | 11.5 |
| 498 | | | | | SD | 4.614 | | | | Std. Error of Mean | | 0.803 |
| 499 | | | | | Coefficient of Variation | 0.378 | | | | Skewness | | 3.297 |
| 500 | | | | | | | | | | | | |
| 501 | | | | | | Normal GOF Test | | | | | | |
| 502 | | | | | Shapiro Wilk Test Statistic | 0.693 | | | | Shapiro Wilk GOF Test | | |
| 503 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | | Data Not Normal at 5% Significance Level | | |
| 504 | | | | | Lilliefors Test Statistic | 0.209 | | | | Lilliefors GOF Test | | |
| 505 | | | | | 5% Lilliefors Critical Value | 0.154 | | | | Data Not Normal at 5% Significance Level | | |
| 506 | | | | | | Data Not Normal at 5% Significance Level | | | | | | |
| 507 | | | | | | | | | | | | |
| 508 | | | | | | Assuming Normal Distribution | | | | | | |
| 509 | | | | | 95% Normal UCL | | | | | 95% UCLs (Adjusted for Skewness) | | |
| 510 | | | | | 95% Student's-t UCL | 13.58 | | | | 95% Adjusted-CLT UCL (Chen-1995) | | 14.03 |
| 511 | | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 13.65 |
| 512 | | | | | | | | | | | | |
| 513 | | | | | | Gamma GOF Test | | | | | | |
| 514 | | | | | A-D Test Statistic | 1.072 | | | | Anderson-Darling Gamma GOF Test | | |
| 515 | | | | | 5% A-D Critical Value | 0.747 | | | | Data Not Gamma Distributed at 5% Significance Level | | |
| 516 | | | | | K-S Test Statistic | 0.15 | | | | Kolmogrov-Smirnoff Gamma GOF Test | | |
| 517 | | | | | 5% K-S Critical Value | 0.153 | | | | Detected data appear Gamma Distributed at 5% Significance Leve | | |
| 518 | | | | | | Detected data follow Appr. Gamma Distribution at 5% Significance Level | | | | | | |
| 519 | | | | | | | | | | | | |
| 520 | | | | | | Gamma Statistics | | | | | | |
| 521 | | | | | k hat (MLE) | 10.87 | | | | k star (bias corrected MLE) | | 9.906 |
| 522 | | | | | Theta hat (MLE) | 1.123 | | | | Theta star (bias corrected MLE) | | 1.233 |
| 523 | | | | | nu hat (MLE) | 717.7 | | | | nu star (bias corrected) | | 653.8 |
| 524 | | | | | MLE Mean (bias corrected) | 12.22 | | | | MLE Sd (bias corrected) | | 3.881 |
| 525 | | | | | | | | | | Approximate Chi Square Value (0.05) | | 595.5 |
| 526 | | | | | Adjusted Level of Significance | 0.0419 | | | | Adjusted Chi Square Value | | 592.6 |
| 527 | | | | | | | | | | | | |
| 528 | | | | | | Assuming Gamma Distribution | | | | | | |
| 529 | | | | | 95% Approximate Gamma UCL (use when n>=50) | 13.41 | | | | 95% Adjusted Gamma UCL (use when n<50) | | 13.48 |
| 530 | | | | | | | | | | | | |
| 531 | | | | | | Lognormal GOF Test | | | | | | |
| 532 | | | | | Shapiro Wilk Test Statistic | 0.896 | | | | Shapiro Wilk Lognormal GOF Test | | |
| 533 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | | Data Not Lognormal at 5% Significance Level | | |
| 534 | | | | | Lilliefors Test Statistic | 0.123 | | | | Lilliefors Lognormal GOF Test | | |
| 535 | | | | | 5% Lilliefors Critical Value | 0.154 | | | | Data appear Lognormal at 5% Significance Level | | |
| 536 | | | | | | Data appear Approximate Lognormal at 5% Significance Level | | | | | | |
| 537 | | | | | | | | | | | | |
| 538 | | | | | | Lognormal Statistics | | | | | | |
| 539 | | | | | Minimum of Logged Data | 2.046 | | | | Mean of logged Data | | 2.456 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 540 | | | | | Maximum of Logged Data | 3.515 | | | | SD of logged Data | | 0.287 |
| 541 | | | | | | | | | | | | |
| 542 | | | | | Assuming Lognormal Distribution | | | | | | | |
| 543 | | | | | 95% H-UCL | 13.3 | | | | 90% Chebyshev (MVUE) UCL | | 13.98 |
| 544 | | | | 95% Chebyshev (MVUE) UCL | | 14.82 | | | | 97.5% Chebyshev (MVUE) UCL | | 15.98 |
| 545 | | | | 99% Chebyshev (MVUE) UCL | | 18.26 | | | | | | |
| 546 | | | | | | | | | | | | |
| 547 | | | | | Nonparametric Distribution Free UCL Statistics | | | | | | | |
| 548 | | | | | Data appear to follow a Discernible Distribution at 5% Significance Level | | | | | | | |
| 549 | | | | | | | | | | | | |
| 550 | | | | | Nonparametric Distribution Free UCLs | | | | | | | |
| 551 | | | | | 95% CLT UCL | 13.54 | | | | 95% Jackknife UCL | | 13.58 |
| 552 | | | | 95% Standard Bootstrap UCL | | 13.55 | | | | 95% Bootstrap-t UCL | | 14.55 |
| 553 | | | | 95% Hall's Bootstrap UCL | | 19.76 | | | | 95% Percentile Bootstrap UCL | | 13.61 |
| 554 | | | | 95% BCA Bootstrap UCL | | 14.1 | | | | | | |
| 555 | | | | 90% Chebyshev(Mean, Sd) UCL | | 14.63 | | | | 95% Chebyshev(Mean, Sd) UCL | | 15.72 |
| 556 | | | | 97.5% Chebyshev(Mean, Sd) UCL | | 17.23 | | | | 99% Chebyshev(Mean, Sd) UCL | | 20.21 |
| 557 | | | | | | | | | | | | |
| 558 | | | | | Suggested UCL to Use | | | | | | | |
| 559 | | | | | 95% Adjusted Gamma UCL | 13.48 | | | | | | |
| 560 | | | | | | | | | | | | |
| 561 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 562 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 563 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 564 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 565 | | | | | | | | | | | | |
| 566 | | | | | | | | | | | | |
| 567 | Manganese | | | | | | | | | | | |
| 568 | | | | | | | | | | | | |
| 569 | | | | | General Statistics | | | | | | | |
| 570 | | | | | Total Number of Observations | 33 | | | | Number of Distinct Observations | | 32 |
| 571 | | | | | | | | | | Number of Missing Observations | | 0 |
| 572 | | | | | Minimum | 92.5 | | | | Mean | | 356.2 |
| 573 | | | | | Maximum | 578 | | | | Median | | 376 |
| 574 | | | | | SD | 132.7 | | | | Std. Error of Mean | | 23.09 |
| 575 | | | | | Coefficient of Variation | 0.372 | | | | Skewness | | -0.37 |
| 576 | | | | | | | | | | | | |
| 577 | | | | | Normal GOF Test | | | | | | | |
| 578 | | | | | Shapiro Wilk Test Statistic | 0.945 | | | | Shapiro Wilk GOF Test | | |
| 579 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | | | | Data appear Normal at 5% Significance Level | | |
| 580 | | | | | Lilliefors Test Statistic | 0.103 | | | | Lilliefors GOF Test | | |
| 581 | | | | | 5% Lilliefors Critical Value | 0.154 | | | | Data appear Normal at 5% Significance Level | | |
| 582 | | | | | Data appear Normal at 5% Significance Level | | | | | | | |
| 583 | | | | | | | | | | | | |
| 584 | | | | | Assuming Normal Distribution | | | | | | | |
| 585 | | | | | 95% Normal UCL | | | | | 95% UCLs (Adjusted for Skewness) | | |
| 586 | | | | | 95% Student's-t UCL | 395.3 | | | | 95% Adjusted-CLT UCL (Chen-1995) | | 392.6 |
| 587 | | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | 395 |
| 588 | | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 589 | **Gamma GOF Test** | | | | | | | | | | | |
| 590 | | | | | A-D Test Statistic | 1.291 | **Anderson-Darling Gamma GOF Test** | | | | | |
| 591 | | | | | 5% A-D Critical Value | 0.748 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 592 | | | | | K-S Test Statistic | 0.164 | **Kolmogrov-Smirnoff Gamma GOF Test** | | | | | |
| 593 | | | | | 5% K-S Critical Value | 0.153 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 594 | **Data Not Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 595 | | | | | | | | | | | | |
| 596 | **Gamma Statistics** | | | | | | | | | | | |
| 597 | | | | | k hat (MLE) | 5.652 | k star (bias corrected MLE) | | | | | 5.158 |
| 598 | | | | | Theta hat (MLE) | 63.02 | Theta star (bias corrected MLE) | | | | | 69.05 |
| 599 | | | | | nu hat (MLE) | 373 | nu star (bias corrected) | | | | | 340.4 |
| 600 | | | | | MLE Mean (bias corrected) | 356.2 | MLE Sd (bias corrected) | | | | | 156.8 |
| 601 | | | | | | | Approximate Chi Square Value (0.05) | | | | | 298.7 |
| 602 | | | | | Adjusted Level of Significance | 0.0419 | Adjusted Chi Square Value | | | | | 296.7 |
| 603 | | | | | | | | | | | | |
| 604 | **Assuming Gamma Distribution** | | | | | | | | | | | |
| 605 | 95% Approximate Gamma UCL (use when n>=50)) | | | | | 406 | 95% Adjusted Gamma UCL (use when n<50) | | | | | 408.7 |
| 606 | | | | | | | | | | | | |
| 607 | **Lognormal GOF Test** | | | | | | | | | | | |
| 608 | | | | | Shapiro Wilk Test Statistic | 0.864 | **Shapiro Wilk Lognormal GOF Test** | | | | | |
| 609 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | Data Not Lognormal at 5% Significance Level | | | | | |
| 610 | | | | | Lilliefors Test Statistic | 0.195 | **Lilliefors Lognormal GOF Test** | | | | | |
| 611 | | | | | 5% Lilliefors Critical Value | 0.154 | Data Not Lognormal at 5% Significance Level | | | | | |
| 612 | **Data Not Lognormal at 5% Significance Level** | | | | | | | | | | | |
| 613 | | | | | | | | | | | | |
| 614 | **Lognormal Statistics** | | | | | | | | | | | |
| 615 | | | | | Minimum of Logged Data | 4.527 | Mean of logged Data | | | | | 5.784 |
| 616 | | | | | Maximum of Logged Data | 6.36 | SD of logged Data | | | | | 0.473 |
| 617 | | | | | | | | | | | | |
| 618 | **Assuming Lognormal Distribution** | | | | | | | | | | | |
| 619 | | | | | 95% H-UCL | 426.9 | 90% Chebyshev (MVUE) UCL | | | | | 455.6 |
| 620 | | | | | 95% Chebyshev (MVUE) UCL | 497.9 | 97.5% Chebyshev (MVUE) UCL | | | | | 556.5 |
| 621 | | | | | 99% Chebyshev (MVUE) UCL | 671.7 | | | | | | |
| 622 | | | | | | | | | | | | |
| 623 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 624 | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | | | | | |
| 625 | | | | | | | | | | | | |
| 626 | **Nonparametric Distribution Free UCLs** | | | | | | | | | | | |
| 627 | | | | | 95% CLT UCL | 394.2 | 95% Jackknife UCL | | | | | 395.3 |
| 628 | | | | | 95% Standard Bootstrap UCL | 393.5 | 95% Bootstrap-t UCL | | | | | 392.8 |
| 629 | | | | | 95% Hall's Bootstrap UCL | 390.1 | 95% Percentile Bootstrap UCL | | | | | 393.6 |
| 630 | | | | | 95% BCA Bootstrap UCL | 390 | | | | | | |
| 631 | | | | | 90% Chebyshev(Mean, Sd) UCL | 425.4 | 95% Chebyshev(Mean, Sd) UCL | | | | | 456.8 |
| 632 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 500.4 | 99% Chebyshev(Mean, Sd) UCL | | | | | 585.9 |
| 633 | | | | | | | | | | | | |
| 634 | **Suggested UCL to Use** | | | | | | | | | | | |
| 635 | | | | | 95% Student's-t UCL | 395.3 | | | | | | |
| 636 | | | | | | | | | | | | |
| 637 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. For additional insight the user may want to consult a statistician.

**Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.**

**Mercury**

**General Statistics**

| | | | |
|---|---|---|---|
| Total Number of Observations | 33 | Number of Distinct Observations | 31 |
| | | Number of Missing Observations | 0 |
| Minimum | 0.00703 | Mean | 0.803 |
| Maximum | 20.6 | Median | 0.0158 |
| SD | 3.63 | Std. Error of Mean | 0.632 |
| Coefficient of Variation | 4.521 | Skewness | 5.414 |

**Normal GOF Test**

| | | | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.24 | **Shapiro Wilk GOF Test** | |
| 5% Shapiro Wilk Critical Value | 0.931 | Data Not Normal at 5% Significance Level | |
| Lilliefors Test Statistic | 0.469 | **Lilliefors GOF Test** | |
| 5% Lilliefors Critical Value | 0.154 | Data Not Normal at 5% Significance Level | |

**Data Not Normal at 5% Significance Level**

**Assuming Normal Distribution**

| **95% Normal UCL** | | **95% UCLs (Adjusted for Skewness)** | |
|---|---|---|---|
| 95% Student's-t UCL | 1.873 | 95% Adjusted-CLT UCL (Chen-1995) | 2.479 |
| | | 95% Modified-t UCL (Johnson-1978) | 1.972 |

**Gamma GOF Test**

| | | | |
|---|---|---|---|
| A-D Test Statistic | 8.736 | **Anderson-Darling Gamma GOF Test** | |
| 5% A-D Critical Value | 0.897 | Data Not Gamma Distributed at 5% Significance Level | |
| K-S Test Statistic | 0.45 | **Kolmogrov-Smirnoff Gamma GOF Test** | |
| 5% K-S Critical Value | 0.169 | Data Not Gamma Distributed at 5% Significance Level | |

**Data Not Gamma Distributed at 5% Significance Level**

**Gamma Statistics**

| | | | |
|---|---|---|---|
| k hat (MLE) | 0.218 | k star (bias corrected MLE) | 0.219 |
| Theta hat (MLE) | 3.677 | Theta star (bias corrected MLE) | 3.671 |
| nu hat (MLE) | 14.41 | nu star (bias corrected) | 14.43 |
| MLE Mean (bias corrected) | 0.803 | MLE Sd (bias corrected) | 1.717 |
| | | Approximate Chi Square Value (0.05) | 6.869 |
| Adjusted Level of Significance | 0.0419 | Adjusted Chi Square Value | 6.6 |

**Assuming Gamma Distribution**

| | | | |
|---|---|---|---|
| 95% Approximate Gamma UCL (use when n>=50)) | 1.687 | 95% Adjusted Gamma UCL (use when n<50) | 1.756 |

**Lognormal GOF Test**

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 687 | | | | | Shapiro Wilk Test Statistic | 0.612 | **Shapiro Wilk Lognormal GOF Test** | | | | | |
| 688 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | Data Not Lognormal at 5% Significance Level | | | | | |
| 689 | | | | | Lilliefors Test Statistic | 0.311 | **Lilliefors Lognormal GOF Test** | | | | | |
| 690 | | | | | 5% Lilliefors Critical Value | 0.154 | Data Not Lognormal at 5% Significance Level | | | | | |
| 691 | | | | | **Data Not Lognormal at 5% Significance Level** | | | | | | | |
| 692 | | | | | | | | | | | | |
| 693 | | | | | **Lognormal Statistics** | | | | | | | |
| 694 | | | | | Minimum of Logged Data | -4.958 | | | Mean of logged Data | | | -3.544 |
| 695 | | | | | Maximum of Logged Data | 3.025 | | | SD of logged Data | | | 1.772 |
| 696 | | | | | | | | | | | | |
| 697 | | | | | **Assuming Lognormal Distribution** | | | | | | | |
| 698 | | | | | 95% H-UCL | 0.416 | | | 90% Chebyshev (MVUE) UCL | | | 0.278 |
| 699 | | | | | 95% Chebyshev (MVUE) UCL | 0.347 | | | 97.5% Chebyshev (MVUE) UCL | | | 0.444 |
| 700 | | | | | 99% Chebyshev (MVUE) UCL | 0.633 | | | | | | |
| 701 | | | | | | | | | | | | |
| 702 | | | | | **Nonparametric Distribution Free UCL Statistics** | | | | | | | |
| 703 | | | | | **Data do not follow a Discernible Distribution (0.05)** | | | | | | | |
| 704 | | | | | | | | | | | | |
| 705 | | | | | **Nonparametric Distribution Free UCLs** | | | | | | | |
| 706 | | | | | 95% CLT UCL | 1.842 | | | 95% Jackknife UCL | | | 1.873 |
| 707 | | | | | 95% Standard Bootstrap UCL | 1.816 | | | 95% Bootstrap-t UCL | | | 17.71 |
| 708 | | | | | 95% Hall's Bootstrap UCL | 18.75 | | | 95% Percentile Bootstrap UCL | | | 1.902 |
| 709 | | | | | 95% BCA Bootstrap UCL | 3.192 | | | | | | |
| 710 | | | | | 90% Chebyshev(Mean, Sd) UCL | 2.699 | | | 95% Chebyshev(Mean, Sd) UCL | | | 3.557 |
| 711 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 4.749 | | | 99% Chebyshev(Mean, Sd) UCL | | | 7.09 |
| 712 | | | | | | | | | | | | |
| 713 | | | | | **Suggested UCL to Use** | | | | | | | |
| 714 | | | | | 95% Chebyshev (Mean, Sd) UCL | 3.557 | | | | | | |
| 715 | | | | | | | | | | | | |
| 716 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 717 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 718 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 719 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 720 | | | | | | | | | | | | |
| 721 | **Perchlorate** | | | | | | | | | | | |
| 722 | | | | | | | | | | | | |
| 723 | | | | | **General Statistics** | | | | | | | |
| 724 | | | | | Total Number of Observations | 33 | | | Number of Distinct Observations | | | 25 |
| 725 | | | | | Number of Detects | 8 | | | Number of Non-Detects | | | 25 |
| 726 | | | | | Number of Distinct Detects | 8 | | | Number of Distinct Non-Detects | | | 17 |
| 727 | | | | | Minimum Detect | 5.8200E-4 | | | Minimum Non-Detect | | | 0.00204 |
| 728 | | | | | Maximum Detect | 0.00159 | | | Maximum Non-Detect | | | 0.00225 |
| 729 | | | | | Variance Detects | 1.0574E-7 | | | Percent Non-Detects | | | 75.76% |
| 730 | | | | | Mean Detects | 9.2413E-4 | | | SD Detects | | | 3.2518E-4 |
| 731 | | | | | Median Detects | 8.1450E-4 | | | CV Detects | | | 0.352 |
| 732 | | | | | Skewness Detects | 1.297 | | | Kurtosis Detects | | | 1.826 |
| 733 | | | | | Mean of Logged Detects | -7.035 | | | SD of Logged Detects | | | 0.325 |
| 734 | | | | | | | | | | | | |
| 735 | | | | | **Normal GOF Test on Detects Only** | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 736 | | | | | Shapiro Wilk Test Statistic | 0.885 | **Shapiro Wilk GOF Test** | | | | | |
| 737 | | | | | 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Normal at 5% Significance Level | | | | | |
| 738 | | | | | Lilliefors Test Statistic | 0.226 | **Lilliefors GOF Test** | | | | | |
| 739 | | | | | 5% Lilliefors Critical Value | 0.313 | Detected Data appear Normal at 5% Significance Level | | | | | |
| 740 | **Detected Data appear Normal at 5% Significance Level** | | | | | | | | | | | |
| 741 | | | | | | | | | | | | |
| 742 | **Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs** | | | | | | | | | | | |
| 743 | | | | | Mean | 9.2413E-4 | | | | Standard Error of Mean | | 1.1497E-4 |
| 744 | | | | | SD | 3.0418E-4 | | | | 95% KM (BCA) UCL | | 0.00112 |
| 745 | | | | | 95% KM (t) UCL | 0.00112 | | | | 95% KM (Percentile Bootstrap) UCL | | 0.00112 |
| 746 | | | | | 95% KM (z) UCL | 0.00111 | | | | 95% KM Bootstrap t UCL | | 0.00127 |
| 747 | | | | | 90% KM Chebyshev UCL | 0.00127 | | | | 95% KM Chebyshev UCL | | 0.00143 |
| 748 | | | | | 97.5% KM Chebyshev UCL | 0.00164 | | | | 99% KM Chebyshev UCL | | 0.00207 |
| 749 | | | | | | | | | | | | |
| 750 | **Gamma GOF Tests on Detected Observations Only** | | | | | | | | | | | |
| 751 | | | | | A-D Test Statistic | 0.319 | **Anderson-Darling GOF Test** | | | | | |
| 752 | | | | | 5% A-D Critical Value | 0.715 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 753 | | | | | K-S Test Statistic | 0.203 | **Kolmogrov-Smirnoff GOF** | | | | | |
| 754 | | | | | 5% K-S Critical Value | 0.294 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 755 | **Detected data appear Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 756 | | | | | | | | | | | | |
| 757 | **Gamma Statistics on Detected Data Only** | | | | | | | | | | | |
| 758 | | | | | k hat (MLE) | 10.47 | | | | k star (bias corrected MLE) | | 6.628 |
| 759 | | | | | Theta hat (MLE) | 8.8258E-5 | | | | Theta star (bias corrected MLE) | | 1.3944E-4 |
| 760 | | | | | nu hat (MLE) | 167.5 | | | | nu star (bias corrected) | | 106 |
| 761 | | | | | MLE Mean (bias corrected) | 9.2413E-4 | | | | MLE Sd (bias corrected) | | 3.5897E-4 |
| 762 | | | | | | | | | | | | |
| 763 | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | | | | | |
| 764 | | | | | k hat (KM) | 9.23 | | | | nu hat (KM) | | 609.2 |
| 765 | | | | | Approximate Chi Square Value (609.19, α) | 552.9 | | | | Adjusted Chi Square Value (609.19, β) | | 550.2 |
| 766 | | | | | 95% Gamma Approximate KM-UCL (use when n>=50) | 0.00102 | | | | 95% Gamma Adjusted KM-UCL (use when n<50) | | 0.00102 |
| 767 | | | | | | | | | | | | |
| 768 | **Gamma ROS Statistics using Imputed Non-Detects** | | | | | | | | | | | |
| 769 | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | | | | | |
| 770 | GROS may not be used when kstar of detected data is small such as < 0.1 | | | | | | | | | | | |
| 771 | For such situations, GROS method tends to yield inflated values of UCLs and BTVs | | | | | | | | | | | |
| 772 | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | | | | | |
| 773 | | | | | Minimum | 5.8200E-4 | | | | Mean | | 0.0078 |
| 774 | | | | | Maximum | 0.01 | | | | Median | | 0.01 |
| 775 | | | | | SD | 0.00395 | | | | CV | | 0.507 |
| 776 | | | | | k hat (MLE) | 1.615 | | | | k star (bias corrected MLE) | | 1.488 |
| 777 | | | | | Theta hat (MLE) | 0.00483 | | | | Theta star (bias corrected MLE) | | 0.00524 |
| 778 | | | | | nu hat (MLE) | 106.6 | | | | nu star (bias corrected) | | 98.2 |
| 779 | | | | | MLE Mean (bias corrected) | 0.0078 | | | | MLE Sd (bias corrected) | | 0.00639 |
| 780 | | | | | | | | | | Adjusted Level of Significance (β) | | 0.0419 |
| 781 | | | | | Approximate Chi Square Value (98.20, α) | 76.34 | | | | Adjusted Chi Square Value (98.20, β) | | 75.35 |
| 782 | | | | | 95% Gamma Approximate UCL (use when n>=50) | 0.01 | | | | 95% Gamma Adjusted UCL (use when n<50) | | 0.0102 |
| 783 | | | | | | | | | | | | |
| 784 | **Lognormal GOF Test on Detected Observations Only** | | | | | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 785 | | | | | Shapiro Wilk Test Statistic | 0.949 | Shapiro Wilk GOF Test | | | | | |
| 786 | | | | | 5% Shapiro Wilk Critical Value | 0.818 | Detected Data appear Lognormal at 5% Significance Level | | | | | |
| 787 | | | | | Lilliefors Test Statistic | 0.181 | Lilliefors GOF Test | | | | | |
| 788 | | | | | 5% Lilliefors Critical Value | 0.313 | Detected Data appear Lognormal at 5% Significance Level | | | | | |
| 789 | Detected Data appear Lognormal at 5% Significance Level | | | | | | | | | | | |
| 790 | | | | | | | | | | | | |
| 791 | Lognormal ROS Statistics Using Imputed Non-Detects | | | | | | | | | | | |
| 792 | | | | | Mean in Original Scale | 8.9868E-4 | | | | Mean in Log Scale | | -7.035 |
| 793 | | | | | SD in Original Scale | 1.9447E-4 | | | | SD in Log Scale | | 0.203 |
| 794 | | | | | 95% t UCL (assumes normality of ROS data) | 9.5603E-4 | | | | 95% Percentile Bootstrap UCL | | 9.5549E-4 |
| 795 | | | | | 95% BCA Bootstrap UCL | 9.6014E-4 | | | | 95% Bootstrap t UCL | | 9.6664E-4 |
| 796 | | | | | 95% H-UCL (Log ROS) | 9.5670E-4 | | | | | | |
| 797 | | | | | | | | | | | | |
| 798 | UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed | | | | | | | | | | | |
| 799 | | | | | KM Mean (logged) | -7.035 | | | | 95% H-UCL (KM -Log) | | 0.00102 |
| 800 | | | | | KM SD (logged) | 0.304 | | | | 95% Critical H Value (KM-Log) | | 1.8 |
| 801 | | | | | KM Standard Error of Mean (logged) | 0.115 | | | | | | |
| 802 | | | | | | | | | | | | |
| 803 | DL/2 Statistics | | | | | | | | | | | |
| 804 | | | DL/2 Normal | | | | | | DL/2 Log-Transformed | | | |
| 805 | | | | | Mean in Original Scale | 0.00103 | | | | Mean in Log Scale | | -6.892 |
| 806 | | | | | SD in Original Scale | 1.6581E-4 | | | | SD in Log Scale | | 0.175 |
| 807 | | | | | 95% t UCL (Assumes normality) | 0.00108 | | | | 95% H-Stat UCL | | 0.00109 |
| 808 | DL/2 is not a recommended method, provided for comparisons and historical reasons | | | | | | | | | | | |
| 809 | | | | | | | | | | | | |
| 810 | Nonparametric Distribution Free UCL Statistics | | | | | | | | | | | |
| 811 | Detected Data appear Normal Distributed at 5% Significance Level | | | | | | | | | | | |
| 812 | | | | | | | | | | | | |
| 813 | Suggested UCL to Use | | | | | | | | | | | |
| 814 | | | | | 95% KM (t) UCL | 0.00112 | | | | 95% KM (Percentile Bootstrap) UCL | | 0.00112 |
| 815 | | | | | | | | | | | | |
| 816 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 817 | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | | | | | |
| 818 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 819 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician | | | | | | | | | | | |
| 820 | | | | | | | | | | | | |
| 821 | Silver | | | | | | | | | | | |
| 822 | | | | | | | | | | | | |
| 823 | General Statistics | | | | | | | | | | | |
| 824 | | | | | Total Number of Observations | 33 | | | | Number of Distinct Observations | | 32 |
| 825 | | | | | Number of Detects | 16 | | | | Number of Non-Detects | | 17 |
| 826 | | | | | Number of Distinct Detects | 16 | | | | Number of Distinct Non-Detects | | 16 |
| 827 | | | | | Minimum Detect | 0.105 | | | | Minimum Non-Detect | | 0.438 |
| 828 | | | | | Maximum Detect | 15.2 | | | | Maximum Non-Detect | | 0.56 |
| 829 | | | | | Variance Detects | 14.05 | | | | Percent Non-Detects | | 51.52% |
| 830 | | | | | Mean Detects | 1.267 | | | | SD Detects | | 3.748 |
| 831 | | | | | Median Detects | 0.196 | | | | CV Detects | | 2.958 |
| 832 | | | | | Skewness Detects | 3.889 | | | | Kurtosis Detects | | 15.32 |
| 833 | | | | | Mean of Logged Detects | -1.263 | | | | SD of Logged Detects | | 1.308 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 834 | | | | | | | | | | | | |
| 835 | **Normal GOF Test on Detects Only** | | | | | | | | | | | |
| 836 | | | | | Shapiro Wilk Test Statistic | 0.342 | **Shapiro Wilk GOF Test** | | | | | |
| 837 | | | | | 5% Shapiro Wilk Critical Value | 0.887 | Detected Data Not Normal at 5% Significance Level | | | | | |
| 838 | | | | | Lilliefors Test Statistic | 0.441 | **Lilliefors GOF Test** | | | | | |
| 839 | | | | | 5% Lilliefors Critical Value | 0.222 | Detected Data Not Normal at 5% Significance Level | | | | | |
| 840 | **Detected Data Not Normal at 5% Significance Level** | | | | | | | | | | | |
| 841 | | | | | | | | | | | | |
| 842 | **Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs** | | | | | | | | | | | |
| 843 | | | | | Mean | 0.705 | | | Standard Error of Mean | | | 0.465 |
| 844 | | | | | SD | 2.586 | | | 95% KM (BCA) UCL | | | 1.616 |
| 845 | | | | | 95% KM (t) UCL | 1.493 | | | 95% KM (Percentile Bootstrap) UCL | | | 1.597 |
| 846 | | | | | 95% KM (z) UCL | 1.47 | | | 95% KM Bootstrap t UCL | | | 13.03 |
| 847 | | | | | 90% KM Chebyshev UCL | 2.1 | | | 95% KM Chebyshev UCL | | | 2.732 |
| 848 | | | | | 97.5% KM Chebyshev UCL | 3.609 | | | 99% KM Chebyshev UCL | | | 5.332 |
| 849 | | | | | | | | | | | | |
| 850 | **Gamma GOF Tests on Detected Observations Only** | | | | | | | | | | | |
| 851 | | | | | A-D Test Statistic | 3.254 | **Anderson-Darling GOF Test** | | | | | |
| 852 | | | | | 5% A-D Critical Value | 0.81 | Detected Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 853 | | | | | K-S Test Statistic | 0.428 | **Kolmogrov-Smirnoff GOF** | | | | | |
| 854 | | | | | 5% K-S Critical Value | 0.229 | Detected Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 855 | **Detected Data Not Gamma Distributed at 5% Significance Level** | | | | | | | | | | | |
| 856 | | | | | | | | | | | | |
| 857 | **Gamma Statistics on Detected Data Only** | | | | | | | | | | | |
| 858 | | | | | k hat (MLE) | 0.433 | | | k star (bias corrected MLE) | | | 0.394 |
| 859 | | | | | Theta hat (MLE) | 2.925 | | | Theta star (bias corrected MLE) | | | 3.219 |
| 860 | | | | | nu hat (MLE) | 13.86 | | | nu star (bias corrected) | | | 12.59 |
| 861 | | | | | MLE Mean (bias corrected) | 1.267 | | | MLE Sd (bias corrected) | | | 2.02 |
| 862 | | | | | | | | | | | | |
| 863 | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | | | | | |
| 864 | | | | | k hat (KM) | 0.0744 | | | nu hat (KM) | | | 4.91 |
| 865 | | | | | Approximate Chi Square Value (4.91, α) | 1.111 | | | Adjusted Chi Square Value (4.91, β) | | | 1.023 |
| 866 | | | | | 95% Gamma Approximate KM-UCL (use when n>=50) | 3.117 | | | 95% Gamma Adjusted KM-UCL (use when n<50) | | | 3.386 |
| 867 | Gamma (KM) may not be used when k hat (KM) is < 0.1 | | | | | | | | | | | |
| 868 | | | | | | | | | | | | |
| 869 | **Gamma ROS Statistics using Imputed Non-Detects** | | | | | | | | | | | |
| 870 | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | | | | | |
| 871 | GROS may not be used when kstar of detected data is small such as < 0.1 | | | | | | | | | | | |
| 872 | For such situations, GROS method tends to yield inflated values of UCLs and BTVs | | | | | | | | | | | |
| 873 | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | | | | | |
| 874 | | | | | Minimum | 0.01 | | | Mean | | | 0.627 |
| 875 | | | | | Maximum | 15.2 | | | Median | | | 0.105 |
| 876 | | | | | SD | 2.643 | | | CV | | | 4.216 |
| 877 | | | | | k hat (MLE) | 0.287 | | | k star (bias corrected MLE) | | | 0.281 |
| 878 | | | | | Theta hat (MLE) | 2.184 | | | Theta star (bias corrected MLE) | | | 2.23 |
| 879 | | | | | nu hat (MLE) | 18.94 | | | nu star (bias corrected) | | | 18.56 |
| 880 | | | | | MLE Mean (bias corrected) | 0.627 | | | MLE Sd (bias corrected) | | | 1.182 |
| 881 | | | | | | | | | Adjusted Level of Significance (β) | | | 0.0419 |
| 882 | | | | | Approximate Chi Square Value (18.56, α) | 9.793 | | | Adjusted Chi Square Value (18.56, β) | | | 9.465 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 883 | 95% Gamma Approximate UCL (use when n>=50) | | | | | 1.188 | 95% Gamma Adjusted UCL (use when n<50) | | | | | 1.229 |
| 884 | | | | | | | | | | | | |
| 885 | **Lognormal GOF Test on Detected Observations Only** | | | | | | | | | | | |
| 886 | Shapiro Wilk Test Statistic | | | | | 0.701 | **Shapiro Wilk GOF Test** | | | | | |
| 887 | 5% Shapiro Wilk Critical Value | | | | | 0.887 | Detected Data Not Lognormal at 5% Significance Level | | | | | |
| 888 | Lilliefors Test Statistic | | | | | 0.34 | **Lilliefors GOF Test** | | | | | |
| 889 | 5% Lilliefors Critical Value | | | | | 0.222 | Detected Data Not Lognormal at 5% Significance Level | | | | | |
| 890 | **Detected Data Not Lognormal at 5% Significance Level** | | | | | | | | | | | |
| 891 | | | | | | | | | | | | |
| 892 | **Lognormal ROS Statistics Using Imputed Non-Detects** | | | | | | | | | | | |
| 893 | Mean in Original Scale | | | | | 0.719 | Mean in Log Scale | | | | | -1.437 |
| 894 | SD in Original Scale | | | | | 2.623 | SD in Log Scale | | | | | 0.918 |
| 895 | 95% t UCL (assumes normality of ROS data) | | | | | 1.493 | 95% Percentile Bootstrap UCL | | | | | 1.588 |
| 896 | 95% BCA Bootstrap UCL | | | | | 2.112 | 95% Bootstrap t UCL | | | | | 15.84 |
| 897 | 95% H-UCL (Log ROS) | | | | | 0.53 | | | | | | |
| 898 | | | | | | | | | | | | |
| 899 | **DL/2 Statistics** | | | | | | | | | | | |
| 900 | **DL/2 Normal** | | | | | | **DL/2 Log-Transformed** | | | | | |
| 901 | Mean in Original Scale | | | | | 0.744 | Mean in Log Scale | | | | | -1.323 |
| 902 | SD in Original Scale | | | | | 2.618 | SD in Log Scale | | | | | 0.899 |
| 903 | 95% t UCL (Assumes normality) | | | | | 1.516 | 95% H-Stat UCL | | | | | 0.577 |
| 904 | **DL/2 is not a recommended method, provided for comparisons and historical reasons** | | | | | | | | | | | |
| 905 | | | | | | | | | | | | |
| 906 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 907 | **Data do not follow a Discernible Distribution at 5% Significance Level** | | | | | | | | | | | |
| 908 | | | | | | | | | | | | |
| 909 | **Suggested UCL to Use** | | | | | | | | | | | |
| 910 | 95% KM (BCA) UCL | | | | | 1.616 | | | | | | |
| 911 | | | | | | | | | | | | |
| 912 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 913 | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | | | | | |
| 914 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 915 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statisticiar | | | | | | | | | | | |
| 916 | | | | | | | | | | | | |
| 917 | | | | | | | | | | | | |
| 918 | **Zinc** | | | | | | | | | | | |
| 919 | | | | | | | | | | | | |
| 920 | **General Statistics** | | | | | | | | | | | |
| 921 | Total Number of Observations | | | | | 33 | Number of Distinct Observations | | | | | 32 |
| 922 | | | | | | | Number of Missing Observations | | | | | 0 |
| 923 | Minimum | | | | | 39 | Mean | | | | | 54.3 |
| 924 | Maximum | | | | | 113 | Median | | | | | 52.2 |
| 925 | SD | | | | | 14.57 | Std. Error of Mean | | | | | 2.537 |
| 926 | Coefficient of Variation | | | | | 0.268 | Skewness | | | | | 2.251 |
| 927 | | | | | | | | | | | | |
| 928 | **Normal GOF Test** | | | | | | | | | | | |
| 929 | Shapiro Wilk Test Statistic | | | | | 0.801 | **Shapiro Wilk GOF Test** | | | | | |
| 930 | 5% Shapiro Wilk Critical Value | | | | | 0.931 | Data Not Normal at 5% Significance Level | | | | | |
| 931 | Lilliefors Test Statistic | | | | | 0.18 | **Lilliefors GOF Test** | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 932 | | | | | 5% Lilliefors Critical Value | 0.154 | Data Not Normal at 5% Significance Level | | | | | |
| 933 | **Data Not Normal at 5% Significance Level** | | | | | | | | | | | |
| 934 | | | | | | | | | | | | |
| 935 | **Assuming Normal Distribution** | | | | | | | | | | | |
| 936 | **95% Normal UCL** | | | | | | **95% UCLs (Adjusted for Skewness)** | | | | | |
| 937 | | | | | 95% Student's-t UCL | 58.59 | | | 95% Adjusted-CLT UCL (Chen-1995) | | | 59.53 |
| 938 | | | | | | | | | 95% Modified-t UCL (Johnson-1978) | | | 58.76 |
| 939 | | | | | | | | | | | | |
| 940 | **Gamma GOF Test** | | | | | | | | | | | |
| 941 | | | | | A-D Test Statistic | 0.939 | **Anderson-Darling Gamma GOF Test** | | | | | |
| 942 | | | | | 5% A-D Critical Value | 0.746 | Data Not Gamma Distributed at 5% Significance Level | | | | | |
| 943 | | | | | K-S Test Statistic | 0.151 | **Kolmogrov-Smirnoff Gamma GOF Test** | | | | | |
| 944 | | | | | 5% K-S Critical Value | 0.153 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 945 | **Detected data follow Appr. Gamma Distribution at 5% Significance Level** | | | | | | | | | | | |
| 946 | | | | | | | | | | | | |
| 947 | **Gamma Statistics** | | | | | | | | | | | |
| 948 | | | | | k hat (MLE) | 18.06 | | | k star (bias corrected MLE) | | | 16.44 |
| 949 | | | | | Theta hat (MLE) | 3.006 | | | Theta star (bias corrected MLE) | | | 3.302 |
| 950 | | | | | nu hat (MLE) | 1192 | | | nu star (bias corrected) | | | 1085 |
| 951 | | | | | MLE Mean (bias corrected) | 54.3 | | | MLE Sd (bias corrected) | | | 13.39 |
| 952 | | | | | | | | | Approximate Chi Square Value (0.05) | | | 1010 |
| 953 | | | | | Adjusted Level of Significance | 0.0419 | | | Adjusted Chi Square Value | | | 1006 |
| 954 | | | | | | | | | | | | |
| 955 | **Assuming Gamma Distribution** | | | | | | | | | | | |
| 956 | | | | | 95% Approximate Gamma UCL (use when n>=50) | 58.36 | | | 95% Adjusted Gamma UCL (use when n<50) | | | 58.57 |
| 957 | | | | | | | | | | | | |
| 958 | **Lognormal GOF Test** | | | | | | | | | | | |
| 959 | | | | | Shapiro Wilk Test Statistic | 0.908 | **Shapiro Wilk Lognormal GOF Test** | | | | | |
| 960 | | | | | 5% Shapiro Wilk Critical Value | 0.931 | Data Not Lognormal at 5% Significance Level | | | | | |
| 961 | | | | | Lilliefors Test Statistic | 0.134 | **Lilliefors Lognormal GOF Test** | | | | | |
| 962 | | | | | 5% Lilliefors Critical Value | 0.154 | Data appear Lognormal at 5% Significance Level | | | | | |
| 963 | **Data appear Approximate Lognormal at 5% Significance Level** | | | | | | | | | | | |
| 964 | | | | | | | | | | | | |
| 965 | **Lognormal Statistics** | | | | | | | | | | | |
| 966 | | | | | Minimum of Logged Data | 3.664 | | | Mean of logged Data | | | 3.967 |
| 967 | | | | | Maximum of Logged Data | 4.727 | | | SD of logged Data | | | 0.229 |
| 968 | | | | | | | | | | | | |
| 969 | **Assuming Lognormal Distribution** | | | | | | | | | | | |
| 970 | | | | | 95% H-UCL | 58.2 | | | 90% Chebyshev (MVUE) UCL | | | 60.7 |
| 971 | | | | | 95% Chebyshev (MVUE) UCL | 63.66 | | | 97.5% Chebyshev (MVUE) UCL | | | 67.77 |
| 972 | | | | | 99% Chebyshev (MVUE) UCL | 75.85 | | | | | | |
| 973 | | | | | | | | | | | | |
| 974 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 975 | **Data appear to follow a Discernible Distribution at 5% Significance Level** | | | | | | | | | | | |
| 976 | | | | | | | | | | | | |
| 977 | **Nonparametric Distribution Free UCLs** | | | | | | | | | | | |
| 978 | | | | | 95% CLT UCL | 58.47 | | | 95% Jackknife UCL | | | 58.59 |
| 979 | | | | | 95% Standard Bootstrap UCL | 58.32 | | | 95% Bootstrap-t UCL | | | 60.54 |
| 980 | | | | | 95% Hall's Bootstrap UCL | 62.12 | | | 95% Percentile Bootstrap UCL | | | 58.46 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
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| 981 | | | | | 95% BCA Bootstrap UCL | 59.44 | | | | | | |
| 982 | | | | | 90% Chebyshev(Mean, Sd) UCL | 61.91 | | | | | 95% Chebyshev(Mean, Sd) UCL | 65.35 |
| 983 | | | | | 97.5% Chebyshev(Mean, Sd) UCL | 70.14 | | | | | 99% Chebyshev(Mean, Sd) UCL | 79.54 |
| 984 | | | | | | | | | | | | |
| 985 | | | | | Suggested UCL to Use | | | | | | | |
| 986 | | | | | 95% Adjusted Gamma UCL | 58.57 | | | | | | |
| 987 | | | | | | | | | | | | |
| 988 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 989 | These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) | | | | | | | | | | | |
| 990 | and Singh and Singh (2003). However, simulations results will not cover all Real World data sets. | | | | | | | | | | | |
| 991 | For additional insight the user may want to consult a statistician. | | | | | | | | | | | |
| 992 | | | | | | | | | | | | |
| 993 | Uranium-235/236 | | | | | | | | | | | |
| 994 | | | | | | | | | | | | |
| 995 | | | | | General Statistics | | | | | | | |
| 996 | | | | | Total Number of Observations | 33 | | | | | Number of Distinct Observations | 32 |
| 997 | | | | | Number of Detects | 14 | | | | | Number of Non-Detects | 19 |
| 998 | | | | | Number of Distinct Detects | 14 | | | | | Number of Distinct Non-Detects | 19 |
| 999 | | | | | Minimum Detect | 0.0577 | | | | | Minimum Non-Detect | 0.0346 |
| 1000 | | | | | Maximum Detect | 0.115 | | | | | Maximum Non-Detect | 0.0864 |
| 1001 | | | | | Variance Detects | 2.2437E-4 | | | | | Percent Non-Detects | 57.58% |
| 1002 | | | | | Mean Detects | 0.0882 | | | | | SD Detects | 0.015 |
| 1003 | | | | | Median Detects | 0.0855 | | | | | CV Detects | 0.17 |
| 1004 | | | | | Skewness Detects | -0.0735 | | | | | Kurtosis Detects | 0.386 |
| 1005 | | | | | Mean of Logged Detects | -2.442 | | | | | SD of Logged Detects | 0.177 |
| 1006 | | | | | | | | | | | | |
| 1007 | | | | | Normal GOF Test on Detects Only | | | | | | | |
| 1008 | | | | | Shapiro Wilk Test Statistic | 0.975 | | | | | Shapiro Wilk GOF Test | |
| 1009 | | | | | 5% Shapiro Wilk Critical Value | 0.874 | | | | | Detected Data appear Normal at 5% Significance Level | |
| 1010 | | | | | Lilliefors Test Statistic | 0.15 | | | | | Lilliefors GOF Test | |
| 1011 | | | | | 5% Lilliefors Critical Value | 0.237 | | | | | Detected Data appear Normal at 5% Significance Level | |
| 1012 | | | | | Detected Data appear Normal at 5% Significance Level | | | | | | | |
| 1013 | | | | | | | | | | | | |
| 1014 | | | | | Kaplan-Meier (KM) Statistics using Normal Critical Values and other Nonparametric UCLs | | | | | | | |
| 1015 | | | | | Mean | 0.0594 | | | | | Standard Error of Mean | 0.00527 |
| 1016 | | | | | SD | 0.0275 | | | | | 95% KM (BCA) UCL | 0.072 |
| 1017 | | | | | 95% KM (t) UCL | 0.0683 | | | | | 95% KM (Percentile Bootstrap) UCL | 0.0701 |
| 1018 | | | | | 95% KM (z) UCL | 0.068 | | | | | 95% KM Bootstrap t UCL | 0.0678 |
| 1019 | | | | | 90% KM Chebyshev UCL | 0.0752 | | | | | 95% KM Chebyshev UCL | 0.0823 |
| 1020 | | | | | 97.5% KM Chebyshev UCL | 0.0923 | | | | | 99% KM Chebyshev UCL | 0.112 |
| 1021 | | | | | | | | | | | | |
| 1022 | | | | | Gamma GOF Tests on Detected Observations Only | | | | | | | |
| 1023 | | | | | A-D Test Statistic | 0.264 | | | | | Anderson-Darling GOF Test | |
| 1024 | | | | | 5% A-D Critical Value | 0.733 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 1025 | | | | | K-S Test Statistic | 0.166 | | | | | Kolmogrov-Smirnoff GOF | |
| 1026 | | | | | 5% K-S Critical Value | 0.228 | Detected data appear Gamma Distributed at 5% Significance Leve | | | | | |
| 1027 | | | | | Detected data appear Gamma Distributed at 5% Significance Level | | | | | | | |
| 1028 | | | | | | | | | | | | |
| 1029 | | | | | Gamma Statistics on Detected Data Only | | | | | | | |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1030 | | | | | k hat (MLE) | 35.73 | | | | | k star (bias corrected MLE) | 28.12 |
| 1031 | | | | | Theta hat (MLE) | 0.00247 | | | | | Theta star (bias corrected MLE) | 0.00314 |
| 1032 | | | | | nu hat (MLE) | 1000 | | | | | nu star (bias corrected) | 787.3 |
| 1033 | | | | | MLE Mean (bias corrected) | 0.0882 | | | | | MLE Sd (bias corrected) | 0.0166 |
| 1034 | | | | | | | | | | | | |
| 1035 | | | | | **Gamma Kaplan-Meier (KM) Statistics** | | | | | | | |
| 1036 | | | | | k hat (KM) | 4.659 | | | | | nu hat (KM) | 307.5 |
| 1037 | | | | | Approximate Chi Square Value (307.50, α) | 267.9 | | | | | Adjusted Chi Square Value (307.50, β) | 266 |
| 1038 | | | | | 95% Gamma Approximate KM-UCL (use when n>=50) | 0.0682 | | | | | 95% Gamma Adjusted KM-UCL (use when n<50) | 0.0686 |
| 1039 | | | | | | | | | | | | |
| 1040 | | | | | **Gamma ROS Statistics using Imputed Non-Detects** | | | | | | | |
| 1041 | | | | | GROS may not be used when data set has > 50% NDs with many tied observations at multiple DLs | | | | | | | |
| 1042 | | | | | GROS may not be used when kstar of detected data is small such as < 0.1 | | | | | | | |
| 1043 | | | | | For such situations, GROS method tends to yield inflated values of UCLs and BTVs | | | | | | | |
| 1044 | | | | | For gamma distributed detected data, BTVs and UCLs may be computed using gamma distribution on KM estimates | | | | | | | |
| 1045 | | | | | Minimum | 0.0499 | | | | | Mean | 0.0677 |
| 1046 | | | | | Maximum | 0.115 | | | | | Median | 0.0551 |
| 1047 | | | | | SD | 0.0203 | | | | | CV | 0.3 |
| 1048 | | | | | k hat (MLE) | 12.77 | | | | | k star (bias corrected MLE) | 11.63 |
| 1049 | | | | | Theta hat (MLE) | 0.0053 | | | | | Theta star (bias corrected MLE) | 0.00582 |
| 1050 | | | | | nu hat (MLE) | 842.5 | | | | | nu star (bias corrected) | 767.3 |
| 1051 | | | | | MLE Mean (bias corrected) | 0.0677 | | | | | MLE Sd (bias corrected) | 0.0199 |
| 1052 | | | | | | | | | | | Adjusted Level of Significance (β) | 0.0419 |
| 1053 | | | | | Approximate Chi Square Value (767.27, α) | 704 | | | | | Adjusted Chi Square Value (767.27, β) | 700.9 |
| 1054 | | | | | 95% Gamma Approximate UCL (use when n>=50) | 0.0738 | | | | | 95% Gamma Adjusted UCL (use when n<50) | 0.0741 |
| 1055 | | | | | | | | | | | | |
| 1056 | | | | | **Lognormal GOF Test on Detected Observations Only** | | | | | | | |
| 1057 | | | | | Shapiro Wilk Test Statistic | 0.956 | | | | | **Shapiro Wilk GOF Test** | |
| 1058 | | | | | 5% Shapiro Wilk Critical Value | 0.874 | | | | | Detected Data appear Lognormal at 5% Significance Level | |
| 1059 | | | | | Lilliefors Test Statistic | 0.181 | | | | | **Lilliefors GOF Test** | |
| 1060 | | | | | 5% Lilliefors Critical Value | 0.237 | | | | | Detected Data appear Lognormal at 5% Significance Level | |
| 1061 | | | | | **Detected Data appear Lognormal at 5% Significance Level** | | | | | | | |
| 1062 | | | | | | | | | | | | |
| 1063 | | | | | **Lognormal ROS Statistics Using Imputed Non-Detects** | | | | | | | |
| 1064 | | | | | Mean in Original Scale | 0.0696 | | | | | Mean in Log Scale | -2.697 |
| 1065 | | | | | SD in Original Scale | 0.0189 | | | | | SD in Log Scale | 0.251 |
| 1066 | | | | | 95% t UCL (assumes normality of ROS data) | 0.0752 | | | | | 95% Percentile Bootstrap UCL | 0.0752 |
| 1067 | | | | | 95% BCA Bootstrap UCL | 0.0752 | | | | | 95% Bootstrap t UCL | 0.0761 |
| 1068 | | | | | 95% H-UCL (Log ROS) | 0.0752 | | | | | | |
| 1069 | | | | | | | | | | | | |
| 1070 | | | | | **UCLs using Lognormal Distribution and KM Estimates when Detected data are Lognormally Distributed** | | | | | | | |
| 1071 | | | | | KM Mean (logged) | -2.931 | | | | | 95% H-UCL (KM -Log) | 0.0692 |
| 1072 | | | | | KM SD (logged) | 0.459 | | | | | 95% Critical H Value (KM-Log) | 1.904 |
| 1073 | | | | | KM Standard Error of Mean (logged) | 0.0909 | | | | | | |
| 1074 | | | | | | | | | | | | |
| 1075 | | | | | **DL/2 Statistics** | | | | | | | |
| 1076 | | | | | **DL/2 Normal** | | | | | | **DL/2 Log-Transformed** | |
| 1077 | | | | | Mean in Original Scale | 0.0551 | | | | | Mean in Log Scale | -3.056 |
| 1078 | | | | | SD in Original Scale | 0.0308 | | | | | SD in Log Scale | 0.577 |

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1079 | | | | 95% t UCL (Assumes normality) | | 0.0642 | | | | 95% H-Stat UCL | | 0.0682 |
| 1080 | **DL/2 is not a recommended method, provided for comparisons and historical reasons** | | | | | | | | | | | |
| 1081 | | | | | | | | | | | | |
| 1082 | **Nonparametric Distribution Free UCL Statistics** | | | | | | | | | | | |
| 1083 | **Detected Data appear Normal Distributed at 5% Significance Level** | | | | | | | | | | | |
| 1084 | | | | | | | | | | | | |
| 1085 | **Suggested UCL to Use** | | | | | | | | | | | |
| 1086 | | | | 95% KM (t) UCL | | 0.0683 | | | | 95% KM (Percentile Bootstrap) UCL | | 0.0701 |
| 1087 | | | | | | | | | | | | |
| 1088 | Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL. | | | | | | | | | | | |
| 1089 | Recommendations are based upon data size, data distribution, and skewness. | | | | | | | | | | | |
| 1090 | These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). | | | | | | | | | | | |
| 1091 | However, simulations results will not cover all Real World data sets; for additional insight the user may want to consult a statistician | | | | | | | | | | | |

| Barium | D_Barium | Chromium | D_Chromium | Copper | D_Copper | Zinc | D_Zinc | Uranium-235 | D_Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|
| 42.6 | 1 | 113 | 1 | 4.55 | 1 | 66.5 | 1 | 0.0956 | 1 |
| 55.1 | 1 | 8.29 | 1 | 2.74 | 1 | 50.4 | 1 | 0.0717 | 0 |
| 96.2 | 1 | 41.8 | 1 | 4.94 | 1 | 62.8 | 1 | 0.0555 | 0 |
| 75.2 | 1 | 5.92 | 1 | 3.62 | 1 | 44.5 | 1 | 0.0857 | 1 |
| 73.4 | 1 | 4.04 | 1 | 3.17 | 1 | 53.6 | 1 | 0.0461 | 0 |
| 114 | 1 | 3.37 | 1 | 2.99 | 1 | 60.9 | 1 | 0.0708 | 0 |
| 79.5 | 1 | 4.41 | 1 | 2.69 | 1 | 45.5 | 1 | 0.0665 | 0 |
| 79.3 | 1 | 23.9 | 1 | 2.22 | 1 | 72.6 | 1 | 0.0752 | 1 |
| 126 | 1 | 4.54 | 1 | 2.62 | 1 | 58.4 | 1 | 0.0717 | 1 |
| 73.5 | 1 | 4.22 | 1 | 3.31 | 1 | 50.4 | 1 | 0.0795 | 1 |
| 75.7 | 1 | 13.1 | 1 | 4.12 | 1 | 64.6 | 1 | -0.0163 | 0 |
| 136 | 1 | 78.1 | 1 | 26 | 1 | 75.1 | 1 | 0.0376 | 0 |

| Aluminum | D_Aluminum | Antimony | D_Antimony | Arsenic | D_Arsenic | Barium | D_Barium | Chromium | D_Chromium | Copper | D_Copper | Lead | D_Lead | Manganese | D_Manganes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3670 | 1 | 1.06 | 0 | 1.14 | 1 | 60.5 | 1 | 68.3 | 1 | 4.63 | 1 | 9.31 | 1 | 376 | 1 |
| 5260 | 1 | 1.03 | 0 | 0.92 | 1 | 36 | 1 | 4.97 | 1 | 3.99 | 1 | 12.7 | 1 | 126 | 1 |
| 2540 | 1 | 0.486 | 1 | 0.585 | 1 | 28.9 | 1 | 27.7 | 1 | 4.6 | 1 | 10.1 | 1 | 145 | 1 |
| 5230 | 1 | 1.05 | 0 | 2.64 | 1 | 384 | 1 | 19.1 | 1 | 65.1 | 1 | 33.6 | 1 | 227 | 1 |
| 2720 | 1 | 0.991 | 0 | 0.527 | 1 | 50.5 | 1 | 4.2 | 1 | 5.83 | 1 | 10.1 | 1 | 141 | 1 |
| 4070 | 1 | 1 | 0 | 1.33 | 1 | 111 | 1 | 3.17 | 1 | 3.21 | 1 | 12 | 1 | 387 | 1 |
| 29600 | 1 | 1.15 | 0 | 3.85 | 1 | 70.5 | 1 | 11.9 | 1 | 11.4 | 1 | 18.6 | 1 | 92.5 | 1 |
| 8710 | 1 | 1.04 | 0 | 1.73 | 1 | 89.1 | 1 | 3.36 | 1 | 3.83 | 1 | 13.4 | 1 | 369 | 1 |
| 4190 | 1 | 1.01 | 0 | 1.29 | 1 | 33.8 | 1 | 3.35 | 1 | 1.75 | 1 | 7.74 | 1 | 169 | 1 |
| 4150 | 1 | 0.99 | 0 | 0.791 | 1 | 50.4 | 1 | 25.9 | 1 | 3.02 | 1 | 9.17 | 1 | 536 | 1 |
| 3410 | 1 | 0.992 | 0 | 0.76 | 1 | 51.2 | 1 | 8.89 | 1 | 2.55 | 1 | 8.71 | 1 | 445 | 1 |
| 4830 | 1 | 1.04 | 0 | 1.88 | 1 | 122 | 1 | 15.5 | 1 | 7.49 | 1 | 11.6 | 1 | 156 | 1 |
| 5190 | 1 | 1 | 0 | 2.47 | 1 | 147 | 1 | 2.92 | 1 | 14.1 | 1 | 16.3 | 1 | 389 | 1 |
| 5960 | 1 | 1.06 | 0 | 2.4 | 1 | 152 | 1 | 3.91 | 1 | 4.3 | 1 | 14 | 1 | 350 | 1 |
| 4480 | 1 | 0.986 | 0 | 1.32 | 1 | 62.3 | 1 | 3.74 | 1 | 4.22 | 1 | 15.7 | 1 | 578 | 1 |
| 4490 | 1 | 1.01 | 0 | 2.22 | 1 | 151 | 1 | 3.59 | 1 | 2.74 | 1 | 8.95 | 1 | 444 | 1 |
| 4800 | 1 | 1.02 | 0 | 1.77 | 1 | 101 | 1 | 4.98 | 1 | 3.35 | 1 | 11.1 | 1 | 437 | 1 |
| 5430 | 1 | 1.03 | 0 | 1.62 | 1 | 33.7 | 1 | 3.23 | 1 | 1.65 | 1 | 9.89 | 1 | 319 | 1 |
| 3300 | 1 | 0.875 | 0 | 0.997 | 1 | 19.6 | 1 | 10.7 | 1 | 1.28 | 1 | 8.02 | 1 | 279 | 1 |
| 4070 | 1 | 0.961 | 0 | 1.98 | 1 | 82.1 | 1 | 3.99 | 1 | 3.24 | 1 | 10.4 | 1 | 475 | 1 |
| 5730 | 1 | 0.488 | 1 | 1.28 | 1 | 77.3 | 1 | 3.67 | 1 | 2.66 | 1 | 9.8 | 1 | 412 | 1 |
| 4510 | 1 | 0.437 | 1 | 1.01 | 1 | 54.8 | 1 | 3.63 | 1 | 2.2 | 1 | 9.28 | 1 | 313 | 1 |
| 3660 | 1 | 0.986 | 0 | 0.789 | 1 | 22 | 1 | 46.9 | 1 | 2.79 | 1 | 11.5 | 1 | 434 | 1 |
| 5300 | 1 | 0.465 | 1 | 1.55 | 1 | 83.3 | 1 | 4.49 | 1 | 3.1 | 1 | 10.2 | 1 | 412 | 1 |
| 7590 | 1 | 1.05 | 0 | 2.05 | 1 | 105 | 1 | 10.3 | 1 | 3.92 | 1 | 13.5 | 1 | 565 | 1 |
| 7010 | 1 | 1.11 | 0 | 1.95 | 1 | 53.4 | 1 | 6.69 | 1 | 3.11 | 1 | 15.5 | 1 | 326 | 1 |
| 5880 | 1 | 0.404 | 1 | 1.54 | 1 | 126 | 1 | 3.57 | 1 | 3.3 | 1 | 12.2 | 1 | 443 | 1 |
| 8920 | 1 | 0.997 | 0 | 1.78 | 1 | 58.8 | 1 | 6.26 | 1 | 4.55 | 1 | 12.4 | 1 | 278 | 1 |
| 5920 | 1 | 0.361 | 1 | 1.52 | 1 | 126 | 1 | 3.81 | 1 | 4.61 | 1 | 13.3 | 1 | 570 | 1 |
| | | | | 1.75 | 1 | | | | | | | | | | |
| | | | | 1.87 | 1 | | | | | | | | | | |

| Mercury | D_Mercury | Perchlorate | D_Perchlorat | Silver | D_Silver | Zinc | D_Zinc | Uranium-235 | D_Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0088 | 1 | 0.00211 | 0 | 0.53 | 0 | 60.3 | 1 | 0.0472 | 0 |
| 0.257 | 1 | 0.00214 | 0 | 0.513 | 0 | 73.3 | 1 | 0.083 | 1 |
| 0.0267 | 1 | 0.00206 | 0 | 0.486 | 0 | 75.4 | 1 | 0.0627 | 0 |
| 20.6 | 1 | 0.0011 | 1 | 15.2 | 1 | 113 | 1 | 0.0848 | 1 |
| 0.00941 | 1 | 0.00208 | 0 | 0.495 | 0 | 64.8 | 1 | 0.0715 | 1 |
| 0.0361 | 1 | 0.0021 | 0 | 0.105 | 1 | 44.5 | 1 | 0.0768 | 0 |
| 0.0145 | 1 | 0.00159 | 1 | 0.25 | 1 | 47.3 | 1 | 0.0479 | 0 |
| 0.0165 | 1 | 0.00223 | 0 | 0.244 | 1 | 55.7 | 1 | 0.0634 | 0 |
| 0.0626 | 1 | 0.000582 | 1 | 0.114 | 1 | 43.4 | 1 | 0.0835 | 1 |
| 0.0124 | 1 | 0.00107 | 1 | 0.185 | 1 | 39 | 1 | 0.0702 | 0 |
| 0.0144 | 1 | 0.000841 | 1 | 0.495 | 0 | 65.2 | 1 | 0.067 | 0 |
| 0.919 | 1 | 0.00209 | 0 | 0.647 | 1 | 73.7 | 1 | 0.0864 | 0 |
| 4.2 | 1 | 0.000786 | 1 | 2.13 | 1 | 59.2 | 1 | 0.065 | 0 |
| 0.0185 | 1 | 0.0021 | 0 | 0.501 | 0 | 52.2 | 1 | 0.0346 | 0 |
| 0.0173 | 1 | 0.00213 | 0 | 0.255 | 1 | 52.9 | 1 | 0.0978 | 1 |
| 0.0133 | 1 | 0.00206 | 0 | 0.206 | 1 | 40.7 | 1 | 0.0642 | 0 |
| 0.013 | 1 | 0.00214 | 0 | 0.121 | 1 | 41.3 | 1 | 0.0589 | 0 |
| 0.0101 | 1 | 0.00215 | 0 | 0.17 | 1 | 44.9 | 1 | 0.0861 | 1 |
| 0.0137 | 1 | 0.00204 | 0 | 0.438 | 0 | 53.2 | 1 | 0.0577 | 1 |
| 0.0302 | 1 | 0.00209 | 0 | 0.258 | 1 | 46.2 | 1 | 0.0433 | 0 |
| 0.0114 | 1 | 0.00217 | 0 | 0.115 | 1 | 43.1 | 1 | 0.0844 | 1 |
| 0.0114 | 1 | 0.00206 | 0 | 0.479 | 0 | 41.4 | 1 | 0.0512 | 0 |
| 0.00703 | 1 | 0.00209 | 0 | 0.493 | 0 | 64.3 | 1 | 0.11 | 1 |
| 0.0112 | 1 | 0.00216 | 0 | 0.505 | 0 | 43.2 | 1 | 0.0999 | 1 |
| 0.018 | 1 | 0.00221 | 0 | 0.149 | 1 | 41.1 | 1 | 0.0637 | 0 |
| 0.0191 | 1 | 0.0022 | 0 | 0.553 | 0 | 59.2 | 1 | 0.115 | 1 |
| 0.0158 | 1 | 0.000788 | 1 | 0.56 | 0 | 47 | 1 | 0.0608 | 0 |
| 0.0228 | 1 | 0.00214 | 0 | 0.499 | 0 | 46.6 | 1 | 0.0799 | 0 |
| 0.0147 | 1 | 0.00225 | 0 | 0.123 | 1 | 50.4 | 1 | 0.083 | 0 |

| Aluminum | D_Aluminum | Antimony | D_Antimony | Arsenic | D_Arsenic | Barium | D_Barium | Chromium | D_Chromium | Copper | D_Copper | Lead | D_Lead | Manganese | D_Manganes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3670 | 1 | 1.06 | 0 | 1.14 | 1 | 60.5 | 1 | 68.3 | 1 | 4.63 | 1 | 9.31 | 1 | 376 | 1 |
| 5260 | 1 | 1.03 | 0 | 0.92 | 1 | 36 | 1 | 4.97 | 1 | 3.99 | 1 | 12.7 | 1 | 126 | 1 |
| 2540 | 1 | 0.486 | 1 | 0.585 | 1 | 28.9 | 1 | 27.7 | 1 | 4.6 | 1 | 10.1 | 1 | 145 | 1 |
| 5230 | 1 | 1.05 | 0 | 2.64 | 1 | 384 | 1 | 19.1 | 1 | 65.1 | 1 | 33.6 | 1 | 227 | 1 |
| 2720 | 1 | 0.991 | 0 | 0.527 | 1 | 50.5 | 1 | 4.2 | 1 | 5.83 | 1 | 10.1 | 1 | 141 | 1 |
| 4070 | 1 | 1 | 0 | 1.33 | 1 | 111 | 1 | 3.17 | 1 | 3.21 | 1 | 12 | 1 | 387 | 1 |
| 29600 | 1 | 1.15 | 0 | 3.85 | 1 | 70.5 | 1 | 11.9 | 1 | 11.4 | 1 | 18.6 | 1 | 92.5 | 1 |
| 4140 | 1 | 0.94 | 0 | 0.842 | 1 | 28.1 | 1 | 29.1 | 1 | 2.56 | 1 | 7.96 | 1 | 339 | 1 |
| 8710 | 1 | 1.04 | 0 | 1.73 | 1 | 89.1 | 1 | 3.36 | 1 | 3.83 | 1 | 13.4 | 1 | 369 | 1 |
| 4190 | 1 | 1.01 | 0 | 1.29 | 1 | 33.8 | 1 | 3.35 | 1 | 1.75 | 1 | 7.74 | 1 | 169 | 1 |
| 4150 | 1 | 0.99 | 0 | 0.791 | 1 | 50.4 | 1 | 25.9 | 1 | 3.02 | 1 | 9.17 | 1 | 536 | 1 |
| 3410 | 1 | 0.992 | 0 | 0.76 | 1 | 51.2 | 1 | 8.89 | 1 | 2.55 | 1 | 8.71 | 1 | 445 | 1 |
| 4830 | 1 | 1.04 | 0 | 1.88 | 1 | 122 | 1 | 15.5 | 1 | 7.49 | 1 | 11.6 | 1 | 156 | 1 |
| 5190 | 1 | 1 | 0 | 2.47 | 1 | 147 | 1 | 2.92 | 1 | 14.1 | 1 | 16.3 | 1 | 389 | 1 |
| 5960 | 1 | 1.06 | 0 | 2.4 | 1 | 152 | 1 | 3.91 | 1 | 4.3 | 1 | 14 | 1 | 350 | 1 |
| 4480 | 1 | 0.986 | 0 | 1.32 | 1 | 62.3 | 1 | 3.74 | 1 | 4.22 | 1 | 15.7 | 1 | 578 | 1 |
| 4490 | 1 | 1.01 | 0 | 2.22 | 1 | 151 | 1 | 3.59 | 1 | 2.74 | 1 | 8.95 | 1 | 444 | 1 |
| 4800 | 1 | 1.02 | 0 | 1.77 | 1 | 101 | 1 | 4.98 | 1 | 3.35 | 1 | 11.1 | 1 | 437 | 1 |
| 5430 | 1 | 1.03 | 0 | 1.62 | 1 | 33.7 | 1 | 3.23 | 1 | 1.65 | 1 | 9.89 | 1 | 319 | 1 |
| 3300 | 1 | 0.875 | 0 | 0.997 | 1 | 19.6 | 1 | 10.7 | 1 | 1.28 | 1 | 8.02 | 1 | 279 | 1 |
| 4070 | 1 | 0.961 | 0 | 1.98 | 1 | 82.1 | 1 | 3.99 | 1 | 3.24 | 1 | 10.4 | 1 | 475 | 1 |
| 5730 | 1 | 0.488 | 1 | 1.28 | 1 | 77.3 | 1 | 3.67 | 1 | 2.66 | 1 | 9.8 | 1 | 412 | 1 |
| 4510 | 1 | 0.437 | 1 | 1.01 | 1 | 54.8 | 1 | 3.63 | 1 | 2.2 | 1 | 9.28 | 1 | 313 | 1 |
| 3660 | 1 | 0.986 | 0 | 0.789 | 1 | 22 | 1 | 46.9 | 1 | 2.79 | 1 | 11.5 | 1 | 434 | 1 |
| 4780 | 1 | 0.978 | 0 | 1.44 | 1 | 35.6 | 1 | 60.6 | 1 | 3.43 | 1 | 11.2 | 1 | 361 | 1 |
| 5300 | 1 | 0.465 | 1 | 1.55 | 1 | 83.3 | 1 | 4.49 | 1 | 3.1 | 1 | 10.2 | 1 | 412 | 1 |
| 7590 | 1 | 1.05 | 0 | 2.05 | 1 | 105 | 1 | 10.3 | 1 | 3.92 | 1 | 13.5 | 1 | 565 | 1 |
| 7010 | 1 | 1.11 | 0 | 1.95 | 1 | 53.4 | 1 | 6.69 | 1 | 3.11 | 1 | 15.5 | 1 | 326 | 1 |
| 5880 | 1 | 0.404 | 1 | 1.54 | 1 | 126 | 1 | 3.57 | 1 | 3.3 | 1 | 12.2 | 1 | 443 | 1 |
| 5260 | 1 | 0.465 | 1 | 2.52 | 1 | 58.3 | 1 | 4.18 | 1 | 3.14 | 1 | 12.3 | 1 | 452 | 1 |
| 8920 | 1 | 0.997 | 0 | 1.78 | 1 | 58.8 | 1 | 6.26 | 1 | 4.55 | 1 | 12.4 | 1 | 278 | 1 |
| 5920 | 1 | 0.361 | 1 | 1.52 | 1 | 126 | 1 | 3.81 | 1 | 4.61 | 1 | 13.3 | 1 | 570 | 1 |
| 7440 | 1 | 1.05 | 0 | 1.49 | 1 | 60.1 | 1 | 5.82 | 1 | 3.42 | 1 | 12.6 | 1 | 408 | 1 |
| | | | | 1.75 | 1 | | | | | | | | | | |
| | | | | 1.78 | 1 | | | | | | | | | | |
| | | | | 5.12 | 1 | | | | | | | | | | |
| | | | | 1.87 | 1 | | | | | | | | | | |

| Mercury | D_Mercury | Perchlorate | D_Perchlorat | Silver | D_Silver | Zinc | D_Zinc | Uranium-235 | D_Uranium-235/236 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0088 | 1 | 0.00211 | 0 | 0.53 | 0 | 60.3 | 1 | 0.0472 | 0 |
| 0.257 | 1 | 0.00214 | 0 | 0.513 | 0 | 73.3 | 1 | 0.083 | 1 |
| 0.0267 | 1 | 0.00206 | 0 | 0.486 | 0 | 75.4 | 1 | 0.0627 | 0 |
| 20.6 | 1 | 0.0011 | 1 | 15.2 | 1 | 113 | 1 | 0.0848 | 1 |
| 0.00941 | 1 | 0.00208 | 0 | 0.495 | 0 | 64.8 | 1 | 0.0715 | 1 |
| 0.0361 | 1 | 0.0021 | 0 | 0.105 | 1 | 44.5 | 1 | 0.0768 | 0 |
| 0.0145 | 1 | 0.00159 | 1 | 0.25 | 1 | 47.3 | 1 | 0.0479 | 0 |
| 0.0201 | 1 | 0.000636 | 1 | 0.47 | 0 | 52.6 | 1 | 0.0956 | 1 |
| 0.0165 | 1 | 0.00223 | 0 | 0.244 | 1 | 55.7 | 1 | 0.0634 | 0 |
| 0.0626 | 1 | 0.000582 | 1 | 0.114 | 1 | 43.4 | 1 | 0.0835 | 1 |
| 0.0124 | 1 | 0.00107 | 1 | 0.185 | 1 | 39 | 1 | 0.0702 | 0 |
| 0.0144 | 1 | 0.000841 | 1 | 0.495 | 0 | 65.2 | 1 | 0.067 | 0 |
| 0.919 | 1 | 0.00209 | 0 | 0.647 | 1 | 73.7 | 1 | 0.0864 | 0 |
| 4.2 | 1 | 0.000786 | 1 | 2.13 | 1 | 59.2 | 1 | 0.065 | 0 |
| 0.0185 | 1 | 0.0021 | 0 | 0.501 | 0 | 52.2 | 1 | 0.0346 | 0 |
| 0.0173 | 1 | 0.00213 | 0 | 0.255 | 1 | 52.9 | 1 | 0.0978 | 1 |
| 0.0133 | 1 | 0.00206 | 0 | 0.206 | 1 | 40.7 | 1 | 0.0642 | 0 |
| 0.013 | 1 | 0.00214 | 0 | 0.121 | 1 | 41.3 | 1 | 0.0589 | 0 |
| 0.0101 | 1 | 0.00215 | 0 | 0.17 | 1 | 44.9 | 1 | 0.0861 | 1 |
| 0.0137 | 1 | 0.00204 | 0 | 0.438 | 0 | 53.2 | 1 | 0.0577 | 1 |
| 0.0302 | 1 | 0.00209 | 0 | 0.258 | 1 | 46.2 | 1 | 0.0433 | 0 |
| 0.0114 | 1 | 0.00217 | 0 | 0.115 | 1 | 43.1 | 1 | 0.0844 | 1 |
| 0.0114 | 1 | 0.00206 | 0 | 0.479 | 0 | 41.4 | 1 | 0.0512 | 0 |
| 0.00703 | 1 | 0.00209 | 0 | 0.493 | 0 | 64.3 | 1 | 0.11 | 1 |
| 0.0198 | 1 | 0.00206 | 0 | 0.489 | 0 | 52.3 | 1 | 0.0437 | 0 |
| 0.0112 | 1 | 0.00216 | 0 | 0.505 | 0 | 43.2 | 1 | 0.0999 | 1 |
| 0.018 | 1 | 0.00221 | 0 | 0.149 | 1 | 41.1 | 1 | 0.0637 | 0 |
| 0.0191 | 1 | 0.0022 | 0 | 0.553 | 0 | 59.2 | 1 | 0.115 | 1 |
| 0.0158 | 1 | 0.000788 | 1 | 0.56 | 0 | 47 | 1 | 0.0608 | 0 |
| 0.0149 | 1 | 0.00222 | 0 | 0.549 | 0 | 53.8 | 1 | 0.0896 | 1 |
| 0.0228 | 1 | 0.00214 | 0 | 0.499 | 0 | 46.6 | 1 | 0.0799 | 0 |
| 0.0147 | 1 | 0.00225 | 0 | 0.123 | 1 | 50.4 | 1 | 0.083 | 0 |
| 0.0144 | 1 | 0.00212 | 0 | 0.525 | 0 | 50.6 | 1 | 0.076 | 1 |

# Attachment G-2

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*Vapor Intrusion Model Spreadsheets*
*(on CD included with this document)*

SL-ADV
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES: X

**OR**

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES:

| ENTER Chemical CAS No. (numbers only, no dashes) | ENTER Initial soil conc., $C_R$ (µg/kg) | Chemical |
|---|---|---|
| 79016 | | Trichloroethylene |

MORE ↓

| ENTER Average soil temperature, $T_S$ (°C) | ENTER Depth below grade to bottom of enclosed space floor, $L_F$ (cm) | ENTER Depth below grade to top of contamination, $L_t$ (cm) | ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) $L_b$ (cm) | ENTER Totals must add up to value of $L_t$ (cell G28) Thickness of soil stratum A, $h_A$ (cm) | ENTER Thickness of soil stratum B, (Enter value or 0) $h_B$ (cm) | ENTER Thickness of soil stratum C, (Enter value or 0) $h_C$ (cm) | ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability) | OR | ENTER User-defined stratum A soil vapor permeability, $k_v$ ($cm^2$) |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 1 | 1 | 30.5 | 1 | 0 | 0 | | | 1.00E-08 |

MORE ↓

| ENTER Stratum A SCS soil type (Lookup Soil Parameters) | ENTER Stratum A soil dry bulk density, $\rho_b^A$ ($g/cm^3$) | ENTER Stratum A soil total porosity, $n^A$ (unitless) | ENTER Stratum A soil water-filled porosity, $\theta_w^A$ ($cm^3/cm^3$) | ENTER Stratum A soil organic carbon fraction, $f_{oc}^A$ (unitless) | ENTER Stratum B SCS soil type (Lookup Soil Parameters) | ENTER Stratum B soil dry bulk density, $\rho_b^B$ ($g/cm^3$) | ENTER Stratum B soil total porosity, $n^B$ (unitless) | ENTER Stratum B soil water-filled porosity, $\theta_w^B$ ($cm^3/cm^3$) | ENTER Stratum B soil organic carbon fraction, $f_{oc}^B$ (unitless) | ENTER Stratum C SCS soil type (Lookup Soil Parameters) | ENTER Stratum C soil dry bulk density, $\rho_b^C$ ($g/cm^3$) | ENTER Stratum C soil total porosity, $n^C$ (unitless) | ENTER Stratum C soil water-filled porosity, $\theta_w^C$ ($cm^3/cm^3$) | ENTER Stratum C soil organic carbon fraction, $f_{oc}^C$ (unitless) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.65 | 0.439 | 0.045 | 0.002 | | | | | | | | | | |

MORE ↓

| ENTER Enclosed space floor thickness, $L_{crack}$ (cm) | ENTER Soil-bldg. pressure differential, $\Delta P$ ($g/cm\text{-}s^2$) | ENTER Enclosed space floor length, $L_B$ (cm) | ENTER Enclosed space floor width, $W_B$ (cm) | ENTER Enclosed space height, $H_B$ (cm) | ENTER Floor-wall seam crack width, w (cm) | ENTER Indoor air exchange rate, ER (1/h) | ENTER Average vapor flow rate into bldg. OR Leave blank to calculate $Q_{soil}$ (L/m) |
|---|---|---|---|---|---|---|---|
| 10 | 40 | 1000 | 1000 | 244 | 0.1 | 0.25 | |

| ENTER Averaging time for carcinogens, $AT_C$ (yrs) | ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs) | ENTER Exposure duration, ED (yrs) | ENTER Exposure frequency, EF (days/yr) | ENTER Target risk for carcinogens, TR (unitless) | ENTER Target hazard quotient for noncarcinogens, THQ (unitless) |
|---|---|---|---|---|---|
| 70 | 30 | 30 | 350 | 1.0E-05 | 1 |

Used to calculate risk-based soil concentration.

END

CHEMICAL PROPERTIES SHEET

| Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Pure component water solubility, S (mg/L) | Unit risk factor, URF ($\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) | Physical state at soil temperature, (S,L,G) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.90E-02 | 9.10E-06 | 1.03E-02 | 25 | 7,505 | 360.36 | 544.20 | 1.66E+02 | 1.47E+03 | 4.1E-06 | 2.0E-03 | L |

**END**

INTERMEDIATE CALCULATIONS SHEET

| Exposure duration, $\tau$ (sec) | Source-building separation, $L_T$ (cm) | Stratum A soil air-filled porosity, $\theta_a^A$ ($cm^3/cm^3$) | Stratum B soil air-filled porosity, $\theta_a^B$ ($cm^3/cm^3$) | Stratum C soil air-filled porosity, $\theta_a^C$ ($cm^3/cm^3$) | Stratum A effective total fluid saturation, $S_{te}$ ($cm^3/cm^3$) | Stratum A soil intrinsic permeability, $k_i$ ($cm^2$) | Stratum A soil relative air permeability, $k_{rg}$ ($cm^2$) | Stratum A soil effective vapor permeability, $k_v$ ($cm^2$) | Floor-wall seam perimeter, $X_{crack}$ (cm) | Initial soil concentration used, $C_R$ ($\mu g/kg$) | Bldg. ventilation rate, $Q_{building}$ ($cm^3/s$) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.46E+08 | 1 | 0.394 | ERROR | ERROR | #N/A | #N/A | #N/A | 1.00E-08 | 4,000 | 1.00E+00 | 1.69E+04 |

| Area of enclosed space below grade, $A_B$ ($cm^2$) | Crack-to-total area ratio, $\eta$ (unitless) | Crack depth below grade, $Z_{crack}$ (cm) | Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol) | Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-$m^3$/mol) | Henry's law constant at ave. soil temperature, $H'_{TS}$ (unitless) | Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s) | Stratum A effective diffusion coefficient, $D^{eff}_A$ ($cm^2/s$) | Stratum B effective diffusion coefficient, $D^{eff}_B$ ($cm^2/s$) | Stratum C effective diffusion coefficient, $D^{eff}_C$ ($cm^2/s$) | Total overall effective diffusion coefficient, $D^{eff}_T$ ($cm^2/s$) | Diffusion path length, $L_d$ (cm) | Convection path length, $L_p$ (cm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.00E+06 | 4.00E-04 | 1 | 8,557 | 4.78E-03 | 2.06E-01 | 1.75E-04 | 1.84E-02 | 0.00E+00 | 0.00E+00 | 1.84E-02 | 1 | 1 |

| Soil-water partition coefficient, $K_d$ ($cm^3/g$) | Source vapor conc., $C_{source}$ ($\mu g/m^3$) | Crack radius, $r_{crack}$ (cm) | Average vapor flow rate into bldg., $Q_{soil}$ ($cm^3/s$) | Crack effective diffusion coefficient, $D^{crack}$ ($cm^2/s$) | Area of crack, $A_{crack}$ ($cm^2$) | Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless) | Infinite source indoor attenuation coefficient, $\alpha$ (unitless) | Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source $\beta$ term (unitless) | Finite source $\psi$ term $(sec)^{-1}$ | Time for source depletion, $\tau_D$ (sec) | Exposure duration > time for source depletion (YES/NO) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.32E-01 | 5.04E+02 | 0.10 | 1.91E+01 | 1.84E-02 | 4.00E+02 | 1.84E+11 | NA | NA | 9.65E+02 | 5.63E-03 | 5.13E+06 | YES |

| Finite source indoor attenuation coefficient, $<\alpha>$ (unitless) | Mass limit bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Final finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) |
|---|---|---|---|---|---|
| NA | 3.04E-03 | NA | 3.04E-03 | 4.1E-06 | 2.0E-03 |

**END**

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

| Indoor exposure soil conc., carcinogen (µg/kg) | Indoor exposure soil conc., noncarcinogen (µg/kg) | Risk-based indoor exposure soil conc., (µg/kg) | Soil saturation conc., $C_{sat}$ (µg/kg) | Final indoor exposure soil conc., (µg/kg) |
|---|---|---|---|---|
| 1.95E+03 | 6.87E+02 | 6.87E+02 | 6.01E+05 | 6.87E+02 |

INCREMENTAL RISK CALCULATIONS:

| Incremental risk from vapor intrusion to indoor air, carcinogen (unitless) | Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless) |
|---|---|
| NA | NA |

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)
MESSAGE: The values of Csource and Cbuilding on the INTERCALCS worksheet are based on unity and do not represent actual values.
MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

**SCROLL DOWN TO "END"**

**END**

VLOOKUP TABLES

Soil Properties Lookup Table

| SCS Soil Type | $K_s$ (cm/h) | $\alpha_1$ (1/cm) | N (unitless) | M (unitless) | n ($cm^3/cm^3$) | $\theta_r$ ($cm^3/cm^3$) | Mean Grain Diameter (cm) | Bulk Density ($g/cm^3$) | $\theta_w$ ($cm^3/cm^3$) | SCS Soil Name |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.61 | 0.01496 | 1.253 | 0.2019 | 0.459 | 0.098 | 0.0092 | 1.43 | 0.215 | Clay |
| CL | 0.34 | 0.01581 | 1.416 | 0.2938 | 0.442 | 0.079 | 0.016 | 1.48 | 0.168 | Clay Loam |
| L | 0.50 | 0.01112 | 1.472 | 0.3207 | 0.399 | 0.061 | 0.020 | 1.59 | 0.148 | Loam |
| LS | 4.38 | 0.03475 | 1.746 | 0.4273 | 0.390 | 0.049 | 0.040 | 1.62 | 0.076 | Loamy Sand |
| S | 26.78 | 0.03524 | 3.177 | 0.6852 | 0.375 | 0.053 | 0.044 | 1.66 | 0.054 | Sand |
| SC | 0.47 | 0.03342 | 1.208 | 0.1722 | 0.385 | 0.117 | 0.025 | 1.63 | 0.197 | Sandy Clay |
| SCL | 0.55 | 0.02109 | 1.330 | 0.2481 | 0.384 | 0.063 | 0.029 | 1.63 | 0.146 | Sandy Clay Loam |
| SI | 1.82 | 0.00658 | 1.679 | 0.4044 | 0.489 | 0.050 | 0.0046 | 1.35 | 0.167 | Silt |
| SIC | 0.40 | 0.01622 | 1.321 | 0.2430 | 0.481 | 0.111 | 0.0039 | 1.38 | 0.216 | Silty Clay |
| SICL | 0.46 | 0.00839 | 1.521 | 0.3425 | 0.482 | 0.090 | 0.0056 | 1.37 | 0.198 | Silty Clay Loam |
| SIL | 0.76 | 0.00506 | 1.663 | 0.3987 | 0.439 | 0.065 | 0.011 | 1.49 | 0.180 | Silt Loam |
| SL | 1.60 | 0.02667 | 1.449 | 0.3099 | 0.387 | 0.039 | 0.030 | 1.62 | 0.103 | Sandy Loam |

Chemical Properties Lookup Table

| CAS No. | Chemical | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Pure component water solubility, S (mg/L) | Henry's law constant H' (unitless) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC (mg/$m^3$) | Physical state at soil temperature, (S,L,G) | URF extrapolated (X) | RfC extrapolated (X) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56235 | Carbon tetrachloride | 1.74E+02 | 7.80E-02 | 8.80E-06 | 7.93E+02 | 1.24E+00 | 3.03E-02 | 25 | 349.90 | 556.60 | 7,127 | 1.5E-05 | 0.0E+00 | L | | |
| 57749 | Chlordane | 1.20E+05 | 1.18E-02 | 4.37E-06 | 5.60E-02 | 1.99E-03 | 4.85E-05 | 25 | 624.24 | 885.73 | 14,000 | 1.0E-04 | 7.0E-04 | S | | |
| 58899 | gamma-HCH (Lindane) | 1.07E+03 | 1.42E-02 | 7.34E-06 | 7.30E+00 | 5.73E-04 | 1.40E-05 | 25 | 596.55 | 839.36 | 15,000 | 3.7E-04 | 1.1E-03 | S | X | X |
| 60297 | Ethyl ether | 5.73E+00 | 7.82E-02 | 8.61E-06 | 5.68E+04 | 1.35E+00 | 3.29E-02 | 25 | 307.50 | 466.74 | 6,338 | 0.0E+00 | 7.0E-01 | L | | X |
| 60571 | Dieldrin | 2.14E+04 | 1.25E-02 | 4.74E-06 | 1.95E-01 | 6.18E-04 | 1.51E-05 | 25 | 613.32 | 842.25 | 17,000 | 4.6E-03 | 1.8E-04 | S | | X |
| 67641 | Acetone | 5.75E-01 | 1.24E-01 | 1.14E-05 | 1.00E+06 | 1.59E-03 | 3.87E-05 | 25 | 329.20 | 508.10 | 6,955 | 0.0E+00 | 3.1E+01 | L | | X |
| 67663 | Chloroform | 3.98E+01 | 1.04E-01 | 1.00E-05 | 7.92E+03 | 1.50E-01 | 3.66E-03 | 25 | 334.32 | 536.40 | 6,988 | 2.3E-05 | 0.0E+00 | L | | |
| 67721 | Hexachloroethane | 1.78E+03 | 2.50E-03 | 6.80E-06 | 5.00E+01 | 1.59E-01 | 3.88E-03 | 25 | 458.00 | 695.00 | 9,510 | 4.0E-06 | 3.5E-03 | S | | X |
| 71432 | Benzene | 5.89E+01 | 8.80E-02 | 9.80E-06 | 1.79E+03 | 2.27E-01 | 5.54E-03 | 25 | 353.24 | 562.16 | 7,342 | 7.8E-06 | 3.0E-02 | L | | |
| 71556 | 1,1,1-Trichloroethane | 1.10E+02 | 7.80E-02 | 8.80E-06 | 1.33E+03 | 7.03E-01 | 1.72E-02 | 25 | 347.24 | 545.00 | 7,136 | 0.0E+00 | 2.2E+00 | L | | |
| 72435 | Methoxychlor | 9.77E+04 | 1.56E-02 | 4.46E-06 | 1.00E-01 | 6.46E-04 | 1.58E-05 | 25 | 651.02 | 848.49 | 16,000 | 0.0E+00 | 1.8E-02 | S | | X |
| 72559 | DDE | 4.47E+06 | 1.44E-02 | 5.87E-06 | 1.20E-01 | 8.59E-04 | 2.09E-05 | 25 | 636.44 | 860.38 | 15,000 | 9.7E-05 | 0.0E+00 | S | X | |
| 74839 | Methyl bromide | 1.05E+01 | 7.28E-02 | 1.21E-05 | 1.52E+04 | 2.55E-01 | 6.22E-03 | 25 | 276.71 | 467.00 | 5,714 | 0.0E+00 | 5.0E-03 | G | | |
| 74873 | Methyl chloride (chloromethane) | 2.12E+00 | 1.26E-01 | 6.50E-06 | 5.33E+03 | 3.61E-01 | 8.80E-03 | 25 | 249.00 | 416.25 | 5,115 | 1.0E-06 | 9.0E-02 | L | | |
| 74908 | Hydrogen cyanide | 3.80E+00 | 1.93E-01 | 2.10E-05 | 1.00E+06 | 5.44E-03 | 1.33E-04 | 25 | 299.00 | 456.70 | 6,676 | 0.0E+00 | 3.0E-03 | L | | |
| 74953 | Methylene bromide | 1.26E+01 | 4.30E-02 | 8.44E-06 | 1.19E+04 | 3.52E-02 | 8.59E-04 | 25 | 370.00 | 583.00 | 7,868 | 0.0E+00 | 3.5E-02 | L | | X |
| 75003 | Chloroethane (ethyl chloride) | 4.40E+00 | 2.71E-01 | 1.15E-05 | 5.68E+03 | 3.61E-01 | 8.80E-03 | 25 | 285.30 | 460.40 | 5,879 | 8.3E-07 | 1.0E+01 | L | X | |
| 75014 | Vinyl chloride (chloroethene) | 1.86E+01 | 1.06E-01 | 1.23E-05 | 8.80E+03 | 1.10E+00 | 2.69E-02 | 25 | 259.25 | 432.00 | 5,250 | 8.8E-06 | 1.0E-01 | G | | |
| 75058 | Acetonitrile | 4.20E+00 | 1.28E-01 | 1.66E-05 | 1.00E+06 | 1.42E-03 | 3.45E-05 | 25 | 354.60 | 545.50 | 7,110 | 0.0E+00 | 6.0E-02 | L | | |
| 75070 | Acetaldehyde | 1.06E+00 | 1.24E-01 | 1.41E-05 | 1.00E+06 | 3.23E-03 | 7.87E-05 | 25 | 293.10 | 466.00 | 6,157 | 2.2E-06 | 9.0E-03 | L | | |
| 75092 | Methylene chloride | 1.17E+01 | 1.01E-01 | 1.17E-05 | 1.30E+04 | 8.96E-02 | 2.18E-03 | 25 | 313.00 | 510.00 | 6,706 | 4.7E-07 | 3.0E+00 | L | | |
| 75150 | Carbon disulfide | 4.57E+01 | 1.04E-01 | 1.00E-05 | 1.19E+03 | 1.24E+00 | 3.02E-02 | 25 | 319.00 | 552.00 | 6,391 | 0.0E+00 | 7.0E-01 | L | | |
| 75218 | Ethylene oxide | 1.33E+00 | 1.04E-01 | 1.45E-05 | 3.04E+05 | 2.27E-02 | 5.54E-04 | 25 | 283.60 | 469.00 | 6,104 | 1.0E-04 | 0.0E+00 | L | | |
| 75252 | Bromoform | 8.71E+01 | 1.49E-02 | 1.03E-05 | 3.10E+03 | 2.41E-02 | 5.88E-04 | 25 | 422.35 | 696.00 | 9,479 | 1.1E-06 | 7.0E-02 | L | | X |
| 75274 | Bromodichloromethane | 5.50E+01 | 2.98E-02 | 1.06E-05 | 6.74E+03 | 6.54E-02 | 1.60E-03 | 25 | 363.15 | 585.85 | 7,800 | 1.8E-05 | 7.0E-02 | L | X | X |
| 75296 | 2-Chloropropane | 9.14E+00 | 8.88E-02 | 1.01E-05 | 3.73E+03 | 5.93E-01 | 1.45E-02 | 25 | 308.70 | 485.00 | 6,286 | 0.0E+00 | 1.0E-01 | L | | |
| 75343 | 1,1-Dichloroethane | 3.16E+01 | 7.42E-02 | 1.05E-05 | 5.06E+03 | 2.30E-01 | 5.61E-03 | 25 | 330.55 | 523.00 | 6,895 | 0.0E+00 | 5.0E-01 | L | | |
| 75354 | 1,1-Dichloroethylene | 5.89E+01 | 9.00E-02 | 1.04E-05 | 2.25E+03 | 1.07E+00 | 2.60E-02 | 25 | 304.75 | 576.05 | 6,247 | 0.0E+00 | 2.0E-01 | L | | |
| 75456 | Chlorodifluoromethane | 4.79E+01 | 1.01E-01 | 1.28E-05 | 2.00E+00 | 1.10E+00 | 2.70E-02 | 25 | 232.40 | 369.30 | 4,836 | 0.0E+00 | 5.0E+01 | L | | |
| 75694 | Trichlorofluoromethane | 4.97E+02 | 8.70E-02 | 9.70E-06 | 1.10E+03 | 3.97E+00 | 9.68E-02 | 25 | 296.70 | 471.00 | 5,999 | 0.0E+00 | 7.0E-01 | L | | |
| 75718 | Dichlorodifluoromethane | 4.57E+02 | 6.65E-02 | 9.92E-06 | 2.80E+02 | 1.40E+01 | 3.42E-01 | 25 | 243.20 | 384.95 | 9,421 | 0.0E+00 | 2.0E-01 | L | | |
| 76131 | 1,1,2-Trichloro-1,2,2-trifluoroetha | 1.11E+04 | 7.80E-02 | 8.20E-06 | 1.70E+02 | 1.97E+01 | 4.80E-01 | 25 | 320.70 | 487.30 | 6,463 | 0.0E+00 | 3.0E+01 | L | | |
| 76448 | Heptachlor | 1.41E+06 | 1.12E-02 | 5.69E-06 | 1.80E-01 | 6.05E+01 | 1.48E+00 | 25 | 603.69 | 846.31 | 13,000 | 1.3E-03 | 1.8E-03 | S | | X |
| 77474 | Hexachlorocyclopentadiene | 2.00E+05 | 1.61E-02 | 7.21E-06 | 1.80E+00 | 1.10E+00 | 2.69E-02 | 25 | 512.15 | 746.00 | 10,931 | 0.0E+00 | 2.0E-04 | L | | |
| 78831 | Isobutanol | 2.59E+00 | 8.60E-02 | 9.30E-06 | 8.50E+04 | 4.83E-04 | 1.18E-05 | 25 | 381.04 | 547.78 | 10,936 | 0.0E+00 | 1.1E+00 | L | | X |
| 78875 | 1,2-Dichloropropane | 4.37E+01 | 7.82E-02 | 8.73E-06 | 2.80E+03 | 1.15E-01 | 2.79E-03 | 25 | 369.52 | 572.00 | 7,590 | 1.9E-05 | 4.0E-03 | L | X | |
| 78933 | Methylethylketone (2-butanone) | 2.30E+00 | 8.08E-02 | 9.80E-06 | 2.23E+05 | 2.29E-03 | 5.58E-05 | 25 | 352.50 | 536.78 | 7,481 | 0.0E+00 | 5.0E+00 | L | | |
| 79005 | 1,1,2-Trichloroethane | 5.01E+01 | 7.80E-02 | 8.80E-06 | 4.42E+03 | 3.73E-02 | 9.11E-04 | 25 | 386.15 | 602.00 | 8,322 | 1.6E-05 | 1.4E-02 | L | | X |
| 79016 | Trichloroethylene | 1.66E+02 | 7.90E-02 | 9.10E-06 | 1.47E+03 | 4.21E-01 | 1.03E-02 | 25 | 360.36 | 544.20 | 7,505 | 4.1E-06 | 2.0E-03 | L | X | |
| 79209 | Methyl acetate | 3.26E+00 | 1.04E-01 | 1.00E-05 | 2.00E+03 | 4.84E-03 | 1.18E-04 | 25 | 329.80 | 506.70 | 7,260 | 0.0E+00 | 3.5E+00 | L | | X |
| 79345 | 1,1,2,2-Tetrachloroethane | 9.33E+01 | 7.10E-02 | 7.90E-06 | 2.96E+03 | 1.41E-02 | 3.44E-04 | 25 | 419.60 | 661.15 | 8,996 | 5.8E-05 | 2.1E-01 | L | | X |
| 79469 | 2-Nitropropane | 1.17E+01 | 9.23E-02 | 1.01E-05 | 1.70E+04 | 5.03E-03 | 1.23E-04 | 25 | 393.20 | 594.00 | 8,383 | 2.7E-03 | 2.0E-02 | L | | |
| 80626 | Methylmethacrylate | 6.98E+00 | 7.70E-02 | 8.60E-06 | 1.50E+04 | 1.38E-02 | 3.36E-04 | 25 | 373.50 | 567.00 | 8,975 | 0.0E+00 | 7.0E-01 | L | | |
| 83329 | Acenaphthene | 7.08E+03 | 4.21E-02 | 7.69E-06 | 3.57E+00 | 6.34E-03 | 1.55E-04 | 25 | 550.54 | 803.15 | 12,155 | 0.0E+00 | 2.1E-01 | S | | X |
| 86737 | Fluorene | 1.38E+04 | 3.63E-02 | 7.88E-06 | 1.98E+00 | 2.60E-03 | 6.34E-05 | 25 | 570.44 | 870.00 | 12,666 | 0.0E+00 | 1.4E-01 | S | | X |
| 87683 | Hexachloro-1,3-butadiene | 5.37E+04 | 5.61E-02 | 6.16E-06 | 3.20E+00 | 3.33E-01 | 8.13E-03 | 25 | 486.15 | 738.00 | 10,206 | 2.2E-05 | 7.0E-04 | L | | X |
| 88722 | o-Nitrotoluene | 3.24E+02 | 5.87E-02 | 8.67E-06 | 6.50E+02 | 5.11E-04 | 1.25E-05 | 25 | 495.00 | 720.00 | 12,239 | 0.0E+00 | 3.5E-02 | L | | X |
| 91203 | Naphthalene | 2.00E+03 | 5.90E-02 | 7.50E-06 | 3.10E+01 | 1.98E-02 | 4.82E-04 | 25 | 491.14 | 748.40 | 10,373 | 3.4E-05 | 3.0E-03 | S | | |
| 91576 | 2-Methylnaphthalene | 2.81E+03 | 5.22E-02 | 7.75E-06 | 2.46E+01 | 2.12E-02 | 5.17E-04 | 25 | 514.26 | 761.00 | 12,600 | 0.0E+00 | 7.0E-02 | S | | X |
| 92524 | Biphenyl | 4.38E+03 | 4.04E-02 | 8.15E-06 | 7.45E+00 | 1.23E-02 | 2.99E-04 | 25 | 529.10 | 789.00 | 10,890 | 0.0E+00 | 1.8E-01 | S | | X |
| 95476 | o-Xylene | 3.63E+02 | 8.70E-02 | 1.00E-05 | 1.78E+02 | 2.12E-01 | 5.18E-03 | 25 | 417.60 | 630.30 | 8,661 | 0.0E+00 | 1.0E-01 | L | | |
| 95501 | 1,2-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 1.56E+02 | 7.77E-02 | 1.90E-03 | 25 | 453.57 | 705.00 | 9,700 | 0.0E+00 | 2.0E-01 | L | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95578 2-Chlorophenol | 3.88E+02 | 5.01E-02 | 9.46E-06 | 2.20E+04 | 1.60E-02 | 3.90E-04 | 25 | 447.53 | 675.00 | 9,572 | 0.0E+00 | 1.8E-02 | L | | X |
| 95636 1,2,4-Trimethylbenzene | 1.35E+03 | 6.06E-02 | 7.92E-06 | 5.70E+01 | 2.52E-01 | 6.14E-03 | 25 | 442.30 | 649.17 | 9,369 | 0.0E+00 | 6.0E-03 | L | | |
| 96184 1,2,3-Trichloropropane | 2.20E+01 | 7.10E-02 | 7.90E-06 | 1.75E+03 | 1.67E-02 | 4.08E-04 | 25 | 430.00 | 652.00 | 9,171 | 5.7E-04 | 4.9E-03 | L | X | |
| 96333 Methyl acrylate | 4.53E+00 | 9.76E-02 | 1.02E-05 | 6.00E+04 | 7.68E-03 | 1.87E-04 | 25 | 353.70 | 536.00 | 7,749 | 0.0E+00 | 1.1E-01 | L | | X |
| 97632 Ethylmethacrylate | 2.95E+01 | 6.53E-02 | 8.37E-06 | 3.67E+03 | 3.44E-02 | 8.40E-04 | 25 | 390.00 | 571.00 | 10,957 | 0.0E+00 | 3.2E-01 | L | | X |
| 98066 tert-Butylbenzene | 7.71E+02 | 5.65E-02 | 8.02E-06 | 2.95E+01 | 4.87E-01 | 1.19E-02 | 25 | 442.10 | 1220.00 | 8,980 | 0.0E+00 | 1.4E-01 | L | | X |
| 98828 Cumene | 4.89E+02 | 6.50E-02 | 7.10E-06 | 6.13E+01 | 4.74E+01 | 1.46E-02 | 25 | 425.56 | 631.10 | 10,335 | 0.0E+00 | 4.0E-01 | L | | |
| 98862 Acetophenone | 5.77E+01 | 6.00E-02 | 8.73E-06 | 6.13E+03 | 4.38E-04 | 1.07E-05 | 25 | 475.00 | 709.50 | 11,732 | 0.0E+00 | 3.5E-01 | S,L | | X |
| 98953 Nitrobenzene | 6.46E+01 | 7.60E-02 | 8.60E-06 | 2.09E+03 | 9.82E-04 | 2.39E-05 | 25 | 483.95 | 719.00 | 10,566 | 0.0E+00 | 2.0E-03 | L | | |
| 100414 Ethylbenzene | 3.63E+02 | 7.50E-02 | 7.80E-06 | 1.69E+02 | 3.22E-01 | 7.86E-03 | 25 | 409.34 | 617.20 | 8,501 | 0.0E+00 | 1.0E+00 | L | | |
| 100425 Styrene | 7.76E+02 | 7.10E-02 | 8.00E-06 | 3.10E+02 | 1.12E-01 | 2.74E-03 | 25 | 418.31 | 636.00 | 8,737 | 0.0E+00 | 1.0E+00 | L | | |
| 100447 Benzylchloride | 6.14E+01 | 7.50E-02 | 7.80E-06 | 5.25E+02 | 1.70E-02 | 4.14E-04 | 25 | 452.00 | 685.00 | 8,773 | 4.9E-05 | 0.0E+00 | L | X | |
| 100527 Benzaldehyde | 4.59E+01 | 7.21E-02 | 9.07E-06 | 3.30E+03 | 9.73E-04 | 2.37E-05 | 25 | 452.00 | 695.00 | 11,658 | 0.0E+00 | 3.5E-01 | L | | X |
| 103651 n-Propylbenzene | 5.62E+02 | 6.01E-02 | 7.83E-06 | 6.00E+01 | 4.37E-01 | 1.07E-02 | 25 | 432.20 | 630.00 | 9,123 | 0.0E+00 | 1.4E-01 | L | | X |
| 104518 n-Butylbenzene | 1.11E+03 | 5.70E-02 | 8.12E-06 | 2.00E+00 | 5.38E-01 | 1.31E-02 | 25 | 456.46 | 660.50 | 9,290 | 0.0E+00 | 1.4E-01 | L | | X |
| 106423 p-Xylene | 3.89E+02 | 7.69E-02 | 8.44E-06 | 1.85E+02 | 3.13E-01 | 7.64E-03 | 25 | 411.52 | 616.20 | 8,525 | 0.0E+00 | 1.0E-01 | L | | |
| 106467 1,4-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 7.90E+01 | 9.82E-02 | 2.39E-03 | 25 | 447.21 | 684.75 | 9,271 | 0.0E+00 | 8.0E-01 | S | | |
| 106934 1,2-Dibromoethane (ethylene dib | 2.50E+01 | 2.17E-02 | 1.19E-05 | 4.18E+03 | 3.04E-02 | 7.41E-04 | 25 | 404.60 | 583.00 | 8,310 | 2.2E-04 | 2.0E-04 | L | | |
| 106990 1,3-Butadiene | 1.91E+01 | 2.49E-01 | 1.08E-05 | 7.35E+02 | 3.01E+00 | 7.34E-02 | 25 | 268.60 | 425.00 | 5,370 | 3.0E-02 | 2.0E-03 | L | | |
| 107028 Acrolein | 2.76E+00 | 1.05E-01 | 1.22E-05 | 2.13E+05 | 4.99E-03 | 1.22E-04 | 25 | 325.60 | 506.00 | 6,731 | 0.0E+00 | 2.0E-05 | L | | |
| 107062 1,2-Dichloroethane | 1.74E+01 | 1.04E-01 | 9.90E-06 | 8.52E+03 | 4.00E-02 | 9.77E-04 | 25 | 356.65 | 561.00 | 7,643 | 2.6E-05 | 0.0E+00 | L | | |
| 107131 Acrylonitrile | 5.90E+00 | 1.22E-01 | 1.34E-05 | 7.40E+04 | 4.21E-03 | 1.03E-04 | 25 | 350.30 | 519.00 | 7,786 | 6.8E-05 | 2.0E-03 | L | | |
| 108054 Vinyl acetate | 5.25E+00 | 8.50E-02 | 9.20E-06 | 2.00E+04 | 2.09E-02 | 5.10E-04 | 25 | 345.65 | 519.13 | 7,800 | 0.0E+00 | 2.0E-01 | L | | |
| 108101 Methylisobutylketone (4-methyl-2 | 9.06E+00 | 7.50E-02 | 7.80E-06 | 1.90E+04 | 5.64E-03 | 1.38E-04 | 25 | 389.50 | 571.00 | 8,243 | 0.0E+00 | 3.0E+00 | L | | |
| 108383 m-Xylene | 4.07E+02 | 7.00E-02 | 7.80E-06 | 1.61E+02 | 3.00E-01 | 7.32E-03 | 25 | 412.27 | 617.05 | 8,523 | 0.0E+00 | 1.0E-01 | L | | |
| 108678 1,3,5-Trimethylbenzene | 1.35E+03 | 6.02E-02 | 8.67E-06 | 2.00E+00 | 2.41E-01 | 5.87E-03 | 25 | 437.89 | 637.25 | 9,321 | 0.0E+00 | 6.0E-03 | L | | |
| 108872 Methylcyclohexane | 7.85E+01 | 7.35E-02 | 8.52E-06 | 1.40E+01 | 4.22E+00 | 1.03E-01 | 25 | 373.90 | 572.20 | 7,474 | 0.0E+00 | 3.0E+00 | L | | |
| 108883 Toluene | 1.82E+02 | 8.70E-02 | 8.60E-06 | 5.26E+02 | 2.72E-01 | 6.62E-03 | 25 | 383.78 | 591.79 | 7,930 | 0.0E+00 | 4.0E-01 | L | | |
| 108907 Chlorobenzene | 2.19E+02 | 7.30E-02 | 8.70E-06 | 4.72E+02 | 1.51E-01 | 3.69E-03 | 25 | 404.87 | 632.40 | 8,410 | 0.0E+00 | 6.0E-02 | L | | |
| 109693 1-Chlorobutane | 1.72E+01 | 8.26E-02 | 1.00E-05 | 1.10E+03 | 6.93E-01 | 1.69E-02 | 25 | 351.60 | 542.00 | 7,263 | 0.0E+00 | 1.4E+00 | L | | X |
| 110009 Furan | 1.86E+01 | 1.04E-01 | 1.22E-05 | 1.00E+04 | 2.21E-01 | 5.39E-03 | 25 | 304.60 | 490.20 | 6,477 | 0.0E+00 | 3.5E-03 | L | | X |
| 110543 Hexane | 4.34E+01 | 2.00E-01 | 7.77E-06 | 1.24E+01 | 6.82E+01 | 1.66E+00 | 25 | 341.70 | 508.00 | 6,895 | 0.0E+00 | 2.0E-01 | L | | |
| 111444 Bis(2-chloroethyl)ether | 1.55E+01 | 6.92E-02 | 7.53E-06 | 1.72E+04 | 7.36E-04 | 1.80E-05 | 25 | 451.15 | 659.79 | 10,803 | 3.3E-04 | 0.0E+00 | L | | |
| 115297 Endosulfan | 2.14E+03 | 1.15E-02 | 4.55E-06 | 5.10E-01 | 4.58E-04 | 1.12E-05 | 25 | 674.43 | 942.94 | 14,000 | 0.0E+00 | 2.1E-02 | S | | X |
| 118741 Hexachlorobenzene | 5.50E+04 | 5.42E-02 | 5.91E-06 | 5.00E-03 | 5.40E-02 | 1.32E-03 | 25 | 582.55 | 825.00 | 14,447 | 4.6E-04 | 2.8E-03 | S | | X |
| 120821 1,2,4-Trichlorobenzene | 1.78E+03 | 3.00E-02 | 8.23E-06 | 4.88E+01 | 5.81E-02 | 1.42E-03 | 25 | 486.15 | 725.00 | 10,471 | 0.0E+00 | 4.0E-03 | L | | |
| 123739 Crotonaldehyde (2-butenal) | 4.82E+00 | 9.56E-02 | 1.07E-05 | 3.69E+04 | 7.99E-04 | 1.95E-05 | 25 | 375.20 | 568.00 | 9 | 5.4E-04 | 0.0E+00 | L | X | |
| 124481 Chlorodibromomethane | 6.31E+01 | 1.96E-02 | 1.05E-05 | 2.60E+03 | 3.20E-02 | 7.81E-04 | 25 | 416.14 | 678.20 | 5,900 | 2.4E-05 | 7.0E-02 | L | X | X |
| 126987 Methacrylonitrile | 3.58E+01 | 1.12E-01 | 1.32E-05 | 2.54E+04 | 1.01E-02 | 2.46E-04 | 25 | 363.30 | 554.00 | 7,600 | 0.0E+00 | 7.0E-04 | L | | |
| 126998 2-Chloro-1,3-butadiene (chloropr | 6.73E+01 | 8.58E-02 | 1.03E-05 | 2.12E+03 | 4.91E-01 | 1.20E-02 | 25 | 332.40 | 525.00 | 8,075 | 0.0E+00 | 7.0E-03 | L | | |
| 127184 Tetrachloroethylene | 1.55E+02 | 7.20E-02 | 8.20E-06 | 2.00E+02 | 7.53E-01 | 1.84E-02 | 25 | 394.40 | 620.20 | 8,288 | 5.9E-06 | 6.0E-01 | L | | |
| 129000 Pyrene | 1.05E+05 | 2.72E-02 | 7.24E-06 | 1.35E+00 | 4.50E-04 | 1.10E-05 | 25 | 667.95 | 936 | 14370 | 0.0E+00 | 1.1E-01 | S | | X |
| 132649 Dibenzofuran | 5.15E+03 | 2.38E-02 | 6.00E-06 | 3.10E+00 | 5.15E-04 | 1.26E-05 | 25 | 560 | 824 | 66400 | 0.0E+00 | 1.4E-02 | S | | X |
| 135988 sec-Butylbenzene | 9.66E+02 | 5.70E-02 | 8.12E-06 | 3.94E+00 | 5.68E-01 | 1.39E-02 | 25 | 446.5 | 679 | 88730 | 0.0E+00 | 1.4E-01 | L | | X |
| 141786 Ethylacetate | 6.44E+00 | 7.32E-02 | 9.70E-06 | 8.03E+04 | 5.64E-03 | 1.38E-04 | 25 | 350.26 | 523.3 | 7633.66 | 0.0E+00 | 3.2E+00 | L | | X |
| 156592 cis-1,2-Dichloroethylene | 3.55E+01 | 7.36E-02 | 1.13E-05 | 3.50E+03 | 1.67E-01 | 4.07E-03 | 25 | 333.65 | 544 | 7192 | 0.0E+00 | 3.5E-02 | L | | X |
| 156605 trans-1,2-Dichloroethylene | 5.25E+01 | 7.07E-02 | 1.19E-05 | 6.30E+03 | 3.84E-01 | 9.36E-03 | 25 | 320.85 | 516.5 | 6717 | 0.0E+00 | 7.0E-02 | L | | X |
| 205992 Benzo(b)fluoranthene | 1.23E+06 | 2.26E-02 | 5.56E-06 | 1.50E-03 | 4.54E-03 | 1.11E-04 | 25 | 715.9 | 969.27 | 17000 | 2.1E-04 | 0.0E+00 | S | X | |
| 218019 Chrysene | 3.98E+05 | 2.48E-02 | 6.21E-06 | 6.30E-03 | 3.87E-03 | 9.44E-05 | 25 | 714.15 | 979 | 16455 | 2.1E-06 | 0.0E+00 | S | X | |
| 309002 Aldrin | 2.45E+06 | 1.32E-02 | 4.86E-06 | 1.70E-02 | 6.95E-03 | 1.70E-04 | 25 | 603.01 | 839.37 | 15000 | 4.9E-03 | 1.1E-04 | S | | X |
| 319846 alpha-HCH (alpha-BHC) | 1.23E+03 | 1.42E-02 | 7.34E-06 | 2.00E+00 | 4.34E-04 | 1.06E-05 | 25 | 596.55 | 839.36 | 15000 | 1.8E-03 | 0.0E+00 | S | | |
| 541731 1,3-Dichlorobenzene | 1.98E+03 | 6.92E-02 | 7.86E-06 | 1.34E+02 | 1.27E-01 | 3.09E-03 | 25 | 446 | 684 | 9230.18 | 0.0E+00 | 1.1E-01 | L | | X |
| 542756 1,3-Dichloropropene | 4.57E+01 | 6.26E-02 | 1.00E-05 | 2.80E+03 | 7.24E-01 | 1.77E-02 | 25 | 381.15 | 587.38 | 7900 | 4.0E-06 | 2.0E-02 | L | | |
| 630206 1,1,1,2-Tetrachloroethane | 1.16E+02 | 7.10E-02 | 7.90E-06 | 1.10E+03 | 9.90E-02 | 2.41E-03 | 25 | 403.5 | 624 | 9768.282525 | 7.4E-06 | 1.1E-01 | L | | X |
| 1634044 MTBE | 7.26E+00 | 1.02E-01 | 1.05E-05 | 5.10E+04 | 2.56E-02 | 6.23E-04 | 25 | 328.3 | 497.1 | 6677.66 | 0.0E+00 | 3.0E+00 | L | | |
| 7439976 Mercury (elemental) | 5.20E+01 | 3.07E-02 | 6.30E-06 | 2.00E+01 | 4.40E-01 | 1.07E-02 | 25 | 629.88 | 1750 | 14127 | 0.0E+00 | 3.0E-04 | L | | |

SL-ADV
Version 3.1; 02/04

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CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ X ]

**OR**

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [ ]

| ENTER Chemical CAS No. (numbers only, no dashes) | ENTER Initial soil conc., $C_R$ (µg/kg) | Chemical |
|---|---|---|
| 75092 | | Methylene chloride |

MORE ↓

| ENTER Average soil temperature, $T_S$ (°C) | ENTER Depth below grade to bottom of enclosed space floor, $L_F$ (cm) | ENTER Depth below grade to top of contamination, $L_t$ (cm) | ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) $L_b$ (cm) | ENTER Totals must add up to value of $L_t$ (cell G28) Thickness of soil stratum A, $h_A$ (cm) | ENTER Thickness of soil stratum B, (Enter value or 0) $h_B$ (cm) | ENTER Thickness of soil stratum C, (Enter value or 0) $h_C$ (cm) | ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability) | OR | ENTER User-defined stratum A soil vapor permeability, $k_v$ ($cm^2$) |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 1 | 1 | 68.6 | 1 | 0 | 0 | | | 1.00E-08 |

MORE ↓

| ENTER Stratum A SCS soil type | ENTER Stratum A soil dry bulk density, $\rho_b^A$ ($g/cm^3$) | ENTER Stratum A soil total porosity, $n^A$ (unitless) | ENTER Stratum A soil water-filled porosity, $\theta_w^A$ ($cm^3/cm^3$) | ENTER Stratum A soil organic carbon fraction, $f_{oc}^A$ (unitless) | ENTER Stratum B SCS soil type | ENTER Stratum B soil dry bulk density, $\rho_b^B$ ($g/cm^3$) | ENTER Stratum B soil total porosity, $n^B$ (unitless) | ENTER Stratum B soil water-filled porosity, $\theta_w^B$ ($cm^3/cm^3$) | ENTER Stratum B soil organic carbon fraction, $f_{oc}^B$ (unitless) | ENTER Stratum C SCS soil type | ENTER Stratum C soil dry bulk density, $\rho_b^C$ ($g/cm^3$) | ENTER Stratum C soil total porosity, $n^C$ (unitless) | ENTER Stratum C soil water-filled porosity, $\theta_w^C$ ($cm^3/cm^3$) | ENTER Stratum C soil organic carbon fraction, $f_{oc}^C$ (unitless) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.65 | 0.439 | 0.045 | 0.002 | | | | | | | | | | |

MORE ↓

| ENTER Enclosed space floor thickness, $L_{crack}$ (cm) | ENTER Soil-bldg. pressure differential, $\Delta P$ ($g/cm\text{-}s^2$) | ENTER Enclosed space floor length, $L_B$ (cm) | ENTER Enclosed space floor width, $W_B$ (cm) | ENTER Enclosed space height, $H_B$ (cm) | ENTER Floor-wall seam crack width, w (cm) | ENTER Indoor air exchange rate, ER (1/h) | ENTER Average vapor flow rate into bldg. OR Leave blank to calculate $Q_{soil}$ (L/m) |
|---|---|---|---|---|---|---|---|
| 10 | 40 | 1000 | 1000 | 244 | 0.1 | 0.25 | |

| ENTER Averaging time for carcinogens, $AT_C$ (yrs) | ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs) | ENTER Exposure duration, ED (yrs) | ENTER Exposure frequency, EF (days/yr) | ENTER Target risk for carcinogens, TR (unitless) | ENTER Target hazard quotient for noncarcinogens, THQ (unitless) |
|---|---|---|---|---|---|
| 70 | 30 | 30 | 350 | 1.0E-05 | 1 |
| | | | | Used to calculate risk-based soil concentration. | |

END

CHEMICAL PROPERTIES SHEET

| Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Pure component water solubility, S (mg/L) | Unit risk factor, URF ($\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) | Physical state at soil temperature, (S,L,G) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.01E-01 | 1.17E-05 | 2.18E-03 | 25 | 6,706 | 313.00 | 510.00 | 1.17E+01 | 1.30E+04 | 1.0E-08 | 6.0E-01 | L |

**END**

INTERMEDIATE CALCULATIONS SHEET

| Exposure duration, $\tau$ (sec) | Source-building separation, $L_T$ (cm) | Stratum A soil air-filled porosity, $\theta_a^A$ ($cm^3/cm^3$) | Stratum B soil air-filled porosity, $\theta_a^B$ ($cm^3/cm^3$) | Stratum C soil air-filled porosity, $\theta_a^C$ ($cm^3/cm^3$) | Stratum A effective total fluid saturation, $S_{te}$ ($cm^3/cm^3$) | Stratum A soil intrinsic permeability, $k_i$ ($cm^2$) | Stratum A soil relative air permeability, $k_{rg}$ ($cm^2$) | Stratum A soil effective vapor permeability, $k_v$ ($cm^2$) | Floor-wall seam perimeter, $X_{crack}$ (cm) | Initial soil concentration used, $C_R$ ($\mu g/kg$) | Bldg. ventilation rate, $Q_{building}$ ($cm^3/s$) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.46E+08 | 1 | 0.394 | ERROR | ERROR | #N/A | #N/A | #N/A | 1.00E-08 | 4,000 | 1.00E+00 | 1.69E+04 |

| Area of enclosed space below grade, $A_B$ ($cm^2$) | Crack-to-total area ratio, $\eta$ (unitless) | Crack depth below grade, $Z_{crack}$ (cm) | Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol) | Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-$m^3$/mol) | Henry's law constant at ave. soil temperature, $H'_{TS}$ (unitless) | Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s) | Stratum A effective diffusion coefficient, $D^{eff}_A$ ($cm^2/s$) | Stratum B effective diffusion coefficient, $D^{eff}_B$ ($cm^2/s$) | Stratum C effective diffusion coefficient, $D^{eff}_C$ ($cm^2/s$) | Total overall effective diffusion coefficient, $D^{eff}_T$ ($cm^2/s$) | Diffusion path length, $L_d$ (cm) | Convection path length, $L_p$ (cm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.00E+06 | 4.00E-04 | 1 | 7,034 | 1.16E-03 | 5.01E-02 | 1.75E-04 | 2.36E-02 | 0.00E+00 | 0.00E+00 | 2.36E-02 | 1 | 1 |

| Soil-water partition coefficient, $K_d$ ($cm^3/g$) | Source vapor conc., $C_{source}$ ($\mu g/m^3$) | Crack radius, $r_{crack}$ (cm) | Average vapor flow rate into bldg., $Q_{soil}$ ($cm^3/s$) | Crack effective diffusion coefficient, $D^{crack}$ ($cm^2/s$) | Area of crack, $A_{crack}$ ($cm^2$) | Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless) | Infinite source indoor attenuation coefficient, $\alpha$ (unitless) | Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source $\beta$ term (unitless) | Finite source $\psi$ term $(sec)^{-1}$ | Time for source depletion, $\tau_D$ (sec) | Exposure duration > time for source depletion (YES/NO) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.34E-02 | 8.00E+02 | 0.10 | 1.91E+01 | 2.36E-02 | 4.00E+02 | 6.48E+08 | NA | NA | 1.23E+03 | 1.14E-02 | 7.49E+06 | YES |

| Finite source indoor attenuation coefficient, $<\alpha>$ (unitless) | Mass limit bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Final finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) |
|---|---|---|---|---|---|
| NA | 6.96E-03 | NA | 6.96E-03 | 1.0E-08 | 6.0E-01 |

**END**

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

| Indoor exposure soil conc., carcinogen (µg/kg) | Indoor exposure soil conc., noncarcinogen (µg/kg) | Risk-based indoor exposure soil conc., (µg/kg) | Soil saturation conc., $C_{sat}$ (µg/kg) | Final indoor exposure soil conc., (µg/kg) |
|---|---|---|---|---|
| 3.50E+05 | 8.99E+04 | 8.99E+04 | 8.16E+05 | 8.99E+04 |

INCREMENTAL RISK CALCULATIONS:

| Incremental risk from vapor intrusion to indoor air, carcinogen (unitless) | Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless) |
|---|---|
| NA | NA |

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)
MESSAGE: The values of Csource and Cbuilding on the INTERCALCS worksheet are based on unity and do not represent actual values.

**SCROLL DOWN TO "END"**

**END**

VLOOKUP TABLES

Soil Properties Lookup Table

| SCS Soil Type | $K_s$ (cm/h) | $\alpha_1$ (1/cm) | N (unitless) | M (unitless) | n ($cm^3/cm^3$) | $\theta_r$ ($cm^3/cm^3$) | Mean Grain Diameter (cm) | Bulk Density ($g/cm^3$) | $\theta_w$ ($cm^3/cm^3$) | SCS Soil Name |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.61 | 0.01496 | 1.253 | 0.2019 | 0.459 | 0.098 | 0.0092 | 1.43 | 0.215 | Clay |
| CL | 0.34 | 0.01581 | 1.416 | 0.2938 | 0.442 | 0.079 | 0.016 | 1.48 | 0.168 | Clay Loam |
| L | 0.50 | 0.01112 | 1.472 | 0.3207 | 0.399 | 0.061 | 0.020 | 1.59 | 0.148 | Loam |
| LS | 4.38 | 0.03475 | 1.746 | 0.4273 | 0.390 | 0.049 | 0.040 | 1.62 | 0.076 | Loamy Sand |
| S | 26.78 | 0.03524 | 3.177 | 0.6852 | 0.375 | 0.053 | 0.044 | 1.66 | 0.054 | Sand |
| SC | 0.47 | 0.03342 | 1.208 | 0.1722 | 0.385 | 0.117 | 0.025 | 1.63 | 0.197 | Sandy Clay |
| SCL | 0.55 | 0.02109 | 1.330 | 0.2481 | 0.384 | 0.063 | 0.029 | 1.63 | 0.146 | Sandy Clay Loam |
| SI | 1.82 | 0.00658 | 1.679 | 0.4044 | 0.489 | 0.050 | 0.0046 | 1.35 | 0.167 | Silt |
| SIC | 0.40 | 0.01622 | 1.321 | 0.2430 | 0.481 | 0.111 | 0.0039 | 1.38 | 0.216 | Silty Clay |
| SICL | 0.46 | 0.00839 | 1.521 | 0.3425 | 0.482 | 0.090 | 0.0056 | 1.37 | 0.198 | Silty Clay Loam |
| SIL | 0.76 | 0.00506 | 1.663 | 0.3987 | 0.439 | 0.065 | 0.011 | 1.49 | 0.180 | Silt Loam |
| SL | 1.60 | 0.02667 | 1.449 | 0.3099 | 0.387 | 0.039 | 0.030 | 1.62 | 0.103 | Sandy Loam |

Chemical Properties Lookup Table

| CAS No. | Chemical | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Pure component water solubility, S (mg/L) | Henry's law constant H' (unitless) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC (mg/$m^3$) | Physical state at soil temperature, (S,L,G) | URF extrapolated (X) | RfC extrapolated (X) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56235 | Carbon tetrachloride | 1.74E+02 | 7.80E-02 | 8.80E-06 | 7.93E+02 | 1.24E+00 | 3.03E-02 | 25 | 349.90 | 556.60 | 7,127 | 1.5E-05 | 0.0E+00 | L | | |
| 57749 | Chlordane | 1.20E+05 | 1.18E-02 | 4.37E-06 | 5.60E-02 | 1.99E-03 | 4.85E-05 | 25 | 624.24 | 885.73 | 14,000 | 1.0E-04 | 7.0E-04 | S | | |
| 58899 | gamma-HCH (Lindane) | 1.07E+03 | 1.42E-02 | 7.34E-06 | 7.30E+00 | 5.73E-04 | 1.40E-05 | 25 | 596.55 | 839.36 | 15,000 | 3.7E-04 | 1.1E-03 | S | X | X |
| 60297 | Ethyl ether | 5.73E+00 | 7.82E-02 | 8.61E-06 | 5.68E+04 | 1.35E+00 | 3.29E-02 | 25 | 307.50 | 466.74 | 6,338 | 0.0E+00 | 7.0E-01 | L | | X |
| 60571 | Dieldrin | 2.14E+04 | 1.25E-02 | 4.74E-06 | 1.95E-01 | 6.18E-04 | 1.51E-05 | 25 | 613.32 | 842.25 | 17,000 | 4.6E-03 | 1.8E-04 | S | | X |
| 67641 | Acetone | 5.75E-01 | 1.24E-01 | 1.14E-05 | 1.00E+06 | 1.59E-03 | 3.87E-05 | 25 | 329.20 | 508.10 | 6,955 | 0.0E+00 | 3.1E+01 | L | | X |
| 67663 | Chloroform | 3.98E+01 | 1.04E-01 | 1.00E-05 | 7.92E+03 | 1.50E-01 | 3.66E-03 | 25 | 334.32 | 536.40 | 6,988 | 2.3E-05 | 9.8E-03 | L | | |
| 67721 | Hexachloroethane | 1.78E+03 | 2.50E-03 | 6.80E-06 | 5.00E+01 | 1.59E-01 | 3.88E-03 | 25 | 458.00 | 695.00 | 9,510 | 4.0E-06 | 3.5E-03 | S | | X |
| 71432 | Benzene | 5.89E+01 | 8.80E-02 | 9.80E-06 | 1.79E+03 | 2.27E-01 | 5.54E-03 | 25 | 353.24 | 562.16 | 7,342 | 7.8E-06 | 3.0E-02 | L | | |
| 71556 | 1,1,1-Trichloroethane | 1.10E+02 | 7.80E-02 | 8.80E-06 | 1.33E+03 | 7.03E-01 | 1.72E-02 | 25 | 347.24 | 545.00 | 7,136 | 0.0E+00 | 5.0E+00 | L | | |
| 72435 | Methoxychlor | 9.77E+04 | 1.56E-02 | 4.46E-06 | 1.00E-01 | 6.46E-04 | 1.58E-05 | 25 | 651.02 | 848.49 | 16,000 | 0.0E+00 | 1.8E-02 | S | | X |
| 72559 | DDE | 4.47E+06 | 1.44E-02 | 5.87E-06 | 1.20E-01 | 8.59E-04 | 2.09E-05 | 25 | 636.44 | 860.38 | 15,000 | 9.7E-05 | 0.0E+00 | S | X | |
| 74839 | Methyl bromide | 1.05E+01 | 7.28E-02 | 1.21E-05 | 1.52E+04 | 2.55E-01 | 6.22E-03 | 25 | 276.71 | 467.00 | 5,714 | 0.0E+00 | 5.0E-03 | G | | |
| 74873 | Methyl chloride (chloromethane) | 2.12E+00 | 1.26E-01 | 6.50E-06 | 5.33E+03 | 3.61E-01 | 8.80E-03 | 25 | 249.00 | 416.25 | 5,115 | 1.0E-06 | 9.0E-02 | L | | |
| 74908 | Hydrogen cyanide | 3.80E+00 | 1.93E-01 | 2.10E-05 | 1.00E+06 | 5.44E-03 | 1.33E-04 | 25 | 299.00 | 456.70 | 6,676 | 0.0E+00 | 3.0E-03 | L | | |
| 74953 | Methylene bromide | 1.26E+01 | 4.30E-02 | 8.44E-06 | 1.19E+04 | 3.52E-02 | 8.59E-04 | 25 | 370.00 | 583.00 | 7,868 | 0.0E+00 | 3.5E-02 | L | | X |
| 75003 | Chloroethane (ethyl chloride) | 4.40E+00 | 2.71E-01 | 1.15E-05 | 5.68E+03 | 3.61E-01 | 8.80E-03 | 25 | 285.30 | 460.40 | 5,879 | 0.0E+00 | 1.0E+01 | L | X | |
| 75014 | Vinyl chloride (chloroethene) | 1.86E+01 | 1.06E-01 | 1.23E-05 | 8.80E+03 | 1.10E+00 | 2.69E-02 | 25 | 259.25 | 432.00 | 5,250 | 8.8E-06 | 1.0E-01 | G | | |
| 75058 | Acetonitrile | 4.20E+00 | 1.28E-01 | 1.66E-05 | 1.00E+06 | 1.42E-03 | 3.45E-05 | 25 | 354.60 | 545.50 | 7,110 | 0.0E+00 | 6.0E-02 | L | | |
| 75070 | Acetaldehyde | 1.06E+00 | 1.24E-01 | 1.41E-05 | 1.00E+06 | 3.23E-03 | 7.87E-05 | 25 | 293.10 | 466.00 | 6,157 | 2.2E-06 | 9.0E-03 | L | | |
| 75092 | Methylene chloride | 1.17E+01 | 1.01E-01 | 1.17E-05 | 1.30E+04 | 8.96E-02 | 2.18E-03 | 25 | 313.00 | 510.00 | 6,706 | 1.0E-08 | 6.0E-01 | L | | |
| 75150 | Carbon disulfide | 4.57E+01 | 1.04E-01 | 1.00E-05 | 1.19E+03 | 1.24E+00 | 3.02E-02 | 25 | 319.00 | 552.00 | 6,391 | 0.0E+00 | 7.0E-01 | L | | |
| 75218 | Ethylene oxide | 1.33E+00 | 1.04E-01 | 1.45E-05 | 3.04E+05 | 2.27E-02 | 5.54E-04 | 25 | 283.60 | 469.00 | 6,104 | 1.0E-04 | 6.0E-01 | L | | |
| 75252 | Bromoform | 8.71E+01 | 1.49E-02 | 1.03E-05 | 3.10E+03 | 2.41E-02 | 5.88E-04 | 25 | 422.35 | 696.00 | 9,479 | 1.1E-06 | 7.0E-02 | L | | X |
| 75274 | Bromodichloromethane | 5.50E+01 | 2.98E-02 | 1.06E-05 | 6.74E+03 | 6.54E-02 | 1.60E-03 | 25 | 363.15 | 585.85 | 7,800 | 1.8E-05 | 7.0E-02 | L | X | X |
| 75296 | 2-Chloropropane | 9.14E+00 | 8.88E-02 | 1.01E-05 | 3.73E+03 | 5.93E-01 | 1.45E-02 | 25 | 308.70 | 485.00 | 6,286 | 0.0E+00 | 1.0E-01 | L | | |
| 75343 | 1,1-Dichloroethane | 3.16E+01 | 7.42E-02 | 1.05E-05 | 5.06E+03 | 2.30E-01 | 5.61E-03 | 25 | 330.55 | 523.00 | 6,895 | 0.0E+00 | 5.0E-01 | L | | |
| 75354 | 1,1-Dichloroethylene | 5.89E+01 | 9.00E-02 | 1.04E-05 | 2.25E+03 | 1.07E+00 | 2.60E-02 | 25 | 304.75 | 576.05 | 6,247 | 0.0E+00 | 2.0E-01 | L | | |
| 75456 | Chlorodifluoromethane | 4.79E+01 | 1.01E-01 | 1.28E-05 | 2.00E+00 | 1.10E+00 | 2.70E-02 | 25 | 232.40 | 369.30 | 4,836 | 0.0E+00 | 5.0E+01 | L | | |
| 75694 | Trichlorofluoromethane | 4.97E+02 | 8.70E-02 | 9.70E-06 | 1.10E+03 | 3.97E+00 | 9.68E-02 | 25 | 296.70 | 471.00 | 5,999 | 0.0E+00 | 7.0E-01 | L | | |
| 75718 | Dichlorodifluoromethane | 4.57E+02 | 6.65E-02 | 9.92E-06 | 2.80E+02 | 1.40E+01 | 3.42E-01 | 25 | 243.20 | 384.95 | 9,421 | 0.0E+00 | 2.0E-01 | L | | |
| 76131 | 1,1,2-Trichloro-1,2,2-trifluoroetha | 1.11E+04 | 7.80E-02 | 8.20E-06 | 1.70E+02 | 1.97E+01 | 4.80E-01 | 25 | 320.70 | 487.30 | 6,463 | 0.0E+00 | 3.0E+01 | L | | |
| 76448 | Heptachlor | 1.41E+06 | 1.12E-02 | 5.69E-06 | 1.80E-01 | 6.05E+01 | 1.48E+00 | 25 | 603.69 | 846.31 | 13,000 | 1.3E-03 | 1.8E-03 | S | | X |
| 77474 | Hexachlorocyclopentadiene | 2.00E+05 | 1.61E-02 | 7.21E-06 | 1.80E+00 | 1.10E+00 | 2.69E-02 | 25 | 512.15 | 746.00 | 10,931 | 0.0E+00 | 2.0E-04 | L | | |
| 78831 | Isobutanol | 2.59E+00 | 8.60E-02 | 9.30E-06 | 8.50E+04 | 4.83E-04 | 1.18E-05 | 25 | 381.04 | 547.78 | 10,936 | 0.0E+00 | 1.1E+00 | L | | X |
| 78875 | 1,2-Dichloropropane | 4.37E+01 | 7.82E-02 | 8.73E-06 | 2.80E+03 | 1.15E-01 | 2.79E-03 | 25 | 369.52 | 572.00 | 7,590 | 1.9E-05 | 4.0E-03 | L | X | |
| 78933 | Methylethylketone (2-butanone) | 2.30E+00 | 8.08E-02 | 9.80E-06 | 2.23E+05 | 2.29E-03 | 5.58E-05 | 25 | 352.50 | 536.78 | 7,481 | 0.0E+00 | 5.0E+00 | L | | |
| 79005 | 1,1,2-Trichloroethane | 5.01E+01 | 7.80E-02 | 8.80E-06 | 4.42E+03 | 3.73E-02 | 9.11E-04 | 25 | 386.15 | 602.00 | 8,322 | 1.6E-05 | 1.4E-02 | L | | X |
| 79016 | Trichloroethylene | 1.66E+02 | 7.90E-02 | 9.10E-06 | 1.47E+03 | 4.21E-01 | 1.03E-02 | 25 | 360.36 | 544.20 | 7,505 | 4.1E-06 | 2.0E-03 | L | X | |
| 79209 | Methyl acetate | 3.26E+00 | 1.04E-01 | 1.00E-05 | 2.00E+03 | 4.84E-03 | 1.18E-04 | 25 | 329.80 | 506.70 | 7,260 | 0.0E+00 | 3.5E+00 | L | | X |
| 79345 | 1,1,2,2-Tetrachloroethane | 9.33E+01 | 7.10E-02 | 7.90E-06 | 2.96E+03 | 1.41E-02 | 3.44E-04 | 25 | 419.60 | 661.15 | 8,996 | 5.8E-05 | 2.1E-01 | L | | X |
| 79469 | 2-Nitropropane | 1.17E+01 | 9.23E-02 | 1.01E-05 | 1.70E+04 | 5.03E-03 | 1.23E-04 | 25 | 393.20 | 594.00 | 8,383 | 2.7E-03 | 2.0E-02 | L | | |
| 80626 | Methylmethacrylate | 6.98E+00 | 7.70E-02 | 8.60E-06 | 1.50E+04 | 1.38E-02 | 3.36E-04 | 25 | 373.50 | 567.00 | 8,975 | 0.0E+00 | 7.0E-01 | L | | |
| 83329 | Acenaphthene | 7.08E+03 | 4.21E-02 | 7.69E-06 | 3.57E+00 | 6.34E-03 | 1.55E-04 | 25 | 550.54 | 803.15 | 12,155 | 0.0E+00 | 2.1E-01 | S | | X |
| 86737 | Fluorene | 1.38E+04 | 3.63E-02 | 7.88E-06 | 1.98E+00 | 2.60E-03 | 6.34E-05 | 25 | 570.44 | 870.00 | 12,666 | 0.0E+00 | 1.4E-01 | S | | X |
| 87683 | Hexachloro-1,3-butadiene | 5.37E+04 | 5.61E-02 | 6.16E-06 | 3.20E+00 | 3.33E-01 | 8.13E-03 | 25 | 486.15 | 738.00 | 10,206 | 2.2E-05 | 7.0E-04 | L | | X |
| 88722 | o-Nitrotoluene | 3.24E+02 | 5.87E-02 | 8.67E-06 | 6.50E+02 | 5.11E-04 | 1.25E-05 | 25 | 495.00 | 720.00 | 12,239 | 0.0E+00 | 3.5E-02 | L | | X |
| 91203 | Naphthalene | 2.00E+03 | 5.90E-02 | 7.50E-06 | 3.10E+01 | 1.98E-02 | 4.82E-04 | 25 | 491.14 | 748.40 | 10,373 | 3.4E-05 | 3.0E-03 | S | | |
| 91576 | 2-Methylnaphthalene | 2.81E+03 | 5.22E-02 | 7.75E-06 | 2.46E+01 | 2.12E-02 | 5.17E-04 | 25 | 514.26 | 761.00 | 12,600 | 0.0E+00 | 7.0E-02 | S | | X |
| 92524 | Biphenyl | 4.38E+03 | 4.04E-02 | 8.15E-06 | 7.45E+00 | 1.23E-02 | 2.99E-04 | 25 | 529.10 | 789.00 | 10,890 | 0.0E+00 | 1.8E-01 | S | | X |
| 95476 | o-Xylene | 3.63E+02 | 8.70E-02 | 1.00E-05 | 1.78E+02 | 2.12E-01 | 5.18E-03 | 25 | 417.60 | 630.30 | 8,661 | 0.0E+00 | 1.0E-01 | L | | |
| 95501 | 1,2-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 1.56E+02 | 7.77E-02 | 1.90E-03 | 25 | 453.57 | 705.00 | 9,700 | 0.0E+00 | 2.0E-01 | L | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95578 2-Chlorophenol | 3.88E+02 | 5.01E-02 | 9.46E-06 | 2.20E+04 | 1.60E-02 | 3.90E-04 | 25 | 447.53 | 675.00 | 9,572 | 0.0E+00 | 1.8E-02 | L | | X |
| 95636 1,2,4-Trimethylbenzene | 1.35E+03 | 6.06E-02 | 7.92E-06 | 5.70E+01 | 2.52E-01 | 6.14E-03 | 25 | 442.30 | 649.17 | 9,369 | 0.0E+00 | 7.0E-03 | L | | |
| 96184 1,2,3-Trichloropropane | 2.20E+01 | 7.10E-02 | 7.90E-06 | 1.75E+03 | 1.67E-02 | 4.08E-04 | 25 | 430.00 | 652.00 | 9,171 | 5.7E-04 | 4.9E-03 | L | X | |
| 96333 Methyl acrylate | 4.53E+00 | 9.76E-02 | 1.02E-05 | 6.00E+04 | 7.68E-03 | 1.87E-04 | 25 | 353.70 | 536.00 | 7,749 | 0.0E+00 | 1.1E-01 | L | | X |
| 97632 Ethylmethacrylate | 2.95E+01 | 6.53E-02 | 8.37E-06 | 3.67E+03 | 3.44E-02 | 8.40E-04 | 25 | 390.00 | 571.00 | 10,957 | 0.0E+00 | 3.2E-01 | L | | X |
| 98066 tert-Butylbenzene | 7.71E+02 | 5.65E-02 | 8.02E-06 | 2.95E+01 | 4.87E-01 | 1.19E-02 | 25 | 442.10 | 1220.00 | 8,980 | 0.0E+00 | 1.4E-01 | L | | X |
| 98828 Cumene | 4.89E+02 | 6.50E-02 | 7.10E-06 | 6.13E+01 | 4.74E+01 | 1.46E-02 | 25 | 425.56 | 631.10 | 10,335 | 0.0E+00 | 4.0E-01 | L | | |
| 98862 Acetophenone | 5.77E+01 | 6.00E-02 | 8.73E-06 | 6.13E+03 | 4.38E-04 | 1.07E-05 | 25 | 475.00 | 709.50 | 11,732 | 0.0E+00 | 3.5E-01 | S,L | | X |
| 98953 Nitrobenzene | 6.46E+01 | 7.60E-02 | 8.60E-06 | 2.09E+03 | 9.82E-04 | 2.39E-05 | 25 | 483.95 | 719.00 | 10,566 | 0.0E+00 | 2.0E-03 | L | | |
| 100414 Ethylbenzene | 3.63E+02 | 7.50E-02 | 7.80E-06 | 1.69E+02 | 3.22E-01 | 7.86E-03 | 25 | 409.34 | 617.20 | 8,501 | 2.5E-06 | 1.0E+00 | L | | |
| 100425 Styrene | 7.76E+02 | 7.10E-02 | 8.00E-06 | 3.10E+02 | 1.12E-01 | 2.74E-03 | 25 | 418.31 | 636.00 | 8,737 | 0.0E+00 | 1.0E+00 | L | | |
| 100447 Benzylchloride | 6.14E+01 | 7.50E-02 | 7.80E-06 | 5.25E+02 | 1.70E-02 | 4.14E-04 | 25 | 452.00 | 685.00 | 8,773 | 4.9E-05 | 0.0E+00 | L | X | |
| 100527 Benzaldehyde | 4.59E+01 | 7.21E-02 | 9.07E-06 | 3.30E+03 | 9.73E-04 | 2.37E-05 | 25 | 452.00 | 695.00 | 11,658 | 0.0E+00 | 3.5E-01 | L | | X |
| 103651 n-Propylbenzene | 5.62E+02 | 6.01E-02 | 7.83E-06 | 6.00E+01 | 4.37E-01 | 1.07E-02 | 25 | 432.20 | 630.00 | 9,123 | 0.0E+00 | 1.0E+00 | L | | X |
| 104518 n-Butylbenzene | 1.11E+03 | 5.70E-02 | 8.12E-06 | 2.00E+00 | 5.38E-01 | 1.31E-02 | 25 | 456.46 | 660.50 | 9,290 | 0.0E+00 | 1.4E-01 | L | | X |
| 106423 p-Xylene | 3.89E+02 | 7.69E-02 | 8.44E-06 | 1.85E+02 | 3.13E-01 | 7.64E-03 | 25 | 411.52 | 616.20 | 8,525 | 0.0E+00 | 1.0E-01 | L | | |
| 106467 1,4-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 7.90E+01 | 9.82E-02 | 2.39E-03 | 25 | 447.21 | 684.75 | 9,271 | 1.1E-05 | 8.0E-01 | S | | |
| 106934 1,2-Dibromoethane (ethylene dib | 2.50E+01 | 2.17E-02 | 1.19E-05 | 4.18E+03 | 3.04E-02 | 7.41E-04 | 25 | 404.60 | 583.00 | 8,310 | 2.2E-04 | 2.0E-04 | L | | |
| 106990 1,3-Butadiene | 1.91E+01 | 2.49E-01 | 1.08E-05 | 7.35E+02 | 3.01E+00 | 7.34E-02 | 25 | 268.60 | 425.00 | 5,370 | 3.0E-02 | 2.0E-03 | L | | |
| 107028 Acrolein | 2.76E+00 | 1.05E-01 | 1.22E-05 | 2.13E+05 | 4.99E-03 | 1.22E-04 | 25 | 325.60 | 506.00 | 6,731 | 0.0E+00 | 2.0E-05 | L | | |
| 107062 1,2-Dichloroethane | 1.74E+01 | 1.04E-01 | 9.90E-06 | 8.52E+03 | 4.00E-02 | 9.77E-04 | 25 | 356.65 | 561.00 | 7,643 | 2.6E-05 | 0.0E+00 | L | | |
| 107131 Acrylonitrile | 5.90E+00 | 1.22E-01 | 1.34E-05 | 7.40E+04 | 4.21E-03 | 1.03E-04 | 25 | 350.30 | 519.00 | 7,786 | 6.8E-05 | 2.0E-03 | L | | |
| 108054 Vinyl acetate | 5.25E+00 | 8.50E-02 | 9.20E-06 | 2.00E+04 | 2.09E-02 | 5.10E-04 | 25 | 345.65 | 519.13 | 7,800 | 0.0E+00 | 2.0E-01 | L | | |
| 108101 Methylisobutylketone (4-methyl-2 | 9.06E+00 | 7.50E-02 | 7.80E-06 | 1.90E+04 | 5.64E-03 | 1.38E-04 | 25 | 389.50 | 571.00 | 8,243 | 0.0E+00 | 3.0E+00 | L | | |
| 108383 m-Xylene | 4.07E+02 | 7.00E-02 | 7.80E-06 | 1.61E+02 | 3.00E-01 | 7.32E-03 | 25 | 412.27 | 617.05 | 8,523 | 0.0E+00 | 1.0E-01 | L | | |
| 108678 1,3,5-Trimethylbenzene | 1.35E+03 | 6.02E-02 | 8.67E-06 | 2.00E+00 | 2.41E-01 | 5.87E-03 | 25 | 437.89 | 637.25 | 9,321 | 0.0E+00 | 6.0E-03 | L | | |
| 108872 Methylcyclohexane | 7.85E+01 | 7.35E-02 | 8.52E-06 | 1.40E+01 | 4.22E+00 | 1.03E-01 | 25 | 373.90 | 572.20 | 7,474 | 0.0E+00 | 3.0E+00 | L | | |
| 108883 Toluene | 1.82E+02 | 8.70E-02 | 8.60E-06 | 5.26E+02 | 2.72E-01 | 6.62E-03 | 25 | 383.78 | 591.79 | 7,930 | 0.0E+00 | 5.0E+00 | L | | |
| 108907 Chlorobenzene | 2.19E+02 | 7.30E-02 | 8.70E-06 | 4.72E+02 | 1.51E-01 | 3.69E-03 | 25 | 404.87 | 632.40 | 8,410 | 0.0E+00 | 5.0E-02 | L | | |
| 109693 1-Chlorobutane | 1.72E+01 | 8.26E-02 | 1.00E-05 | 1.10E+03 | 6.93E-01 | 1.69E-02 | 25 | 351.60 | 542.00 | 7,263 | 0.0E+00 | 1.4E+00 | L | | X |
| 110009 Furan | 1.86E+01 | 1.04E-01 | 1.22E-05 | 1.00E+04 | 2.21E-01 | 5.39E-03 | 25 | 304.60 | 490.20 | 6,477 | 0.0E+00 | 3.5E-03 | L | | X |
| 110543 Hexane | 4.34E+01 | 2.00E-01 | 7.77E-06 | 1.24E+01 | 6.82E+01 | 1.66E+00 | 25 | 341.70 | 508.00 | 6,895 | 0.0E+00 | 2.0E-01 | L | | |
| 111444 Bis(2-chloroethyl)ether | 1.55E+01 | 6.92E-02 | 7.53E-06 | 1.72E+04 | 7.36E-04 | 1.80E-05 | 25 | 451.15 | 659.79 | 10,803 | 3.3E-04 | 0.0E+00 | L | | |
| 115297 Endosulfan | 2.14E+03 | 1.15E-02 | 4.55E-06 | 5.10E-01 | 4.58E-04 | 1.12E-05 | 25 | 674.43 | 942.94 | 14,000 | 0.0E+00 | 2.1E-02 | S | | X |
| 118741 Hexachlorobenzene | 5.50E+04 | 5.42E-02 | 5.91E-06 | 5.00E-03 | 5.40E-02 | 1.32E-03 | 25 | 582.55 | 825.00 | 14,447 | 4.6E-04 | 2.8E-03 | S | | X |
| 120821 1,2,4-Trichlorobenzene | 1.78E+03 | 3.00E-02 | 8.23E-06 | 4.88E+01 | 5.81E-02 | 1.42E-03 | 25 | 486.15 | 725.00 | 10,471 | 0.0E+00 | 4.0E-03 | L | | |
| 123739 Crotonaldehyde (2-butenal) | 4.82E+00 | 9.56E-02 | 1.07E-05 | 3.69E+04 | 7.99E-04 | 1.95E-05 | 25 | 375.20 | 568.00 | 9 | 5.4E-04 | 0.0E+00 | L | X | |
| 124481 Chlorodibromomethane | 6.31E+01 | 1.96E-02 | 1.05E-05 | 2.60E+03 | 3.20E-02 | 7.81E-04 | 25 | 416.14 | 678.20 | 5,900 | 2.4E-05 | 7.0E-02 | L | X | X |
| 126987 Methacrylonitrile | 3.58E+01 | 1.12E-01 | 1.32E-05 | 2.54E+04 | 1.01E-02 | 2.46E-04 | 25 | 363.30 | 554.00 | 7,600 | 0.0E+00 | 7.0E-04 | L | | |
| 126998 2-Chloro-1,3-butadiene (chloropr | 6.73E+01 | 8.58E-02 | 1.03E-05 | 2.12E+03 | 4.91E-01 | 1.20E-02 | 25 | 332.40 | 525.00 | 8,075 | 0.0E+00 | 7.0E-03 | L | | |
| 127184 Tetrachloroethylene | 1.55E+02 | 7.20E-02 | 8.20E-06 | 2.00E+02 | 7.53E-01 | 1.84E-02 | 25 | 394.40 | 620.20 | 8,288 | 2.6E-07 | 4.0E-02 | L | | |
| 129000 Pyrene | 1.05E+05 | 2.72E-02 | 7.24E-06 | 1.35E+00 | 4.50E-04 | 1.10E-05 | 25 | 667.95 | 936 | 14370 | 0.0E+00 | 1.1E-01 | S | | X |
| 132649 Dibenzofuran | 5.15E+03 | 2.38E-02 | 6.00E-06 | 3.10E+00 | 5.15E-04 | 1.26E-05 | 25 | 560 | 824 | 66400 | 0.0E+00 | 1.4E-02 | S | | X |
| 135988 sec-Butylbenzene | 9.66E+02 | 5.70E-02 | 8.12E-06 | 3.94E+00 | 5.68E-01 | 1.39E-02 | 25 | 446.5 | 679 | 88730 | 0.0E+00 | 1.4E-01 | L | | X |
| 141786 Ethylacetate | 6.44E+00 | 7.32E-02 | 9.70E-06 | 8.03E+04 | 5.64E-03 | 1.38E-04 | 25 | 350.26 | 523.3 | 7633.66 | 0.0E+00 | 3.2E+00 | L | | X |
| 156592 cis-1,2-Dichloroethylene | 3.55E+01 | 7.36E-02 | 1.13E-05 | 3.50E+03 | 1.67E-01 | 4.07E-03 | 25 | 333.65 | 544 | 7192 | 0.0E+00 | 3.5E-02 | L | | X |
| 156605 trans-1,2-Dichloroethylene | 5.25E+01 | 7.07E-02 | 1.19E-05 | 6.30E+03 | 3.84E-01 | 9.36E-03 | 25 | 320.85 | 516.5 | 6717 | 0.0E+00 | 7.0E-02 | L | | X |
| 205992 Benzo(b)fluoranthene | 1.23E+06 | 2.26E-02 | 5.56E-06 | 1.50E-03 | 4.54E-03 | 1.11E-04 | 25 | 715.9 | 969.27 | 17000 | 2.1E-04 | 0.0E+00 | S | X | |
| 218019 Chrysene | 3.98E+05 | 2.48E-02 | 6.21E-06 | 6.30E-03 | 3.87E-03 | 9.44E-05 | 25 | 714.15 | 979 | 16455 | 2.1E-06 | 0.0E+00 | S | X | |
| 309002 Aldrin | 2.45E+06 | 1.32E-02 | 4.86E-06 | 1.70E-02 | 6.95E-03 | 1.70E-04 | 25 | 603.01 | 839.37 | 15000 | 4.9E-03 | 1.1E-04 | S | | X |
| 319846 alpha-HCH (alpha-BHC) | 1.23E+03 | 1.42E-02 | 7.34E-06 | 2.00E+00 | 4.34E-04 | 1.06E-05 | 25 | 596.55 | 839.36 | 15000 | 1.8E-03 | 0.0E+00 | S | | |
| 541731 1,3-Dichlorobenzene | 1.98E+03 | 6.92E-02 | 7.86E-06 | 1.34E+02 | 1.27E-01 | 3.09E-03 | 25 | 446 | 684 | 9230.18 | 0.0E+00 | 1.1E-01 | L | | X |
| 542756 1,3-Dichloropropene | 4.57E+01 | 6.26E-02 | 1.00E-05 | 2.80E+03 | 7.24E-01 | 1.77E-02 | 25 | 381.15 | 587.38 | 7900 | 4.0E-06 | 2.0E-02 | L | | |
| 630206 1,1,1,2-Tetrachloroethane | 1.16E+02 | 7.10E-02 | 7.90E-06 | 1.10E+03 | 9.90E-02 | 2.41E-03 | 25 | 403.5 | 624 | 9768.282525 | 7.4E-06 | 1.1E-01 | L | | X |
| 1634044 MTBE | 7.26E+00 | 1.02E-01 | 1.05E-05 | 5.10E+04 | 2.56E-02 | 6.23E-04 | 25 | 328.3 | 497.1 | 6677.66 | 0.0E+00 | 3.0E+00 | L | | |
| 7439976 Mercury (elemental) | 5.20E+01 | 3.07E-02 | 6.30E-06 | 2.00E+01 | 4.40E-01 | 1.07E-02 | 25 | 629.88 | 1750 | 14127 | 0.0E+00 | 3.0E-04 | L | | |

SL-ADV
Version 3.1; 02/04

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CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES [ X ]

**OR**

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES [ ]

| ENTER Chemical CAS No. (numbers only, no dashes) | ENTER Initial soil conc., $C_R$ (µg/kg) | Chemical |
|---|---|---|
| 106467 | | 1,4-Dichlorobenzene |

MORE ↓

| ENTER Average soil temperature, $T_S$ (°C) | ENTER Depth below grade to bottom of enclosed space floor, $L_F$ (cm) | ENTER Depth below grade to top of contamination, $L_t$ (cm) | ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) $L_b$ (cm) | ENTER Totals must add up to value of $L_t$ (cell G28) Thickness of soil stratum A, $h_A$ (cm) | ENTER Thickness of soil stratum B, (Enter value or 0) $h_B$ (cm) | ENTER Thickness of soil stratum C, (Enter value or 0) $h_C$ (cm) | ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability) | OR | ENTER User-defined stratum A soil vapor permeability, $k_v$ ($cm^2$) |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 15 | 30.5 | 106.7 | 30.5 | 0 | 0 | | | 1.00E-08 |

MORE ↓

| ENTER Stratum A SCS soil type | ENTER Stratum A soil dry bulk density, $\rho_b^A$ ($g/cm^3$) | ENTER Stratum A soil total porosity, $n^A$ (unitless) | ENTER Stratum A soil water-filled porosity, $\theta_w^A$ ($cm^3/cm^3$) | ENTER Stratum A soil organic carbon fraction, $f_{oc}^A$ (unitless) | ENTER Stratum B SCS soil type | ENTER Stratum B soil dry bulk density, $\rho_b^B$ ($g/cm^3$) | ENTER Stratum B soil total porosity, $n^B$ (unitless) | ENTER Stratum B soil water-filled porosity, $\theta_w^B$ ($cm^3/cm^3$) | ENTER Stratum B soil organic carbon fraction, $f_{oc}^B$ (unitless) | ENTER Stratum C SCS soil type | ENTER Stratum C soil dry bulk density, $\rho_b^C$ ($g/cm^3$) | ENTER Stratum C soil total porosity, $n^C$ (unitless) | ENTER Stratum C soil water-filled porosity, $\theta_w^C$ ($cm^3/cm^3$) | ENTER Stratum C soil organic carbon fraction, $f_{oc}^C$ (unitless) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.65 | 0.439 | 0.045 | 0.002 | | | | | | | | | | |

MORE ↓

| ENTER Enclosed space floor thickness, $L_{crack}$ (cm) | ENTER Soil-bldg. pressure differential, $\Delta P$ ($g/cm\text{-}s^2$) | ENTER Enclosed space floor length, $L_B$ (cm) | ENTER Enclosed space floor width, $W_B$ (cm) | ENTER Enclosed space height, $H_B$ (cm) | ENTER Floor-wall seam crack width, w (cm) | ENTER Indoor air exchange rate, ER (1/h) | ENTER Average vapor flow rate into bldg. OR Leave blank to calculate $Q_{soil}$ (L/m) |
|---|---|---|---|---|---|---|---|
| 10 | 40 | 1000 | 1000 | 244 | 0.1 | 0.25 | |

| ENTER Averaging time for carcinogens, $AT_C$ (yrs) | ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs) | ENTER Exposure duration, ED (yrs) | ENTER Exposure frequency, EF (days/yr) | ENTER Target risk for carcinogens, TR (unitless) | ENTER Target hazard quotient for noncarcinogens, THQ (unitless) |
|---|---|---|---|---|---|
| 70 | 30 | 30 | 350 | 1.0E-05 | 1 |
| | | | | Used to calculate risk-based soil concentration. | |

END

CHEMICAL PROPERTIES SHEET

| Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Pure component water solubility, S (mg/L) | Unit risk factor, URF ($\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) | Physical state at soil temperature, (S,L,G) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.90E-02 | 7.90E-06 | 2.39E-03 | 25 | 9,271 | 447.21 | 684.75 | 6.17E+02 | 7.90E+01 | 1.1E-05 | 8.0E-01 | S |

**END**

INTERMEDIATE CALCULATIONS SHEET

| Exposure duration, $\tau$ (sec) | Source-building separation, $L_T$ (cm) | Stratum A soil air-filled porosity, $\theta_a^A$ ($cm^3/cm^3$) | Stratum B soil air-filled porosity, $\theta_a^B$ ($cm^3/cm^3$) | Stratum C soil air-filled porosity, $\theta_a^C$ ($cm^3/cm^3$) | Stratum A effective total fluid saturation, $S_{te}$ ($cm^3/cm^3$) | Stratum A soil intrinsic permeability, $k_i$ ($cm^2$) | Stratum A soil relative air permeability, $k_{rg}$ ($cm^2$) | Stratum A soil effective vapor permeability, $k_v$ ($cm^2$) | Floor-wall seam perimeter, $X_{crack}$ (cm) | Initial soil concentration used, $C_R$ ($\mu g/kg$) | Bldg. ventilation rate, $Q_{building}$ ($cm^3/s$) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.46E+08 | 15.5 | 0.394 | ERROR | ERROR | #N/A | #N/A | #N/A | 1.00E-08 | 4,000 | 1.00E+00 | 1.69E+04 |

| Area of enclosed space below grade, $A_B$ ($cm^2$) | Crack-to-total area ratio, $\eta$ (unitless) | Crack depth below grade, $Z_{crack}$ (cm) | Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol) | Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-$m^3$/mol) | Henry's law constant at ave. soil temperature, $H'_{TS}$ (unitless) | Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s) | Stratum A effective diffusion coefficient, $D^{eff}_A$ ($cm^2/s$) | Stratum B effective diffusion coefficient, $D^{eff}_B$ ($cm^2/s$) | Stratum C effective diffusion coefficient, $D^{eff}_C$ ($cm^2/s$) | Total overall effective diffusion coefficient, $D^{eff}_T$ ($cm^2/s$) | Diffusion path length, $L_d$ (cm) | Convection path length, $L_p$ (cm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.06E+06 | 3.77E-04 | 15 | 11,243 | 8.76E-04 | 3.77E-02 | 1.75E-04 | 1.61E-02 | 0.00E+00 | 0.00E+00 | 1.61E-02 | 15.5 | 15 |

| Soil-water partition coefficient, $K_d$ ($cm^3/g$) | Source vapor conc., $C_{source}$ ($\mu g/m^3$) | Crack radius, $r_{crack}$ (cm) | Average vapor flow rate into bldg., $Q_{soil}$ ($cm^3/s$) | Crack effective diffusion coefficient, $D^{crack}$ ($cm^2/s$) | Area of crack, $A_{crack}$ ($cm^2$) | Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless) | Infinite source indoor attenuation coefficient, $\alpha$ (unitless) | Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source $\beta$ term (unitless) | Finite source $\psi$ term $(sec)^{-1}$ | Time for source depletion, $\tau_D$ (sec) | Exposure duration > time for source depletion (YES/NO) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.23E+00 | 2.97E+01 | 0.10 | 1.00E+01 | 1.61E-02 | 4.00E+02 | 5.95E+06 | NA | NA | 1.11E+02 | 1.21E-06 | 4.61E+08 | YES |

| Finite source indoor attenuation coefficient, <$\alpha$> (unitless) | Mass limit bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Final finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) |
|---|---|---|---|---|---|
| NA | 8.31E-03 | NA | 8.31E-03 | 1.1E-05 | 8.0E-01 |

**END**

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

| Indoor exposure soil conc., carcinogen (µg/kg) | Indoor exposure soil conc., noncarcinogen (µg/kg) | Risk-based indoor exposure soil conc., (µg/kg) | Soil saturation conc., $C_{sat}$ (µg/kg) | Final indoor exposure soil conc., (µg/kg) |
|---|---|---|---|---|
| 2.66E+02 | 1.00E+05 | 2.66E+02 | 1.00E+05 | 2.66E+02 |

INCREMENTAL RISK CALCULATIONS:

| Incremental risk from vapor intrusion to indoor air, carcinogen (unitless) | Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless) |
|---|---|
| NA | NA |

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)
MESSAGE: The values of Csource and Cbuilding on the INTERCALCS worksheet are based on unity and do not represent actual values.

**SCROLL DOWN TO "END"**

**END**

VLOOKUP TABLES

Soil Properties Lookup Table

| SCS Soil Type | $K_s$ (cm/h) | $\alpha_1$ (1/cm) | N (unitless) | M (unitless) | n ($cm^3/cm^3$) | $\theta_r$ ($cm^3/cm^3$) | Mean Grain Diameter (cm) | Bulk Density ($g/cm^3$) | $\theta_w$ ($cm^3/cm^3$) | SCS Soil Name |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.61 | 0.01496 | 1.253 | 0.2019 | 0.459 | 0.098 | 0.0092 | 1.43 | 0.215 | Clay |
| CL | 0.34 | 0.01581 | 1.416 | 0.2938 | 0.442 | 0.079 | 0.016 | 1.48 | 0.168 | Clay Loam |
| L | 0.50 | 0.01112 | 1.472 | 0.3207 | 0.399 | 0.061 | 0.020 | 1.59 | 0.148 | Loam |
| LS | 4.38 | 0.03475 | 1.746 | 0.4273 | 0.390 | 0.049 | 0.040 | 1.62 | 0.076 | Loamy Sand |
| S | 26.78 | 0.03524 | 3.177 | 0.6852 | 0.375 | 0.053 | 0.044 | 1.66 | 0.054 | Sand |
| SC | 0.47 | 0.03342 | 1.208 | 0.1722 | 0.385 | 0.117 | 0.025 | 1.63 | 0.197 | Sandy Clay |
| SCL | 0.55 | 0.02109 | 1.330 | 0.2481 | 0.384 | 0.063 | 0.029 | 1.63 | 0.146 | Sandy Clay Loam |
| SI | 1.82 | 0.00658 | 1.679 | 0.4044 | 0.489 | 0.050 | 0.0046 | 1.35 | 0.167 | Silt |
| SIC | 0.40 | 0.01622 | 1.321 | 0.2430 | 0.481 | 0.111 | 0.0039 | 1.38 | 0.216 | Silty Clay |
| SICL | 0.46 | 0.00839 | 1.521 | 0.3425 | 0.482 | 0.090 | 0.0056 | 1.37 | 0.198 | Silty Clay Loam |
| SIL | 0.76 | 0.00506 | 1.663 | 0.3987 | 0.439 | 0.065 | 0.011 | 1.49 | 0.180 | Silt Loam |
| SL | 1.60 | 0.02667 | 1.449 | 0.3099 | 0.387 | 0.039 | 0.030 | 1.62 | 0.103 | Sandy Loam |

Chemical Properties Lookup Table

| CAS No. | Chemical | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Pure component water solubility, S (mg/L) | Henry's law constant H' (unitless) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC (mg/$m^3$) | Physical state at soil temperature, (S,L,G) | URF extrapolated (X) | RfC extrapolated (X) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56235 | Carbon tetrachloride | 1.74E+02 | 7.80E-02 | 8.80E-06 | 7.93E+02 | 1.24E+00 | 3.03E-02 | 25 | 349.90 | 556.60 | 7,127 | 1.5E-05 | 0.0E+00 | L | | |
| 57749 | Chlordane | 1.20E+05 | 1.18E-02 | 4.37E-06 | 5.60E-02 | 1.99E-03 | 4.85E-05 | 25 | 624.24 | 885.73 | 14,000 | 1.0E-04 | 7.0E-04 | S | | |
| 58899 | gamma-HCH (Lindane) | 1.07E+03 | 1.42E-02 | 7.34E-06 | 7.30E+00 | 5.73E-04 | 1.40E-05 | 25 | 596.55 | 839.36 | 15,000 | 3.7E-04 | 1.1E-03 | S | X | X |
| 60297 | Ethyl ether | 5.73E+00 | 7.82E-02 | 8.61E-06 | 5.68E+04 | 1.35E+00 | 3.29E-02 | 25 | 307.50 | 466.74 | 6,338 | 0.0E+00 | 7.0E-01 | L | | X |
| 60571 | Dieldrin | 2.14E+04 | 1.25E-02 | 4.74E-06 | 1.95E-01 | 6.18E-04 | 1.51E-05 | 25 | 613.32 | 842.25 | 17,000 | 4.6E-03 | 1.8E-04 | S | | X |
| 67641 | Acetone | 5.75E-01 | 1.24E-01 | 1.14E-05 | 1.00E+06 | 1.59E-03 | 3.87E-05 | 25 | 329.20 | 508.10 | 6,955 | 0.0E+00 | 3.1E+01 | L | | X |
| 67663 | Chloroform | 3.98E+01 | 1.04E-01 | 1.00E-05 | 7.92E+03 | 1.50E-01 | 3.66E-03 | 25 | 334.32 | 536.40 | 6,988 | 2.3E-05 | 9.8E-03 | L | | |
| 67721 | Hexachloroethane | 1.78E+03 | 2.50E-03 | 6.80E-06 | 5.00E+01 | 1.59E-01 | 3.88E-03 | 25 | 458.00 | 695.00 | 9,510 | 4.0E-06 | 3.5E-03 | S | | X |
| 71432 | Benzene | 5.89E+01 | 8.80E-02 | 9.80E-06 | 1.79E+03 | 2.27E-01 | 5.54E-03 | 25 | 353.24 | 562.16 | 7,342 | 7.8E-06 | 3.0E-02 | L | | |
| 71556 | 1,1,1-Trichloroethane | 1.10E+02 | 7.80E-02 | 8.80E-06 | 1.33E+03 | 7.03E-01 | 1.72E-02 | 25 | 347.24 | 545.00 | 7,136 | 0.0E+00 | 5.0E+00 | L | | |
| 72435 | Methoxychlor | 9.77E+04 | 1.56E-02 | 4.46E-06 | 1.00E-01 | 6.46E-04 | 1.58E-05 | 25 | 651.02 | 848.49 | 16,000 | 0.0E+00 | 1.8E-02 | S | | X |
| 72559 | DDE | 4.47E+06 | 1.44E-02 | 5.87E-06 | 1.20E-01 | 8.59E-04 | 2.09E-05 | 25 | 636.44 | 860.38 | 15,000 | 9.7E-05 | 0.0E+00 | S | X | |
| 74839 | Methyl bromide | 1.05E+01 | 7.28E-02 | 1.21E-05 | 1.52E+04 | 2.55E-01 | 6.22E-03 | 25 | 276.71 | 467.00 | 5,714 | 0.0E+00 | 5.0E-03 | G | | |
| 74873 | Methyl chloride (chloromethane) | 2.12E+00 | 1.26E-01 | 6.50E-06 | 5.33E+03 | 3.61E-01 | 8.80E-03 | 25 | 249.00 | 416.25 | 5,115 | 1.0E-06 | 9.0E-02 | L | | |
| 74908 | Hydrogen cyanide | 3.80E+00 | 1.93E-01 | 2.10E-05 | 1.00E+06 | 5.44E-03 | 1.33E-04 | 25 | 299.00 | 456.70 | 6,676 | 0.0E+00 | 3.0E-03 | L | | |
| 74953 | Methylene bromide | 1.26E+01 | 4.30E-02 | 8.44E-06 | 1.19E+04 | 3.52E-02 | 8.59E-04 | 25 | 370.00 | 583.00 | 7,868 | 0.0E+00 | 3.5E-02 | L | | X |
| 75003 | Chloroethane (ethyl chloride) | 4.40E+00 | 2.71E-01 | 1.15E-05 | 5.68E+03 | 3.61E-01 | 8.80E-03 | 25 | 285.30 | 460.40 | 5,879 | 0.0E+00 | 1.0E+01 | L | X | |
| 75014 | Vinyl chloride (chloroethene) | 1.86E+01 | 1.06E-01 | 1.23E-05 | 8.80E+03 | 1.10E+00 | 2.69E-02 | 25 | 259.25 | 432.00 | 5,250 | 8.8E-06 | 1.0E-01 | G | | |
| 75058 | Acetonitrile | 4.20E+00 | 1.28E-01 | 1.66E-05 | 1.00E+06 | 1.42E-03 | 3.45E-05 | 25 | 354.60 | 545.50 | 7,110 | 0.0E+00 | 6.0E-02 | L | | |
| 75070 | Acetaldehyde | 1.06E+00 | 1.24E-01 | 1.41E-05 | 1.00E+06 | 3.23E-03 | 7.87E-05 | 25 | 293.10 | 466.00 | 6,157 | 2.2E-06 | 9.0E-03 | L | | |
| 75092 | Methylene chloride | 1.17E+01 | 1.01E-01 | 1.17E-05 | 1.30E+04 | 8.96E-02 | 2.18E-03 | 25 | 313.00 | 510.00 | 6,706 | 1.0E-08 | 6.0E-01 | L | | |
| 75150 | Carbon disulfide | 4.57E+01 | 1.04E-01 | 1.00E-05 | 1.19E+03 | 1.24E+00 | 3.02E-02 | 25 | 319.00 | 552.00 | 6,391 | 0.0E+00 | 7.0E-01 | L | | |
| 75218 | Ethylene oxide | 1.33E+00 | 1.04E-01 | 1.45E-05 | 3.04E+05 | 2.27E-02 | 5.54E-04 | 25 | 283.60 | 469.00 | 6,104 | 1.0E-04 | 6.0E-01 | L | | |
| 75252 | Bromoform | 8.71E+01 | 1.49E-02 | 1.03E-05 | 3.10E+03 | 2.41E-02 | 5.88E-04 | 25 | 422.35 | 696.00 | 9,479 | 1.1E-06 | 7.0E-02 | L | | X |
| 75274 | Bromodichloromethane | 5.50E+01 | 2.98E-02 | 1.06E-05 | 6.74E+03 | 6.54E-02 | 1.60E-03 | 25 | 363.15 | 585.85 | 7,800 | 1.8E-05 | 7.0E-02 | L | X | X |
| 75296 | 2-Chloropropane | 9.14E+00 | 8.88E-02 | 1.01E-05 | 3.73E+03 | 5.93E-01 | 1.45E-02 | 25 | 308.70 | 485.00 | 6,286 | 0.0E+00 | 1.0E-01 | L | | |
| 75343 | 1,1-Dichloroethane | 3.16E+01 | 7.42E-02 | 1.05E-05 | 5.06E+03 | 2.30E-01 | 5.61E-03 | 25 | 330.55 | 523.00 | 6,895 | 0.0E+00 | 5.0E-01 | L | | |
| 75354 | 1,1-Dichloroethylene | 5.89E+01 | 9.00E-02 | 1.04E-05 | 2.25E+03 | 1.07E+00 | 2.60E-02 | 25 | 304.75 | 576.05 | 6,247 | 0.0E+00 | 2.0E-01 | L | | |
| 75456 | Chlorodifluoromethane | 4.79E+01 | 1.01E-01 | 1.28E-05 | 2.00E+00 | 1.10E+00 | 2.70E-02 | 25 | 232.40 | 369.30 | 4,836 | 0.0E+00 | 5.0E+01 | L | | |
| 75694 | Trichlorofluoromethane | 4.97E+02 | 8.70E-02 | 9.70E-06 | 1.10E+03 | 3.97E+00 | 9.68E-02 | 25 | 296.70 | 471.00 | 5,999 | 0.0E+00 | 7.0E-01 | L | | |
| 75718 | Dichlorodifluoromethane | 4.57E+02 | 6.65E-02 | 9.92E-06 | 2.80E+02 | 1.40E+01 | 3.42E-01 | 25 | 243.20 | 384.95 | 9,421 | 0.0E+00 | 2.0E-01 | L | | |
| 76131 | 1,1,2-Trichloro-1,2,2-trifluoroetha | 1.11E+04 | 7.80E-02 | 8.20E-06 | 1.70E+02 | 1.97E+01 | 4.80E-01 | 25 | 320.70 | 487.30 | 6,463 | 0.0E+00 | 3.0E+01 | L | | |
| 76448 | Heptachlor | 1.41E+06 | 1.12E-02 | 5.69E-06 | 1.80E-01 | 6.05E+01 | 1.48E+00 | 25 | 603.69 | 846.31 | 13,000 | 1.3E-03 | 1.8E-03 | S | | X |
| 77474 | Hexachlorocyclopentadiene | 2.00E+05 | 1.61E-02 | 7.21E-06 | 1.80E+00 | 1.10E+00 | 2.69E-02 | 25 | 512.15 | 746.00 | 10,931 | 0.0E+00 | 2.0E-04 | L | | |
| 78831 | Isobutanol | 2.59E+00 | 8.60E-02 | 9.30E-06 | 8.50E+04 | 4.83E-04 | 1.18E-05 | 25 | 381.04 | 547.78 | 10,936 | 0.0E+00 | 1.1E+00 | L | | X |
| 78875 | 1,2-Dichloropropane | 4.37E+01 | 7.82E-02 | 8.73E-06 | 2.80E+03 | 1.15E-01 | 2.79E-03 | 25 | 369.52 | 572.00 | 7,590 | 1.9E-05 | 4.0E-03 | L | X | |
| 78933 | Methylethylketone (2-butanone) | 2.30E+00 | 8.08E-02 | 9.80E-06 | 2.23E+05 | 2.29E-03 | 5.58E-05 | 25 | 352.50 | 536.78 | 7,481 | 0.0E+00 | 5.0E+00 | L | | |
| 79005 | 1,1,2-Trichloroethane | 5.01E+01 | 7.80E-02 | 8.80E-06 | 4.42E+03 | 3.73E-02 | 9.11E-04 | 25 | 386.15 | 602.00 | 8,322 | 1.6E-05 | 1.4E-02 | L | | X |
| 79016 | Trichloroethylene | 1.66E+02 | 7.90E-02 | 9.10E-06 | 1.47E+03 | 4.21E-01 | 1.03E-02 | 25 | 360.36 | 544.20 | 7,505 | 4.1E-06 | 2.0E-03 | L | X | |
| 79209 | Methyl acetate | 3.26E+00 | 1.04E-01 | 1.00E-05 | 2.00E+03 | 4.84E-03 | 1.18E-04 | 25 | 329.80 | 506.70 | 7,260 | 0.0E+00 | 3.5E+00 | L | | X |
| 79345 | 1,1,2,2-Tetrachloroethane | 9.33E+01 | 7.10E-02 | 7.90E-06 | 2.96E+03 | 1.41E-02 | 3.44E-04 | 25 | 419.60 | 661.15 | 8,996 | 5.8E-05 | 2.1E-01 | L | | X |
| 79469 | 2-Nitropropane | 1.17E+01 | 9.23E-02 | 1.01E-05 | 1.70E+04 | 5.03E-03 | 1.23E-04 | 25 | 393.20 | 594.00 | 8,383 | 2.7E-03 | 2.0E-02 | L | | |
| 80626 | Methylmethacrylate | 6.98E+00 | 7.70E-02 | 8.60E-06 | 1.50E+04 | 1.38E-02 | 3.36E-04 | 25 | 373.50 | 567.00 | 8,975 | 0.0E+00 | 7.0E-01 | L | | |
| 83329 | Acenaphthene | 7.08E+03 | 4.21E-02 | 7.69E-06 | 3.57E+00 | 6.34E-03 | 1.55E-04 | 25 | 550.54 | 803.15 | 12,155 | 0.0E+00 | 2.1E-01 | S | | X |
| 86737 | Fluorene | 1.38E+04 | 3.63E-02 | 7.88E-06 | 1.98E+00 | 2.60E-03 | 6.34E-05 | 25 | 570.44 | 870.00 | 12,666 | 0.0E+00 | 1.4E-01 | S | | X |
| 87683 | Hexachloro-1,3-butadiene | 5.37E+04 | 5.61E-02 | 6.16E-06 | 3.20E+00 | 3.33E-01 | 8.13E-03 | 25 | 486.15 | 738.00 | 10,206 | 2.2E-05 | 7.0E-04 | L | | X |
| 88722 | o-Nitrotoluene | 3.24E+02 | 5.87E-02 | 8.67E-06 | 6.50E+02 | 5.11E-04 | 1.25E-05 | 25 | 495.00 | 720.00 | 12,239 | 0.0E+00 | 3.5E-02 | L | | X |
| 91203 | Naphthalene | 2.00E+03 | 5.90E-02 | 7.50E-06 | 3.10E+01 | 1.98E-02 | 4.82E-04 | 25 | 491.14 | 748.40 | 10,373 | 3.4E-05 | 3.0E-03 | S | | |
| 91576 | 2-Methylnaphthalene | 2.81E+03 | 5.22E-02 | 7.75E-06 | 2.46E+01 | 2.12E-02 | 5.17E-04 | 25 | 514.26 | 761.00 | 12,600 | 0.0E+00 | 7.0E-02 | S | | X |
| 92524 | Biphenyl | 4.38E+03 | 4.04E-02 | 8.15E-06 | 7.45E+00 | 1.23E-02 | 2.99E-04 | 25 | 529.10 | 789.00 | 10,890 | 0.0E+00 | 1.8E-01 | S | | X |
| 95476 | o-Xylene | 3.63E+02 | 8.70E-02 | 1.00E-05 | 1.78E+02 | 2.12E-01 | 5.18E-03 | 25 | 417.60 | 630.30 | 8,661 | 0.0E+00 | 1.0E-01 | L | | |
| 95501 | 1,2-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 1.56E+02 | 7.77E-02 | 1.90E-03 | 25 | 453.57 | 705.00 | 9,700 | 0.0E+00 | 2.0E-01 | L | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95578 2-Chlorophenol | 3.88E+02 | 5.01E-02 | 9.46E-06 | 2.20E+04 | 1.60E-02 | 3.90E-04 | 25 | 447.53 | 675.00 | 9,572 | 0.0E+00 | 1.8E-02 | L | | X |
| 95636 1,2,4-Trimethylbenzene | 1.35E+03 | 6.06E-02 | 7.92E-06 | 5.70E+01 | 2.52E-01 | 6.14E-03 | 25 | 442.30 | 649.17 | 9,369 | 0.0E+00 | 7.0E-03 | L | | |
| 96184 1,2,3-Trichloropropane | 2.20E+01 | 7.10E-02 | 7.90E-06 | 1.75E+03 | 1.67E-02 | 4.08E-04 | 25 | 430.00 | 652.00 | 9,171 | 5.7E-04 | 4.9E-03 | L | X | |
| 96333 Methyl acrylate | 4.53E+00 | 9.76E-02 | 1.02E-05 | 6.00E+04 | 7.68E-03 | 1.87E-04 | 25 | 353.70 | 536.00 | 7,749 | 0.0E+00 | 1.1E-01 | L | | X |
| 97632 Ethylmethacrylate | 2.95E+01 | 6.53E-02 | 8.37E-06 | 3.67E+03 | 3.44E-02 | 8.40E-04 | 25 | 390.00 | 571.00 | 10,957 | 0.0E+00 | 3.2E-01 | L | | X |
| 98066 tert-Butylbenzene | 7.71E+02 | 5.65E-02 | 8.02E-06 | 2.95E+01 | 4.87E-01 | 1.19E-02 | 25 | 442.10 | 1220.00 | 8,980 | 0.0E+00 | 1.4E-01 | L | | X |
| 98828 Cumene | 4.89E+02 | 6.50E-02 | 7.10E-06 | 6.13E+01 | 4.74E+01 | 1.46E-02 | 25 | 425.56 | 631.10 | 10,335 | 0.0E+00 | 4.0E-01 | L | | |
| 98862 Acetophenone | 5.77E+01 | 6.00E-02 | 8.73E-06 | 6.13E+03 | 4.38E-04 | 1.07E-05 | 25 | 475.00 | 709.50 | 11,732 | 0.0E+00 | 3.5E-01 | S,L | | X |
| 98953 Nitrobenzene | 6.46E+01 | 7.60E-02 | 8.60E-06 | 2.09E+03 | 9.82E-04 | 2.39E-05 | 25 | 483.95 | 719.00 | 10,566 | 0.0E+00 | 2.0E-03 | L | | |
| 100414 Ethylbenzene | 3.63E+02 | 7.50E-02 | 7.80E-06 | 1.69E+02 | 3.22E-01 | 7.86E-03 | 25 | 409.34 | 617.20 | 8,501 | 2.5E-06 | 1.0E+00 | L | | |
| 100425 Styrene | 7.76E+02 | 7.10E-02 | 8.00E-06 | 3.10E+02 | 1.12E-01 | 2.74E-03 | 25 | 418.31 | 636.00 | 8,737 | 0.0E+00 | 1.0E+00 | L | | |
| 100447 Benzylchloride | 6.14E+01 | 7.50E-02 | 7.80E-06 | 5.25E+02 | 1.70E-02 | 4.14E-04 | 25 | 452.00 | 685.00 | 8,773 | 4.9E-05 | 0.0E+00 | L | X | |
| 100527 Benzaldehyde | 4.59E+01 | 7.21E-02 | 9.07E-06 | 3.30E+03 | 9.73E-04 | 2.37E-05 | 25 | 452.00 | 695.00 | 11,658 | 0.0E+00 | 3.5E-01 | L | | X |
| 103651 n-Propylbenzene | 5.62E+02 | 6.01E-02 | 7.83E-06 | 6.00E+01 | 4.37E-01 | 1.07E-02 | 25 | 432.20 | 630.00 | 9,123 | 0.0E+00 | 1.0E+00 | L | | X |
| 104518 n-Butylbenzene | 1.11E+03 | 5.70E-02 | 8.12E-06 | 2.00E+00 | 5.38E-01 | 1.31E-02 | 25 | 456.46 | 660.50 | 9,290 | 0.0E+00 | 1.4E-01 | L | | X |
| 106423 p-Xylene | 3.89E+02 | 7.69E-02 | 8.44E-06 | 1.85E+02 | 3.13E-01 | 7.64E-03 | 25 | 411.52 | 616.20 | 8,525 | 0.0E+00 | 1.0E-01 | L | | |
| 106467 1,4-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 7.90E+01 | 9.82E-02 | 2.39E-03 | 25 | 447.21 | 684.75 | 9,271 | 1.1E-05 | 8.0E-01 | S | | |
| 106934 1,2-Dibromoethane (ethylene dib | 2.50E+01 | 2.17E-02 | 1.19E-05 | 4.18E+03 | 3.04E-02 | 7.41E-04 | 25 | 404.60 | 583.00 | 8,310 | 2.2E-04 | 2.0E-04 | L | | |
| 106990 1,3-Butadiene | 1.91E+01 | 2.49E-01 | 1.08E-05 | 7.35E+02 | 3.01E+00 | 7.34E-02 | 25 | 268.60 | 425.00 | 5,370 | 3.0E-02 | 2.0E-03 | L | | |
| 107028 Acrolein | 2.76E+00 | 1.05E-01 | 1.22E-05 | 2.13E+05 | 4.99E-03 | 1.22E-04 | 25 | 325.60 | 506.00 | 6,731 | 0.0E+00 | 2.0E-05 | L | | |
| 107062 1,2-Dichloroethane | 1.74E+01 | 1.04E-01 | 9.90E-06 | 8.52E+03 | 4.00E-02 | 9.77E-04 | 25 | 356.65 | 561.00 | 7,643 | 2.6E-05 | 0.0E+00 | L | | |
| 107131 Acrylonitrile | 5.90E+00 | 1.22E-01 | 1.34E-05 | 7.40E+04 | 4.21E-03 | 1.03E-04 | 25 | 350.30 | 519.00 | 7,786 | 6.8E-05 | 2.0E-03 | L | | |
| 108054 Vinyl acetate | 5.25E+00 | 8.50E-02 | 9.20E-06 | 2.00E+04 | 2.09E-02 | 5.10E-04 | 25 | 345.65 | 519.13 | 7,800 | 0.0E+00 | 2.0E-01 | L | | |
| 108101 Methylisobutylketone (4-methyl-2 | 9.06E+00 | 7.50E-02 | 7.80E-06 | 1.90E+04 | 5.64E-03 | 1.38E-04 | 25 | 389.50 | 571.00 | 8,243 | 0.0E+00 | 3.0E+00 | L | | |
| 108383 m-Xylene | 4.07E+02 | 7.00E-02 | 7.80E-06 | 1.61E+02 | 3.00E-01 | 7.32E-03 | 25 | 412.27 | 617.05 | 8,523 | 0.0E+00 | 1.0E-01 | L | | |
| 108678 1,3,5-Trimethylbenzene | 1.35E+03 | 6.02E-02 | 8.67E-06 | 2.00E+00 | 2.41E-01 | 5.87E-03 | 25 | 437.89 | 637.25 | 9,321 | 0.0E+00 | 6.0E-03 | L | | |
| 108872 Methylcyclohexane | 7.85E+01 | 7.35E-02 | 8.52E-06 | 1.40E+01 | 4.22E+00 | 1.03E-01 | 25 | 373.90 | 572.20 | 7,474 | 0.0E+00 | 3.0E+00 | L | | |
| 108883 Toluene | 1.82E+02 | 8.70E-02 | 8.60E-06 | 5.26E+02 | 2.72E-01 | 6.62E-03 | 25 | 383.78 | 591.79 | 7,930 | 0.0E+00 | 5.0E+00 | L | | |
| 108907 Chlorobenzene | 2.19E+02 | 7.30E-02 | 8.70E-06 | 4.72E+02 | 1.51E-01 | 3.69E-03 | 25 | 404.87 | 632.40 | 8,410 | 0.0E+00 | 5.0E-02 | L | | |
| 109693 1-Chlorobutane | 1.72E+01 | 8.26E-02 | 1.00E-05 | 1.10E+03 | 6.93E-01 | 1.69E-02 | 25 | 351.60 | 542.00 | 7,263 | 0.0E+00 | 1.4E+00 | L | | X |
| 110009 Furan | 1.86E+01 | 1.04E-01 | 1.22E-05 | 1.00E+04 | 2.21E-01 | 5.39E-03 | 25 | 304.60 | 490.20 | 6,477 | 0.0E+00 | 3.5E-03 | L | | X |
| 110543 Hexane | 4.34E+01 | 2.00E-01 | 7.77E-06 | 1.24E+01 | 6.82E+01 | 1.66E+00 | 25 | 341.70 | 508.00 | 6,895 | 0.0E+00 | 2.0E-01 | L | | |
| 111444 Bis(2-chloroethyl)ether | 1.55E+01 | 6.92E-02 | 7.53E-06 | 1.72E+04 | 7.36E-04 | 1.80E-05 | 25 | 451.15 | 659.79 | 10,803 | 3.3E-04 | 0.0E+00 | L | | |
| 115297 Endosulfan | 2.14E+03 | 1.15E-02 | 4.55E-06 | 5.10E-01 | 4.58E-04 | 1.12E-05 | 25 | 674.43 | 942.94 | 14,000 | 0.0E+00 | 2.1E-02 | S | | X |
| 118741 Hexachlorobenzene | 5.50E+04 | 5.42E-02 | 5.91E-06 | 5.00E-03 | 5.40E-02 | 1.32E-03 | 25 | 582.55 | 825.00 | 14,447 | 4.6E-04 | 2.8E-03 | S | | X |
| 120821 1,2,4-Trichlorobenzene | 1.78E+03 | 3.00E-02 | 8.23E-06 | 4.88E+01 | 5.81E-02 | 1.42E-03 | 25 | 486.15 | 725.00 | 10,471 | 0.0E+00 | 4.0E-03 | L | | |
| 123739 Crotonaldehyde (2-butenal) | 4.82E+00 | 9.56E-02 | 1.07E-05 | 3.69E+04 | 7.99E-04 | 1.95E-05 | 25 | 375.20 | 568.00 | 9 | 5.4E-04 | 0.0E+00 | L | X | |
| 124481 Chlorodibromomethane | 6.31E+01 | 1.96E-02 | 1.05E-05 | 2.60E+03 | 3.20E-02 | 7.81E-04 | 25 | 416.14 | 678.20 | 5,900 | 2.4E-05 | 7.0E-02 | L | X | X |
| 126987 Methacrylonitrile | 3.58E+01 | 1.12E-01 | 1.32E-05 | 2.54E+04 | 1.01E-02 | 2.46E-04 | 25 | 363.30 | 554.00 | 7,600 | 0.0E+00 | 7.0E-04 | L | | |
| 126998 2-Chloro-1,3-butadiene (chloropr | 6.73E+01 | 8.58E-02 | 1.03E-05 | 2.12E+03 | 4.91E-01 | 1.20E-02 | 25 | 332.40 | 525.00 | 8,075 | 0.0E+00 | 7.0E-03 | L | | |
| 127184 Tetrachloroethylene | 1.55E+02 | 7.20E-02 | 8.20E-06 | 2.00E+02 | 7.53E-01 | 1.84E-02 | 25 | 394.40 | 620.20 | 8,288 | 2.6E-07 | 4.0E-02 | L | | |
| 129000 Pyrene | 1.05E+05 | 2.72E-02 | 7.24E-06 | 1.35E+00 | 4.50E-04 | 1.10E-05 | 25 | 667.95 | 936 | 14370 | 0.0E+00 | 1.1E-01 | S | | X |
| 132649 Dibenzofuran | 5.15E+03 | 2.38E-02 | 6.00E-06 | 3.10E+00 | 5.15E-04 | 1.26E-05 | 25 | 560 | 824 | 66400 | 0.0E+00 | 1.4E-02 | S | | X |
| 135988 sec-Butylbenzene | 9.66E+02 | 5.70E-02 | 8.12E-06 | 3.94E+00 | 5.68E-01 | 1.39E-02 | 25 | 446.5 | 679 | 88730 | 0.0E+00 | 1.4E-01 | L | | X |
| 141786 Ethylacetate | 6.44E+00 | 7.32E-02 | 9.70E-06 | 8.03E+04 | 5.64E-03 | 1.38E-04 | 25 | 350.26 | 523.3 | 7633.66 | 0.0E+00 | 3.2E+00 | L | | X |
| 156592 cis-1,2-Dichloroethylene | 3.55E+01 | 7.36E-02 | 1.13E-05 | 3.50E+03 | 1.67E-01 | 4.07E-03 | 25 | 333.65 | 544 | 7192 | 0.0E+00 | 3.5E-02 | L | | X |
| 156605 trans-1,2-Dichloroethylene | 5.25E+01 | 7.07E-02 | 1.19E-05 | 6.30E+03 | 3.84E-01 | 9.36E-03 | 25 | 320.85 | 516.5 | 6717 | 0.0E+00 | 7.0E-02 | L | | X |
| 205992 Benzo(b)fluoranthene | 1.23E+06 | 2.26E-02 | 5.56E-06 | 1.50E-03 | 4.54E-03 | 1.11E-04 | 25 | 715.9 | 969.27 | 17000 | 2.1E-04 | 0.0E+00 | S | X | |
| 218019 Chrysene | 3.98E+05 | 2.48E-02 | 6.21E-06 | 6.30E-03 | 3.87E-03 | 9.44E-05 | 25 | 714.15 | 979 | 16455 | 2.1E-06 | 0.0E+00 | S | X | |
| 309002 Aldrin | 2.45E+06 | 1.32E-02 | 4.86E-06 | 1.70E-02 | 6.95E-03 | 1.70E-04 | 25 | 603.01 | 839.37 | 15000 | 4.9E-03 | 1.1E-04 | S | | X |
| 319846 alpha-HCH (alpha-BHC) | 1.23E+03 | 1.42E-02 | 7.34E-06 | 2.00E+00 | 4.34E-04 | 1.06E-05 | 25 | 596.55 | 839.36 | 15000 | 1.8E-03 | 0.0E+00 | S | | |
| 541731 1,3-Dichlorobenzene | 1.98E+03 | 6.92E-02 | 7.86E-06 | 1.34E+02 | 1.27E-01 | 3.09E-03 | 25 | 446 | 684 | 9230.18 | 0.0E+00 | 1.1E-01 | L | | X |
| 542756 1,3-Dichloropropene | 4.57E+01 | 6.26E-02 | 1.00E-05 | 2.80E+03 | 7.24E-01 | 1.77E-02 | 25 | 381.15 | 587.38 | 7900 | 4.0E-06 | 2.0E-02 | L | | |
| 630206 1,1,1,2-Tetrachloroethane | 1.16E+02 | 7.10E-02 | 7.90E-06 | 1.10E+03 | 9.90E-02 | 2.41E-03 | 25 | 403.5 | 624 | 9768.282525 | 7.4E-06 | 1.1E-01 | L | | X |
| 1634044 MTBE | 7.26E+00 | 1.02E-01 | 1.05E-05 | 5.10E+04 | 2.56E-02 | 6.23E-04 | 25 | 328.3 | 497.1 | 6677.66 | 0.0E+00 | 3.0E+00 | L | | |
| 7439976 Mercury (elemental) | 5.20E+01 | 3.07E-02 | 6.30E-06 | 2.00E+01 | 4.40E-01 | 1.07E-02 | 25 | 629.88 | 1750 | 14127 | 0.0E+00 | 3.0E-04 | L | | |

SL-ADV
Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES: X

**OR**

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES:

| ENTER Chemical CAS No. (numbers only, no dashes) | ENTER Initial soil conc., $C_R$ (µg/kg) | Chemical |
|---|---|---|
| 79016 | | Trichloroethylene |

MORE ↓

| ENTER Average soil temperature, $T_S$ (°C) | ENTER Depth below grade to bottom of enclosed space floor, $L_F$ (cm) | ENTER Depth below grade to top of contamination, $L_t$ (cm) | ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) $L_b$ (cm) | ENTER Thickness of soil stratum A, $h_A$ (cm) | ENTER Thickness of soil stratum B, (Enter value or 0) $h_B$ (cm) | ENTER Thickness of soil stratum C, (Enter value or 0) $h_C$ (cm) | ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability) | OR | ENTER User-defined stratum A soil vapor permeability, $k_v$ ($cm^2$) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Totals must add up to value of $L_t$ (cell G28) | | | | | |
| 10 | 15 | 91.4 | 182.9 | 91.4 | 0 | 0 | | | 1.00E-08 |

MORE ↓

| ENTER Stratum A SCS soil type (Lookup Soil Parameters) | ENTER Stratum A soil dry bulk density, $\rho_b^A$ ($g/cm^3$) | ENTER Stratum A soil total porosity, $n^A$ (unitless) | ENTER Stratum A soil water-filled porosity, $\theta_w^A$ ($cm^3/cm^3$) | ENTER Stratum A soil organic carbon fraction, $f_{oc}^A$ (unitless) | ENTER Stratum B SCS soil type (Lookup Soil Parameters) | ENTER Stratum B soil dry bulk density, $\rho_b^B$ ($g/cm^3$) | ENTER Stratum B soil total porosity, $n^B$ (unitless) | ENTER Stratum B soil water-filled porosity, $\theta_w^B$ ($cm^3/cm^3$) | ENTER Stratum B soil organic carbon fraction, $f_{oc}^B$ (unitless) | ENTER Stratum C SCS soil type (Lookup Soil Parameters) | ENTER Stratum C soil dry bulk density, $\rho_b^C$ ($g/cm^3$) | ENTER Stratum C soil total porosity, $n^C$ (unitless) | ENTER Stratum C soil water-filled porosity, $\theta_w^C$ ($cm^3/cm^3$) | ENTER Stratum C soil organic carbon fraction, $f_{oc}^C$ (unitless) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.65 | 0.439 | 0.045 | 0.002 | | | | | | | | | | |

MORE ↓

| ENTER Enclosed space floor thickness, $L_{crack}$ (cm) | ENTER Soil-bldg. pressure differential, $\Delta P$ ($g/cm\text{-}s^2$) | ENTER Enclosed space floor length, $L_B$ (cm) | ENTER Enclosed space floor width, $W_B$ (cm) | ENTER Enclosed space height, $H_B$ (cm) | ENTER Floor-wall seam crack width, w (cm) | ENTER Indoor air exchange rate, ER (1/h) | ENTER Average vapor flow rate into bldg. OR Leave blank to calculate $Q_{soil}$ (L/m) |
|---|---|---|---|---|---|---|---|
| 10 | 40 | 1000 | 1000 | 244 | 0.1 | 0.25 | |

| ENTER Averaging time for carcinogens, $AT_C$ (yrs) | ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs) | ENTER Exposure duration, ED (yrs) | ENTER Exposure frequency, EF (days/yr) | ENTER Target risk for carcinogens, TR (unitless) | ENTER Target hazard quotient for noncarcinogens, THQ (unitless) |
|---|---|---|---|---|---|
| 70 | 30 | 30 | 350 | 1.0E-05 | 1 |
| | | | | Used to calculate risk-based soil concentration. | |

END

CHEMICAL PROPERTIES SHEET

| Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Pure component water solubility, S (mg/L) | Unit risk factor, URF ($\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) | Physical state at soil temperature, (S,L,G) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.90E-02 | 9.10E-06 | 1.03E-02 | 25 | 7,505 | 360.36 | 544.20 | 1.66E+02 | 1.47E+03 | 4.1E-06 | 2.0E-03 | L |

**END**

INTERMEDIATE CALCULATIONS SHEET

| Exposure duration, $\tau$ (sec) | Source-building separation, $L_T$ (cm) | Stratum A soil air-filled porosity, $\theta_a^A$ ($cm^3/cm^3$) | Stratum B soil air-filled porosity, $\theta_a^B$ ($cm^3/cm^3$) | Stratum C soil air-filled porosity, $\theta_a^C$ ($cm^3/cm^3$) | Stratum A effective total fluid saturation, $S_{te}$ ($cm^3/cm^3$) | Stratum A soil intrinsic permeability, $k_i$ ($cm^2$) | Stratum A soil relative air permeability, $k_{rg}$ ($cm^2$) | Stratum A soil effective vapor permeability, $k_v$ ($cm^2$) | Floor-wall seam perimeter, $X_{crack}$ (cm) | Initial soil concentration used, $C_R$ ($\mu g/kg$) | Bldg. ventilation rate, $Q_{building}$ ($cm^3/s$) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.46E+08 | 76.4 | 0.394 | ERROR | ERROR | #N/A | #N/A | #N/A | 1.00E-08 | 4,000 | 1.00E+00 | 1.69E+04 |

| Area of enclosed space below grade, $A_B$ ($cm^2$) | Crack-to-total area ratio, $\eta$ (unitless) | Crack depth below grade, $Z_{crack}$ (cm) | Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol) | Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-$m^3$/mol) | Henry's law constant at ave. soil temperature, $H'_{TS}$ (unitless) | Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s) | Stratum A effective diffusion coefficient, $D^{eff}_A$ ($cm^2/s$) | Stratum B effective diffusion coefficient, $D^{eff}_B$ ($cm^2/s$) | Stratum C effective diffusion coefficient, $D^{eff}_C$ ($cm^2/s$) | Total overall effective diffusion coefficient, $D^{eff}_T$ ($cm^2/s$) | Diffusion path length, $L_d$ (cm) | Convection path length, $L_p$ (cm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.06E+06 | 3.77E-04 | 15 | 8,557 | 4.78E-03 | 2.06E-01 | 1.75E-04 | 1.84E-02 | 0.00E+00 | 0.00E+00 | 1.84E-02 | 76.4 | 15 |

| Soil-water partition coefficient, $K_d$ ($cm^3/g$) | Source vapor conc., $C_{source}$ ($\mu g/m^3$) | Crack radius, $r_{crack}$ (cm) | Average vapor flow rate into bldg., $Q_{soil}$ ($cm^3/s$) | Crack effective diffusion coefficient, $D^{crack}$ ($cm^2/s$) | Area of crack, $A_{crack}$ ($cm^2$) | Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless) | Infinite source indoor attenuation coefficient, $\alpha$ (unitless) | Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source $\beta$ term (unitless) | Finite source $\psi$ term $(sec)^{-1}$ | Time for source depletion, $\tau_D$ (sec) | Exposure duration > time for source depletion (YES/NO) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.32E-01 | 5.04E+02 | 0.10 | 1.00E+01 | 1.84E-02 | 4.00E+02 | 8.26E+05 | NA | NA | 2.65E+01 | 9.64E-07 | 3.36E+07 | YES |

| Finite source indoor attenuation coefficient, $<\alpha>$ (unitless) | Mass limit bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Final finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) |
|---|---|---|---|---|---|
| NA | 9.98E-03 | NA | 9.98E-03 | 4.1E-06 | 2.0E-03 |

**END**

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

| Indoor exposure soil conc., carcinogen (µg/kg) | Indoor exposure soil conc., noncarcinogen (µg/kg) | Risk-based indoor exposure soil conc., (µg/kg) | Soil saturation conc., $C_{sat}$ (µg/kg) | Final indoor exposure soil conc., (µg/kg) |
|---|---|---|---|---|
| 5.95E+02 | 2.09E+02 | 2.09E+02 | 6.01E+05 | 2.09E+02 |

INCREMENTAL RISK CALCULATIONS:

| Incremental risk from vapor intrusion to indoor air, carcinogen (unitless) | Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless) |
|---|---|
| NA | NA |

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)
MESSAGE: The values of Csource and Cbuilding on the INTERCALCS worksheet are based on unity and do not represent actual values.
MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

**SCROLL DOWN TO "END"**

**END**

VLOOKUP TABLES

Soil Properties Lookup Table

| SCS Soil Type | $K_s$ (cm/h) | $\alpha_1$ (1/cm) | N (unitless) | M (unitless) | n ($cm^3/cm^3$) | $\theta_r$ ($cm^3/cm^3$) | Mean Grain Diameter (cm) | Bulk Density ($g/cm^3$) | $\theta_w$ ($cm^3/cm^3$) | SCS Soil Name |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.61 | 0.01496 | 1.253 | 0.2019 | 0.459 | 0.098 | 0.0092 | 1.43 | 0.215 | Clay |
| CL | 0.34 | 0.01581 | 1.416 | 0.2938 | 0.442 | 0.079 | 0.016 | 1.48 | 0.168 | Clay Loam |
| L | 0.50 | 0.01112 | 1.472 | 0.3207 | 0.399 | 0.061 | 0.020 | 1.59 | 0.148 | Loam |
| LS | 4.38 | 0.03475 | 1.746 | 0.4273 | 0.390 | 0.049 | 0.040 | 1.62 | 0.076 | Loamy Sand |
| S | 26.78 | 0.03524 | 3.177 | 0.6852 | 0.375 | 0.053 | 0.044 | 1.66 | 0.054 | Sand |
| SC | 0.47 | 0.03342 | 1.208 | 0.1722 | 0.385 | 0.117 | 0.025 | 1.63 | 0.197 | Sandy Clay |
| SCL | 0.55 | 0.02109 | 1.330 | 0.2481 | 0.384 | 0.063 | 0.029 | 1.63 | 0.146 | Sandy Clay Loam |
| SI | 1.82 | 0.00658 | 1.679 | 0.4044 | 0.489 | 0.050 | 0.0046 | 1.35 | 0.167 | Silt |
| SIC | 0.40 | 0.01622 | 1.321 | 0.2430 | 0.481 | 0.111 | 0.0039 | 1.38 | 0.216 | Silty Clay |
| SICL | 0.46 | 0.00839 | 1.521 | 0.3425 | 0.482 | 0.090 | 0.0056 | 1.37 | 0.198 | Silty Clay Loam |
| SIL | 0.76 | 0.00506 | 1.663 | 0.3987 | 0.439 | 0.065 | 0.011 | 1.49 | 0.180 | Silt Loam |
| SL | 1.60 | 0.02667 | 1.449 | 0.3099 | 0.387 | 0.039 | 0.030 | 1.62 | 0.103 | Sandy Loam |

Chemical Properties Lookup Table

| CAS No. | Chemical | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Pure component water solubility, S (mg/L) | Henry's law constant H' (unitless) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC (mg/$m^3$) | Physical state at soil temperature, (S,L,G) | URF extrapolated (X) | RfC extrapolated (X) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56235 | Carbon tetrachloride | 1.74E+02 | 7.80E-02 | 8.80E-06 | 7.93E+02 | 1.24E+00 | 3.03E-02 | 25 | 349.90 | 556.60 | 7,127 | 1.5E-05 | 0.0E+00 | L | | |
| 57749 | Chlordane | 1.20E+05 | 1.18E-02 | 4.37E-06 | 5.60E-02 | 1.99E-03 | 4.85E-05 | 25 | 624.24 | 885.73 | 14,000 | 1.0E-04 | 7.0E-04 | S | | |
| 58899 | gamma-HCH (Lindane) | 1.07E+03 | 1.42E-02 | 7.34E-06 | 7.30E+00 | 5.73E-04 | 1.40E-05 | 25 | 596.55 | 839.36 | 15,000 | 3.7E-04 | 1.1E-03 | S | X | X |
| 60297 | Ethyl ether | 5.73E+00 | 7.82E-02 | 8.61E-06 | 5.68E+04 | 1.35E+00 | 3.29E-02 | 25 | 307.50 | 466.74 | 6,338 | 0.0E+00 | 7.0E-01 | L | | X |
| 60571 | Dieldrin | 2.14E+04 | 1.25E-02 | 4.74E-06 | 1.95E-01 | 6.18E-04 | 1.51E-05 | 25 | 613.32 | 842.25 | 17,000 | 4.6E-03 | 1.8E-04 | S | | X |
| 67641 | Acetone | 5.75E-01 | 1.24E-01 | 1.14E-05 | 1.00E+06 | 1.59E-03 | 3.87E-05 | 25 | 329.20 | 508.10 | 6,955 | 0.0E+00 | 3.1E+01 | L | | X |
| 67663 | Chloroform | 3.98E+01 | 1.04E-01 | 1.00E-05 | 7.92E+03 | 1.50E-01 | 3.66E-03 | 25 | 334.32 | 536.40 | 6,988 | 2.3E-05 | 0.0E+00 | L | | |
| 67721 | Hexachloroethane | 1.78E+03 | 2.50E-03 | 6.80E-06 | 5.00E+01 | 1.59E-01 | 3.88E-03 | 25 | 458.00 | 695.00 | 9,510 | 4.0E-06 | 3.5E-03 | S | | X |
| 71432 | Benzene | 5.89E+01 | 8.80E-02 | 9.80E-06 | 1.79E+03 | 2.27E-01 | 5.54E-03 | 25 | 353.24 | 562.16 | 7,342 | 7.8E-06 | 3.0E-02 | L | | |
| 71556 | 1,1,1-Trichloroethane | 1.10E+02 | 7.80E-02 | 8.80E-06 | 1.33E+03 | 7.03E-01 | 1.72E-02 | 25 | 347.24 | 545.00 | 7,136 | 0.0E+00 | 2.2E+00 | L | | |
| 72435 | Methoxychlor | 9.77E+04 | 1.56E-02 | 4.46E-06 | 1.00E-01 | 6.46E-04 | 1.58E-05 | 25 | 651.02 | 848.49 | 16,000 | 0.0E+00 | 1.8E-02 | S | | X |
| 72559 | DDE | 4.47E+06 | 1.44E-02 | 5.87E-06 | 1.20E-01 | 8.59E-04 | 2.09E-05 | 25 | 636.44 | 860.38 | 15,000 | 9.7E-05 | 0.0E+00 | S | X | |
| 74839 | Methyl bromide | 1.05E+01 | 7.28E-02 | 1.21E-05 | 1.52E+04 | 2.55E-01 | 6.22E-03 | 25 | 276.71 | 467.00 | 5,714 | 0.0E+00 | 5.0E-03 | G | | |
| 74873 | Methyl chloride (chloromethane) | 2.12E+00 | 1.26E-01 | 6.50E-06 | 5.33E+03 | 3.61E-01 | 8.80E-03 | 25 | 249.00 | 416.25 | 5,115 | 1.0E-06 | 9.0E-02 | L | | |
| 74908 | Hydrogen cyanide | 3.80E+00 | 1.93E-01 | 2.10E-05 | 1.00E+06 | 5.44E-03 | 1.33E-04 | 25 | 299.00 | 456.70 | 6,676 | 0.0E+00 | 3.0E-03 | L | | |
| 74953 | Methylene bromide | 1.26E+01 | 4.30E-02 | 8.44E-06 | 1.19E+04 | 3.52E-02 | 8.59E-04 | 25 | 370.00 | 583.00 | 7,868 | 0.0E+00 | 3.5E-02 | L | | X |
| 75003 | Chloroethane (ethyl chloride) | 4.40E+00 | 2.71E-01 | 1.15E-05 | 5.68E+03 | 3.61E-01 | 8.80E-03 | 25 | 285.30 | 460.40 | 5,879 | 8.3E-07 | 1.0E+01 | L | X | |
| 75014 | Vinyl chloride (chloroethene) | 1.86E+01 | 1.06E-01 | 1.23E-05 | 8.80E+03 | 1.10E+00 | 2.69E-02 | 25 | 259.25 | 432.00 | 5,250 | 8.8E-06 | 1.0E-01 | G | | |
| 75058 | Acetonitrile | 4.20E+00 | 1.28E-01 | 1.66E-05 | 1.00E+06 | 1.42E-03 | 3.45E-05 | 25 | 354.60 | 545.50 | 7,110 | 0.0E+00 | 6.0E-02 | L | | |
| 75070 | Acetaldehyde | 1.06E+00 | 1.24E-01 | 1.41E-05 | 1.00E+06 | 3.23E-03 | 7.87E-05 | 25 | 293.10 | 466.00 | 6,157 | 2.2E-06 | 9.0E-03 | L | | |
| 75092 | Methylene chloride | 1.17E+01 | 1.01E-01 | 1.17E-05 | 1.30E+04 | 8.96E-02 | 2.18E-03 | 25 | 313.00 | 510.00 | 6,706 | 4.7E-07 | 3.0E+00 | L | | |
| 75150 | Carbon disulfide | 4.57E+01 | 1.04E-01 | 1.00E-05 | 1.19E+03 | 1.24E+00 | 3.02E-02 | 25 | 319.00 | 552.00 | 6,391 | 0.0E+00 | 7.0E-01 | L | | |
| 75218 | Ethylene oxide | 1.33E+00 | 1.04E-01 | 1.45E-05 | 3.04E+05 | 2.27E-02 | 5.54E-04 | 25 | 283.60 | 469.00 | 6,104 | 1.0E-04 | 0.0E+00 | L | | |
| 75252 | Bromoform | 8.71E+01 | 1.49E-02 | 1.03E-05 | 3.10E+03 | 2.41E-02 | 5.88E-04 | 25 | 422.35 | 696.00 | 9,479 | 1.1E-06 | 7.0E-02 | L | | X |
| 75274 | Bromodichloromethane | 5.50E+01 | 2.98E-02 | 1.06E-05 | 6.74E+03 | 6.54E-02 | 1.60E-03 | 25 | 363.15 | 585.85 | 7,800 | 1.8E-05 | 7.0E-02 | L | X | X |
| 75296 | 2-Chloropropane | 9.14E+00 | 8.88E-02 | 1.01E-05 | 3.73E+03 | 5.93E-01 | 1.45E-02 | 25 | 308.70 | 485.00 | 6,286 | 0.0E+00 | 1.0E-01 | L | | |
| 75343 | 1,1-Dichloroethane | 3.16E+01 | 7.42E-02 | 1.05E-05 | 5.06E+03 | 2.30E-01 | 5.61E-03 | 25 | 330.55 | 523.00 | 6,895 | 0.0E+00 | 5.0E-01 | L | | |
| 75354 | 1,1-Dichloroethylene | 5.89E+01 | 9.00E-02 | 1.04E-05 | 2.25E+03 | 1.07E+00 | 2.60E-02 | 25 | 304.75 | 576.05 | 6,247 | 0.0E+00 | 2.0E-01 | L | | |
| 75456 | Chlorodifluoromethane | 4.79E+01 | 1.01E-01 | 1.28E-05 | 2.00E+00 | 1.10E+00 | 2.70E-02 | 25 | 232.40 | 369.30 | 4,836 | 0.0E+00 | 5.0E+01 | L | | |
| 75694 | Trichlorofluoromethane | 4.97E+02 | 8.70E-02 | 9.70E-06 | 1.10E+03 | 3.97E+00 | 9.68E-02 | 25 | 296.70 | 471.00 | 5,999 | 0.0E+00 | 7.0E-01 | L | | |
| 75718 | Dichlorodifluoromethane | 4.57E+02 | 6.65E-02 | 9.92E-06 | 2.80E+02 | 1.40E+01 | 3.42E-01 | 25 | 243.20 | 384.95 | 9,421 | 0.0E+00 | 2.0E-01 | L | | |
| 76131 | 1,1,2-Trichloro-1,2,2-trifluoroetha | 1.11E+04 | 7.80E-02 | 8.20E-06 | 1.70E+02 | 1.97E+01 | 4.80E-01 | 25 | 320.70 | 487.30 | 6,463 | 0.0E+00 | 3.0E+01 | L | | |
| 76448 | Heptachlor | 1.41E+06 | 1.12E-02 | 5.69E-06 | 1.80E-01 | 6.05E+01 | 1.48E+00 | 25 | 603.69 | 846.31 | 13,000 | 1.3E-03 | 1.8E-03 | S | | X |
| 77474 | Hexachlorocyclopentadiene | 2.00E+05 | 1.61E-02 | 7.21E-06 | 1.80E+00 | 1.10E+00 | 2.69E-02 | 25 | 512.15 | 746.00 | 10,931 | 0.0E+00 | 2.0E-04 | L | | |
| 78831 | Isobutanol | 2.59E+00 | 8.60E-02 | 9.30E-06 | 8.50E+04 | 4.83E-04 | 1.18E-05 | 25 | 381.04 | 547.78 | 10,936 | 0.0E+00 | 1.1E+00 | L | | X |
| 78875 | 1,2-Dichloropropane | 4.37E+01 | 7.82E-02 | 8.73E-06 | 2.80E+03 | 1.15E-01 | 2.79E-03 | 25 | 369.52 | 572.00 | 7,590 | 1.9E-05 | 4.0E-03 | L | X | |
| 78933 | Methylethylketone (2-butanone) | 2.30E+00 | 8.08E-02 | 9.80E-06 | 2.23E+05 | 2.29E-03 | 5.58E-05 | 25 | 352.50 | 536.78 | 7,481 | 0.0E+00 | 5.0E+00 | L | | |
| 79005 | 1,1,2-Trichloroethane | 5.01E+01 | 7.80E-02 | 8.80E-06 | 4.42E+03 | 3.73E-02 | 9.11E-04 | 25 | 386.15 | 602.00 | 8,322 | 1.6E-05 | 1.4E-02 | L | | X |
| 79016 | Trichloroethylene | 1.66E+02 | 7.90E-02 | 9.10E-06 | 1.47E+03 | 4.21E-01 | 1.03E-02 | 25 | 360.36 | 544.20 | 7,505 | 4.1E-06 | 2.0E-03 | L | X | |
| 79209 | Methyl acetate | 3.26E+00 | 1.04E-01 | 1.00E-05 | 2.00E+03 | 4.84E-03 | 1.18E-04 | 25 | 329.80 | 506.70 | 7,260 | 0.0E+00 | 3.5E+00 | L | | X |
| 79345 | 1,1,2,2-Tetrachloroethane | 9.33E+01 | 7.10E-02 | 7.90E-06 | 2.96E+03 | 1.41E-02 | 3.44E-04 | 25 | 419.60 | 661.15 | 8,996 | 5.8E-05 | 2.1E-01 | L | | X |
| 79469 | 2-Nitropropane | 1.17E+01 | 9.23E-02 | 1.01E-05 | 1.70E+04 | 5.03E-03 | 1.23E-04 | 25 | 393.20 | 594.00 | 8,383 | 2.7E-03 | 2.0E-02 | L | | |
| 80626 | Methylmethacrylate | 6.98E+00 | 7.70E-02 | 8.60E-06 | 1.50E+04 | 1.38E-02 | 3.36E-04 | 25 | 373.50 | 567.00 | 8,975 | 0.0E+00 | 7.0E-01 | L | | |
| 83329 | Acenaphthene | 7.08E+03 | 4.21E-02 | 7.69E-06 | 3.57E+00 | 6.34E-03 | 1.55E-04 | 25 | 550.54 | 803.15 | 12,155 | 0.0E+00 | 2.1E-01 | S | | X |
| 86737 | Fluorene | 1.38E+04 | 3.63E-02 | 7.88E-06 | 1.98E+00 | 2.60E-03 | 6.34E-05 | 25 | 570.44 | 870.00 | 12,666 | 0.0E+00 | 1.4E-01 | S | | X |
| 87683 | Hexachloro-1,3-butadiene | 5.37E+04 | 5.61E-02 | 6.16E-06 | 3.20E+00 | 3.33E-01 | 8.13E-03 | 25 | 486.15 | 738.00 | 10,206 | 2.2E-05 | 7.0E-04 | L | | X |
| 88722 | o-Nitrotoluene | 3.24E+02 | 5.87E-02 | 8.67E-06 | 6.50E+02 | 5.11E-04 | 1.25E-05 | 25 | 495.00 | 720.00 | 12,239 | 0.0E+00 | 3.5E-02 | L | | X |
| 91203 | Naphthalene | 2.00E+03 | 5.90E-02 | 7.50E-06 | 3.10E+01 | 1.98E-02 | 4.82E-04 | 25 | 491.14 | 748.40 | 10,373 | 3.4E-05 | 3.0E-03 | S | | |
| 91576 | 2-Methylnaphthalene | 2.81E+03 | 5.22E-02 | 7.75E-06 | 2.46E+01 | 2.12E-02 | 5.17E-04 | 25 | 514.26 | 761.00 | 12,600 | 0.0E+00 | 7.0E-02 | S | | X |
| 92524 | Biphenyl | 4.38E+03 | 4.04E-02 | 8.15E-06 | 7.45E+00 | 1.23E-02 | 2.99E-04 | 25 | 529.10 | 789.00 | 10,890 | 0.0E+00 | 1.8E-01 | S | | X |
| 95476 | o-Xylene | 3.63E+02 | 8.70E-02 | 1.00E-05 | 1.78E+02 | 2.12E-01 | 5.18E-03 | 25 | 417.60 | 630.30 | 8,661 | 0.0E+00 | 1.0E-01 | L | | |
| 95501 | 1,2-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 1.56E+02 | 7.77E-02 | 1.90E-03 | 25 | 453.57 | 705.00 | 9,700 | 0.0E+00 | 2.0E-01 | L | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95578 2-Chlorophenol | 3.88E+02 | 5.01E-02 | 9.46E-06 | 2.20E+04 | 1.60E-02 | 3.90E-04 | 25 | 447.53 | 675.00 | 9,572 | 0.0E+00 | 1.8E-02 | L | | X |
| 95636 1,2,4-Trimethylbenzene | 1.35E+03 | 6.06E-02 | 7.92E-06 | 5.70E+01 | 2.52E-01 | 6.14E-03 | 25 | 442.30 | 649.17 | 9,369 | 0.0E+00 | 6.0E-03 | L | | |
| 96184 1,2,3-Trichloropropane | 2.20E+01 | 7.10E-02 | 7.90E-06 | 1.75E+03 | 1.67E-02 | 4.08E-04 | 25 | 430.00 | 652.00 | 9,171 | 5.7E-04 | 4.9E-03 | L | X | |
| 96333 Methyl acrylate | 4.53E+00 | 9.76E-02 | 1.02E-05 | 6.00E+04 | 7.68E-03 | 1.87E-04 | 25 | 353.70 | 536.00 | 7,749 | 0.0E+00 | 1.1E-01 | L | | X |
| 97632 Ethylmethacrylate | 2.95E+01 | 6.53E-02 | 8.37E-06 | 3.67E+03 | 3.44E-02 | 8.40E-04 | 25 | 390.00 | 571.00 | 10,957 | 0.0E+00 | 3.2E-01 | L | | X |
| 98066 tert-Butylbenzene | 7.71E+02 | 5.65E-02 | 8.02E-06 | 2.95E+01 | 4.87E-01 | 1.19E-02 | 25 | 442.10 | 1220.00 | 8,980 | 0.0E+00 | 1.4E-01 | L | | X |
| 98828 Cumene | 4.89E+02 | 6.50E-02 | 7.10E-06 | 6.13E+01 | 4.74E+01 | 1.46E-02 | 25 | 425.56 | 631.10 | 10,335 | 0.0E+00 | 4.0E-01 | L | | |
| 98862 Acetophenone | 5.77E+01 | 6.00E-02 | 8.73E-06 | 6.13E+03 | 4.38E-04 | 1.07E-05 | 25 | 475.00 | 709.50 | 11,732 | 0.0E+00 | 3.5E-01 | S,L | | X |
| 98953 Nitrobenzene | 6.46E+01 | 7.60E-02 | 8.60E-06 | 2.09E+03 | 9.82E-04 | 2.39E-05 | 25 | 483.95 | 719.00 | 10,566 | 0.0E+00 | 2.0E-03 | L | | |
| 100414 Ethylbenzene | 3.63E+02 | 7.50E-02 | 7.80E-06 | 1.69E+02 | 3.22E-01 | 7.86E-03 | 25 | 409.34 | 617.20 | 8,501 | 0.0E+00 | 1.0E+00 | L | | |
| 100425 Styrene | 7.76E+02 | 7.10E-02 | 8.00E-06 | 3.10E+02 | 1.12E-01 | 2.74E-03 | 25 | 418.31 | 636.00 | 8,737 | 0.0E+00 | 1.0E+00 | L | | |
| 100447 Benzylchloride | 6.14E+01 | 7.50E-02 | 7.80E-06 | 5.25E+02 | 1.70E-02 | 4.14E-04 | 25 | 452.00 | 685.00 | 8,773 | 4.9E-05 | 0.0E+00 | L | X | |
| 100527 Benzaldehyde | 4.59E+01 | 7.21E-02 | 9.07E-06 | 3.30E+03 | 9.73E-04 | 2.37E-05 | 25 | 452.00 | 695.00 | 11,658 | 0.0E+00 | 3.5E-01 | L | | X |
| 103651 n-Propylbenzene | 5.62E+02 | 6.01E-02 | 7.83E-06 | 6.00E+01 | 4.37E-01 | 1.07E-02 | 25 | 432.20 | 630.00 | 9,123 | 0.0E+00 | 1.4E-01 | L | | X |
| 104518 n-Butylbenzene | 1.11E+03 | 5.70E-02 | 8.12E-06 | 2.00E+00 | 5.38E-01 | 1.31E-02 | 25 | 456.46 | 660.50 | 9,290 | 0.0E+00 | 1.4E-01 | L | | X |
| 106423 p-Xylene | 3.89E+02 | 7.69E-02 | 8.44E-06 | 1.85E+02 | 3.13E-01 | 7.64E-03 | 25 | 411.52 | 616.20 | 8,525 | 0.0E+00 | 1.0E-01 | L | | |
| 106467 1,4-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 7.90E+01 | 9.82E-02 | 2.39E-03 | 25 | 447.21 | 684.75 | 9,271 | 0.0E+00 | 8.0E-01 | S | | |
| 106934 1,2-Dibromoethane (ethylene dib | 2.50E+01 | 2.17E-02 | 1.19E-05 | 4.18E+03 | 3.04E-02 | 7.41E-04 | 25 | 404.60 | 583.00 | 8,310 | 2.2E-04 | 2.0E-04 | L | | |
| 106990 1,3-Butadiene | 1.91E+01 | 2.49E-01 | 1.08E-05 | 7.35E+02 | 3.01E+00 | 7.34E-02 | 25 | 268.60 | 425.00 | 5,370 | 3.0E-02 | 2.0E-03 | L | | |
| 107028 Acrolein | 2.76E+00 | 1.05E-01 | 1.22E-05 | 2.13E+05 | 4.99E-03 | 1.22E-04 | 25 | 325.60 | 506.00 | 6,731 | 0.0E+00 | 2.0E-05 | L | | |
| 107062 1,2-Dichloroethane | 1.74E+01 | 1.04E-01 | 9.90E-06 | 8.52E+03 | 4.00E-02 | 9.77E-04 | 25 | 356.65 | 561.00 | 7,643 | 2.6E-05 | 0.0E+00 | L | | |
| 107131 Acrylonitrile | 5.90E+00 | 1.22E-01 | 1.34E-05 | 7.40E+04 | 4.21E-03 | 1.03E-04 | 25 | 350.30 | 519.00 | 7,786 | 6.8E-05 | 2.0E-03 | L | | |
| 108054 Vinyl acetate | 5.25E+00 | 8.50E-02 | 9.20E-06 | 2.00E+04 | 2.09E-02 | 5.10E-04 | 25 | 345.65 | 519.13 | 7,800 | 0.0E+00 | 2.0E-01 | L | | |
| 108101 Methylisobutylketone (4-methyl-2 | 9.06E+00 | 7.50E-02 | 7.80E-06 | 1.90E+04 | 5.64E-03 | 1.38E-04 | 25 | 389.50 | 571.00 | 8,243 | 0.0E+00 | 3.0E+00 | L | | |
| 108383 m-Xylene | 4.07E+02 | 7.00E-02 | 7.80E-06 | 1.61E+02 | 3.00E-01 | 7.32E-03 | 25 | 412.27 | 617.05 | 8,523 | 0.0E+00 | 1.0E-01 | L | | |
| 108678 1,3,5-Trimethylbenzene | 1.35E+03 | 6.02E-02 | 8.67E-06 | 2.00E+00 | 2.41E-01 | 5.87E-03 | 25 | 437.89 | 637.25 | 9,321 | 0.0E+00 | 6.0E-03 | L | | |
| 108872 Methylcyclohexane | 7.85E+01 | 7.35E-02 | 8.52E-06 | 1.40E+01 | 4.22E+00 | 1.03E-01 | 25 | 373.90 | 572.20 | 7,474 | 0.0E+00 | 3.0E+00 | L | | |
| 108883 Toluene | 1.82E+02 | 8.70E-02 | 8.60E-06 | 5.26E+02 | 2.72E-01 | 6.62E-03 | 25 | 383.78 | 591.79 | 7,930 | 0.0E+00 | 4.0E-01 | L | | |
| 108907 Chlorobenzene | 2.19E+02 | 7.30E-02 | 8.70E-06 | 4.72E+02 | 1.51E-01 | 3.69E-03 | 25 | 404.87 | 632.40 | 8,410 | 0.0E+00 | 6.0E-02 | L | | |
| 109693 1-Chlorobutane | 1.72E+01 | 8.26E-02 | 1.00E-05 | 1.10E+03 | 6.93E-01 | 1.69E-02 | 25 | 351.60 | 542.00 | 7,263 | 0.0E+00 | 1.4E+00 | L | | X |
| 110009 Furan | 1.86E+01 | 1.04E-01 | 1.22E-05 | 1.00E+04 | 2.21E-01 | 5.39E-03 | 25 | 304.60 | 490.20 | 6,477 | 0.0E+00 | 3.5E-03 | L | | X |
| 110543 Hexane | 4.34E+01 | 2.00E-01 | 7.77E-06 | 1.24E+01 | 6.82E+01 | 1.66E+00 | 25 | 341.70 | 508.00 | 6,895 | 0.0E+00 | 2.0E-01 | L | | |
| 111444 Bis(2-chloroethyl)ether | 1.55E+01 | 6.92E-02 | 7.53E-06 | 1.72E+04 | 7.36E-04 | 1.80E-05 | 25 | 451.15 | 659.79 | 10,803 | 3.3E-04 | 0.0E+00 | L | | |
| 115297 Endosulfan | 2.14E+03 | 1.15E-02 | 4.55E-06 | 5.10E-01 | 4.58E-04 | 1.12E-05 | 25 | 674.43 | 942.94 | 14,000 | 0.0E+00 | 2.1E-02 | S | | X |
| 118741 Hexachlorobenzene | 5.50E+04 | 5.42E-02 | 5.91E-06 | 5.00E-03 | 5.40E-02 | 1.32E-03 | 25 | 582.55 | 825.00 | 14,447 | 4.6E-04 | 2.8E-03 | S | | X |
| 120821 1,2,4-Trichlorobenzene | 1.78E+03 | 3.00E-02 | 8.23E-06 | 4.88E+01 | 5.81E-02 | 1.42E-03 | 25 | 486.15 | 725.00 | 10,471 | 0.0E+00 | 4.0E-03 | L | | |
| 123739 Crotonaldehyde (2-butenal) | 4.82E+00 | 9.56E-02 | 1.07E-05 | 3.69E+04 | 7.99E-04 | 1.95E-05 | 25 | 375.20 | 568.00 | 9 | 5.4E-04 | 0.0E+00 | L | X | |
| 124481 Chlorodibromomethane | 6.31E+01 | 1.96E-02 | 1.05E-05 | 2.60E+03 | 3.20E-02 | 7.81E-04 | 25 | 416.14 | 678.20 | 5,900 | 2.4E-05 | 7.0E-02 | L | X | X |
| 126987 Methacrylonitrile | 3.58E+01 | 1.12E-01 | 1.32E-05 | 2.54E+04 | 1.01E-02 | 2.46E-04 | 25 | 363.30 | 554.00 | 7,600 | 0.0E+00 | 7.0E-04 | L | | |
| 126998 2-Chloro-1,3-butadiene (chloropr | 6.73E+01 | 8.58E-02 | 1.03E-05 | 2.12E+03 | 4.91E-01 | 1.20E-02 | 25 | 332.40 | 525.00 | 8,075 | 0.0E+00 | 7.0E-03 | L | | |
| 127184 Tetrachloroethylene | 1.55E+02 | 7.20E-02 | 8.20E-06 | 2.00E+02 | 7.53E-01 | 1.84E-02 | 25 | 394.40 | 620.20 | 8,288 | 5.9E-06 | 6.0E-01 | L | | |
| 129000 Pyrene | 1.05E+05 | 2.72E-02 | 7.24E-06 | 1.35E+00 | 4.50E-04 | 1.10E-05 | 25 | 667.95 | 936 | 14370 | 0.0E+00 | 1.1E-01 | S | | X |
| 132649 Dibenzofuran | 5.15E+03 | 2.38E-02 | 6.00E-06 | 3.10E+00 | 5.15E-04 | 1.26E-05 | 25 | 560 | 824 | 66400 | 0.0E+00 | 1.4E-02 | S | | X |
| 135988 sec-Butylbenzene | 9.66E+02 | 5.70E-02 | 8.12E-06 | 3.94E+00 | 5.68E-01 | 1.39E-02 | 25 | 446.5 | 679 | 88730 | 0.0E+00 | 1.4E-01 | L | | X |
| 141786 Ethylacetate | 6.44E+00 | 7.32E-02 | 9.70E-06 | 8.03E+04 | 5.64E-03 | 1.38E-04 | 25 | 350.26 | 523.3 | 7633.66 | 0.0E+00 | 3.2E+00 | L | | X |
| 156592 cis-1,2-Dichloroethylene | 3.55E+01 | 7.36E-02 | 1.13E-05 | 3.50E+03 | 1.67E-01 | 4.07E-03 | 25 | 333.65 | 544 | 7192 | 0.0E+00 | 3.5E-02 | L | | X |
| 156605 trans-1,2-Dichloroethylene | 5.25E+01 | 7.07E-02 | 1.19E-05 | 6.30E+03 | 3.84E-01 | 9.36E-03 | 25 | 320.85 | 516.5 | 6717 | 0.0E+00 | 7.0E-02 | L | | X |
| 205992 Benzo(b)fluoranthene | 1.23E+06 | 2.26E-02 | 5.56E-06 | 1.50E-03 | 4.54E-03 | 1.11E-04 | 25 | 715.9 | 969.27 | 17000 | 2.1E-04 | 0.0E+00 | S | X | |
| 218019 Chrysene | 3.98E+05 | 2.48E-02 | 6.21E-06 | 6.30E-03 | 3.87E-03 | 9.44E-05 | 25 | 714.15 | 979 | 16455 | 2.1E-06 | 0.0E+00 | S | X | |
| 309002 Aldrin | 2.45E+06 | 1.32E-02 | 4.86E-06 | 1.70E-02 | 6.95E-03 | 1.70E-04 | 25 | 603.01 | 839.37 | 15000 | 4.9E-03 | 1.1E-04 | S | | X |
| 319846 alpha-HCH (alpha-BHC) | 1.23E+03 | 1.42E-02 | 7.34E-06 | 2.00E+00 | 4.34E-04 | 1.06E-05 | 25 | 596.55 | 839.36 | 15000 | 1.8E-03 | 0.0E+00 | S | | |
| 541731 1,3-Dichlorobenzene | 1.98E+03 | 6.92E-02 | 7.86E-06 | 1.34E+02 | 1.27E-01 | 3.09E-03 | 25 | 446 | 684 | 9230.18 | 0.0E+00 | 1.1E-01 | L | | X |
| 542756 1,3-Dichloropropene | 4.57E+01 | 6.26E-02 | 1.00E-05 | 2.80E+03 | 7.24E-01 | 1.77E-02 | 25 | 381.15 | 587.38 | 7900 | 4.0E-06 | 2.0E-02 | L | | |
| 630206 1,1,1,2-Tetrachloroethane | 1.16E+02 | 7.10E-02 | 7.90E-06 | 1.10E+03 | 9.90E-02 | 2.41E-03 | 25 | 403.5 | 624 | 9768.282525 | 7.4E-06 | 1.1E-01 | L | | X |
| 1634044 MTBE | 7.26E+00 | 1.02E-01 | 1.05E-05 | 5.10E+04 | 2.56E-02 | 6.23E-04 | 25 | 328.3 | 497.1 | 6677.66 | 0.0E+00 | 3.0E+00 | L | | |
| 7439976 Mercury (elemental) | 5.20E+01 | 3.07E-02 | 6.30E-06 | 2.00E+01 | 4.40E-01 | 1.07E-02 | 25 | 629.88 | 1750 | 14127 | 0.0E+00 | 3.0E-04 | L | | |

SL-ADV
Version 3.1; 02/04

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CALCULATE RISK-BASED SOIL CONCENTRATION (enter "X" in "YES" box)

YES: X

**OR**

CALCULATE INCREMENTAL RISKS FROM ACTUAL SOIL CONCENTRATION (enter "X" in "YES" box and initial soil conc. below)

YES:

| ENTER Chemical CAS No. (numbers only, no dashes) | ENTER Initial soil conc., $C_R$ (µg/kg) | Chemical |
|---|---|---|
| 75092 | | Methylene chloride |

MORE ↓

| ENTER Average soil temperature, $T_S$ (°C) | ENTER Depth below grade to bottom of enclosed space floor, $L_F$ (cm) | ENTER Depth below grade to top of contamination, $L_t$ (cm) | ENTER Depth below grade to bottom of contamination, (enter value of 0 if value is unknown) $L_b$ (cm) | ENTER Thickness of soil stratum A, $h_A$ (cm) | ENTER Thickness of soil stratum B, (Enter value or 0) $h_B$ (cm) | ENTER Thickness of soil stratum C, (Enter value or 0) $h_C$ (cm) | ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability) | OR | ENTER User-defined stratum A soil vapor permeability, $k_v$ ($cm^2$) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Totals must add up to value of $L_t$ (cell G28) | | | | | |
| 10 | 15 | 91.4 | 182.9 | 91.4 | 0 | 0 | | | 1.00E-08 |

MORE ↓

| ENTER Stratum A SCS soil type | ENTER Stratum A soil dry bulk density, $\rho_b^A$ ($g/cm^3$) | ENTER Stratum A soil total porosity, $n^A$ (unitless) | ENTER Stratum A soil water-filled porosity, $\theta_w^A$ ($cm^3/cm^3$) | ENTER Stratum A soil organic carbon fraction, $f_{oc}^A$ (unitless) | ENTER Stratum B SCS soil type | ENTER Stratum B soil dry bulk density, $\rho_b^B$ ($g/cm^3$) | ENTER Stratum B soil total porosity, $n^B$ (unitless) | ENTER Stratum B soil water-filled porosity, $\theta_w^B$ ($cm^3/cm^3$) | ENTER Stratum B soil organic carbon fraction, $f_{oc}^B$ (unitless) | ENTER Stratum C SCS soil type | ENTER Stratum C soil dry bulk density, $\rho_b^C$ ($g/cm^3$) | ENTER Stratum C soil total porosity, $n^C$ (unitless) | ENTER Stratum C soil water-filled porosity, $\theta_w^C$ ($cm^3/cm^3$) | ENTER Stratum C soil organic carbon fraction, $f_{oc}^C$ (unitless) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1.65 | 0.439 | 0.045 | 0.002 | | | | | | | | | | |

MORE ↓

| ENTER Enclosed space floor thickness, $L_{crack}$ (cm) | ENTER Soil-bldg. pressure differential, $\Delta P$ ($g/cm\text{-}s^2$) | ENTER Enclosed space floor length, $L_B$ (cm) | ENTER Enclosed space floor width, $W_B$ (cm) | ENTER Enclosed space height, $H_B$ (cm) | ENTER Floor-wall seam crack width, w (cm) | ENTER Indoor air exchange rate, ER (1/h) | ENTER Average vapor flow rate into bldg. OR Leave blank to calculate $Q_{soil}$ (L/m) |
|---|---|---|---|---|---|---|---|
| 10 | 40 | 1000 | 1000 | 244 | 0.1 | 0.25 | |

| ENTER Averaging time for carcinogens, $AT_C$ (yrs) | ENTER Averaging time for noncarcinogens, $AT_{NC}$ (yrs) | ENTER Exposure duration, ED (yrs) | ENTER Exposure frequency, EF (days/yr) | ENTER Target risk for carcinogens, TR (unitless) | ENTER Target hazard quotient for noncarcinogens, THQ (unitless) |
|---|---|---|---|---|---|
| 70 | 30 | 30 | 350 | 1.0E-05 | 1 |
| | | | | Used to calculate risk-based soil concentration. | |

END

CHEMICAL PROPERTIES SHEET

| Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Pure component water solubility, S (mg/L) | Unit risk factor, URF ($\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) | Physical state at soil temperature, (S,L,G) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.01E-01 | 1.17E-05 | 2.18E-03 | 25 | 6,706 | 313.00 | 510.00 | 1.17E+01 | 1.30E+04 | 1.0E-08 | 6.0E-01 | L |

**END**

INTERMEDIATE CALCULATIONS SHEET

| Exposure duration, $\tau$ (sec) | Source-building separation, $L_T$ (cm) | Stratum A soil air-filled porosity, $\theta_a^A$ ($cm^3/cm^3$) | Stratum B soil air-filled porosity, $\theta_a^B$ ($cm^3/cm^3$) | Stratum C soil air-filled porosity, $\theta_a^C$ ($cm^3/cm^3$) | Stratum A effective total fluid saturation, $S_{te}$ ($cm^3/cm^3$) | Stratum A soil intrinsic permeability, $k_i$ ($cm^2$) | Stratum A soil relative air permeability, $k_{rg}$ ($cm^2$) | Stratum A soil effective vapor permeability, $k_v$ ($cm^2$) | Floor-wall seam perimeter, $X_{crack}$ (cm) | Initial soil concentration used, $C_R$ ($\mu g/kg$) | Bldg. ventilation rate, $Q_{building}$ ($cm^3/s$) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.46E+08 | 76.4 | 0.394 | ERROR | ERROR | #N/A | #N/A | #N/A | 1.00E-08 | 4,000 | 1.00E+00 | 1.69E+04 |

| Area of enclosed space below grade, $A_B$ ($cm^2$) | Crack-to-total area ratio, $\eta$ (unitless) | Crack depth below grade, $Z_{crack}$ (cm) | Enthalpy of vaporization at ave. soil temperature, $\Delta H_{v,TS}$ (cal/mol) | Henry's law constant at ave. soil temperature, $H_{TS}$ (atm-$m^3$/mol) | Henry's law constant at ave. soil temperature, $H'_{TS}$ (unitless) | Vapor viscosity at ave. soil temperature, $\mu_{TS}$ (g/cm-s) | Stratum A effective diffusion coefficient, $D^{eff}_A$ ($cm^2/s$) | Stratum B effective diffusion coefficient, $D^{eff}_B$ ($cm^2/s$) | Stratum C effective diffusion coefficient, $D^{eff}_C$ ($cm^2/s$) | Total overall effective diffusion coefficient, $D^{eff}_T$ ($cm^2/s$) | Diffusion path length, $L_d$ (cm) | Convection path length, $L_p$ (cm) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.06E+06 | 3.77E-04 | 15 | 7,034 | 1.16E-03 | 5.01E-02 | 1.75E-04 | 2.36E-02 | 0.00E+00 | 0.00E+00 | 2.36E-02 | 76.4 | 15 |

| Soil-water partition coefficient, $K_d$ ($cm^3/g$) | Source vapor conc., $C_{source}$ ($\mu g/m^3$) | Crack radius, $r_{crack}$ (cm) | Average vapor flow rate into bldg., $Q_{soil}$ ($cm^3/s$) | Crack effective diffusion coefficient, $D^{crack}$ ($cm^2/s$) | Area of crack, $A_{crack}$ ($cm^2$) | Exponent of equivalent foundation Peclet number, $exp(Pe^f)$ (unitless) | Infinite source indoor attenuation coefficient, $\alpha$ (unitless) | Infinite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source $\beta$ term (unitless) | Finite source $\psi$ term $(sec)^{-1}$ | Time for source depletion, $\tau_D$ (sec) | Exposure duration > time for source depletion (YES/NO) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.34E-02 | 8.00E+02 | 0.10 | 1.00E+01 | 2.36E-02 | 4.00E+02 | 4.25E+04 | NA | NA | 3.35E+01 | 1.96E-06 | 2.09E+07 | YES |

| Finite source indoor attenuation coefficient, $<\alpha>$ (unitless) | Mass limit bldg. conc., $C_{building}$ ($\mu g/m^3$) | Finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Final finite source bldg. conc., $C_{building}$ ($\mu g/m^3$) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC ($mg/m^3$) |
|---|---|---|---|---|---|
| NA | 9.98E-03 | NA | 9.98E-03 | 1.0E-08 | 6.0E-01 |

**END**

RESULTS SHEET

RISK-BASED SOIL CONCENTRATION CALCULATIONS:

| Indoor exposure soil conc., carcinogen (µg/kg) | Indoor exposure soil conc., noncarcinogen (µg/kg) | Risk-based indoor exposure soil conc., (µg/kg) | Soil saturation conc., $C_{sat}$ (µg/kg) | Final indoor exposure soil conc., (µg/kg) |
|---|---|---|---|---|
| 2.44E+05 | 6.27E+04 | 6.27E+04 | 8.16E+05 | 6.27E+04 |

INCREMENTAL RISK CALCULATIONS:

| Incremental risk from vapor intrusion to indoor air, carcinogen (unitless) | Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless) |
|---|---|
| NA | NA |

MESSAGE AND ERROR SUMMARY BELOW: (DO NOT USE RESULTS IF ERRORS ARE PRESENT)
MESSAGE: The values of Csource and Cbuilding on the INTERCALCS worksheet are based on unity and do not represent actual values.

**SCROLL DOWN TO "END"**

**END**

VLOOKUP TABLES

Soil Properties Lookup Table

| SCS Soil Type | $K_s$ (cm/h) | $\alpha_1$ (1/cm) | N (unitless) | M (unitless) | n ($cm^3/cm^3$) | $\theta_r$ ($cm^3/cm^3$) | Mean Grain Diameter (cm) | Bulk Density ($g/cm^3$) | $\theta_w$ ($cm^3/cm^3$) | SCS Soil Name |
|---|---|---|---|---|---|---|---|---|---|---|
| C | 0.61 | 0.01496 | 1.253 | 0.2019 | 0.459 | 0.098 | 0.0092 | 1.43 | 0.215 | Clay |
| CL | 0.34 | 0.01581 | 1.416 | 0.2938 | 0.442 | 0.079 | 0.016 | 1.48 | 0.168 | Clay Loam |
| L | 0.50 | 0.01112 | 1.472 | 0.3207 | 0.399 | 0.061 | 0.020 | 1.59 | 0.148 | Loam |
| LS | 4.38 | 0.03475 | 1.746 | 0.4273 | 0.390 | 0.049 | 0.040 | 1.62 | 0.076 | Loamy Sand |
| S | 26.78 | 0.03524 | 3.177 | 0.6852 | 0.375 | 0.053 | 0.044 | 1.66 | 0.054 | Sand |
| SC | 0.47 | 0.03342 | 1.208 | 0.1722 | 0.385 | 0.117 | 0.025 | 1.63 | 0.197 | Sandy Clay |
| SCL | 0.55 | 0.02109 | 1.330 | 0.2481 | 0.384 | 0.063 | 0.029 | 1.63 | 0.146 | Sandy Clay Loam |
| SI | 1.82 | 0.00658 | 1.679 | 0.4044 | 0.489 | 0.050 | 0.0046 | 1.35 | 0.167 | Silt |
| SIC | 0.40 | 0.01622 | 1.321 | 0.2430 | 0.481 | 0.111 | 0.0039 | 1.38 | 0.216 | Silty Clay |
| SICL | 0.46 | 0.00839 | 1.521 | 0.3425 | 0.482 | 0.090 | 0.0056 | 1.37 | 0.198 | Silty Clay Loam |
| SIL | 0.76 | 0.00506 | 1.663 | 0.3987 | 0.439 | 0.065 | 0.011 | 1.49 | 0.180 | Silt Loam |
| SL | 1.60 | 0.02667 | 1.449 | 0.3099 | 0.387 | 0.039 | 0.030 | 1.62 | 0.103 | Sandy Loam |

Chemical Properties Lookup Table

| CAS No. | Chemical | Organic carbon partition coefficient, $K_{oc}$ ($cm^3/g$) | Diffusivity in air, $D_a$ ($cm^2/s$) | Diffusivity in water, $D_w$ ($cm^2/s$) | Pure component water solubility, S (mg/L) | Henry's law constant H' (unitless) | Henry's law constant at reference temperature, H (atm-$m^3$/mol) | Henry's law constant reference temperature, $T_R$ ($^oC$) | Normal boiling point, $T_B$ ($^oK$) | Critical temperature, $T_C$ ($^oK$) | Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol) | Unit risk factor, URF $(\mu g/m^3)^{-1}$ | Reference conc., RfC (mg/$m^3$) | Physical state at soil temperature, (S,L,G) | URF extrapolated (X) | RfC extrapolated (X) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 56235 | Carbon tetrachloride | 1.74E+02 | 7.80E-02 | 8.80E-06 | 7.93E+02 | 1.24E+00 | 3.03E-02 | 25 | 349.90 | 556.60 | 7,127 | 1.5E-05 | 0.0E+00 | L | | |
| 57749 | Chlordane | 1.20E+05 | 1.18E-02 | 4.37E-06 | 5.60E-02 | 1.99E-03 | 4.85E-05 | 25 | 624.24 | 885.73 | 14,000 | 1.0E-04 | 7.0E-04 | S | | |
| 58899 | gamma-HCH (Lindane) | 1.07E+03 | 1.42E-02 | 7.34E-06 | 7.30E+00 | 5.73E-04 | 1.40E-05 | 25 | 596.55 | 839.36 | 15,000 | 3.7E-04 | 1.1E-03 | S | X | X |
| 60297 | Ethyl ether | 5.73E+00 | 7.82E-02 | 8.61E-06 | 5.68E+04 | 1.35E+00 | 3.29E-02 | 25 | 307.50 | 466.74 | 6,338 | 0.0E+00 | 7.0E-01 | L | | X |
| 60571 | Dieldrin | 2.14E+04 | 1.25E-02 | 4.74E-06 | 1.95E-01 | 6.18E-04 | 1.51E-05 | 25 | 613.32 | 842.25 | 17,000 | 4.6E-03 | 1.8E-04 | S | | X |
| 67641 | Acetone | 5.75E-01 | 1.24E-01 | 1.14E-05 | 1.00E+06 | 1.59E-03 | 3.87E-05 | 25 | 329.20 | 508.10 | 6,955 | 0.0E+00 | 3.1E+01 | L | | X |
| 67663 | Chloroform | 3.98E+01 | 1.04E-01 | 1.00E-05 | 7.92E+03 | 1.50E-01 | 3.66E-03 | 25 | 334.32 | 536.40 | 6,988 | 2.3E-05 | 9.8E-03 | L | | |
| 67721 | Hexachloroethane | 1.78E+03 | 2.50E-03 | 6.80E-06 | 5.00E+01 | 1.59E-01 | 3.88E-03 | 25 | 458.00 | 695.00 | 9,510 | 4.0E-06 | 3.5E-03 | S | | X |
| 71432 | Benzene | 5.89E+01 | 8.80E-02 | 9.80E-06 | 1.79E+03 | 2.27E-01 | 5.54E-03 | 25 | 353.24 | 562.16 | 7,342 | 7.8E-06 | 3.0E-02 | L | | |
| 71556 | 1,1,1-Trichloroethane | 1.10E+02 | 7.80E-02 | 8.80E-06 | 1.33E+03 | 7.03E-01 | 1.72E-02 | 25 | 347.24 | 545.00 | 7,136 | 0.0E+00 | 5.0E+00 | L | | |
| 72435 | Methoxychlor | 9.77E+04 | 1.56E-02 | 4.46E-06 | 1.00E-01 | 6.46E-04 | 1.58E-05 | 25 | 651.02 | 848.49 | 16,000 | 0.0E+00 | 1.8E-02 | S | | X |
| 72559 | DDE | 4.47E+06 | 1.44E-02 | 5.87E-06 | 1.20E-01 | 8.59E-04 | 2.09E-05 | 25 | 636.44 | 860.38 | 15,000 | 9.7E-05 | 0.0E+00 | S | X | |
| 74839 | Methyl bromide | 1.05E+01 | 7.28E-02 | 1.21E-05 | 1.52E+04 | 2.55E-01 | 6.22E-03 | 25 | 276.71 | 467.00 | 5,714 | 0.0E+00 | 5.0E-03 | G | | |
| 74873 | Methyl chloride (chloromethane) | 2.12E+00 | 1.26E-01 | 6.50E-06 | 5.33E+03 | 3.61E-01 | 8.80E-03 | 25 | 249.00 | 416.25 | 5,115 | 1.0E-06 | 9.0E-02 | L | | |
| 74908 | Hydrogen cyanide | 3.80E+00 | 1.93E-01 | 2.10E-05 | 1.00E+06 | 5.44E-03 | 1.33E-04 | 25 | 299.00 | 456.70 | 6,676 | 0.0E+00 | 3.0E-03 | L | | |
| 74953 | Methylene bromide | 1.26E+01 | 4.30E-02 | 8.44E-06 | 1.19E+04 | 3.52E-02 | 8.59E-04 | 25 | 370.00 | 583.00 | 7,868 | 0.0E+00 | 3.5E-02 | L | | X |
| 75003 | Chloroethane (ethyl chloride) | 4.40E+00 | 2.71E-01 | 1.15E-05 | 5.68E+03 | 3.61E-01 | 8.80E-03 | 25 | 285.30 | 460.40 | 5,879 | 0.0E+00 | 1.0E+01 | L | X | |
| 75014 | Vinyl chloride (chloroethene) | 1.86E+01 | 1.06E-01 | 1.23E-05 | 8.80E+03 | 1.10E+00 | 2.69E-02 | 25 | 259.25 | 432.00 | 5,250 | 8.8E-06 | 1.0E-01 | G | | |
| 75058 | Acetonitrile | 4.20E+00 | 1.28E-01 | 1.66E-05 | 1.00E+06 | 1.42E-03 | 3.45E-05 | 25 | 354.60 | 545.50 | 7,110 | 0.0E+00 | 6.0E-02 | L | | |
| 75070 | Acetaldehyde | 1.06E+00 | 1.24E-01 | 1.41E-05 | 1.00E+06 | 3.23E-03 | 7.87E-05 | 25 | 293.10 | 466.00 | 6,157 | 2.2E-06 | 9.0E-03 | L | | |
| 75092 | Methylene chloride | 1.17E+01 | 1.01E-01 | 1.17E-05 | 1.30E+04 | 8.96E-02 | 2.18E-03 | 25 | 313.00 | 510.00 | 6,706 | 1.0E-08 | 6.0E-01 | L | | |
| 75150 | Carbon disulfide | 4.57E+01 | 1.04E-01 | 1.00E-05 | 1.19E+03 | 1.24E+00 | 3.02E-02 | 25 | 319.00 | 552.00 | 6,391 | 0.0E+00 | 7.0E-01 | L | | |
| 75218 | Ethylene oxide | 1.33E+00 | 1.04E-01 | 1.45E-05 | 3.04E+05 | 2.27E-02 | 5.54E-04 | 25 | 283.60 | 469.00 | 6,104 | 1.0E-04 | 6.0E-01 | L | | |
| 75252 | Bromoform | 8.71E+01 | 1.49E-02 | 1.03E-05 | 3.10E+03 | 2.41E-02 | 5.88E-04 | 25 | 422.35 | 696.00 | 9,479 | 1.1E-06 | 7.0E-02 | L | | X |
| 75274 | Bromodichloromethane | 5.50E+01 | 2.98E-02 | 1.06E-05 | 6.74E+03 | 6.54E-02 | 1.60E-03 | 25 | 363.15 | 585.85 | 7,800 | 1.8E-05 | 7.0E-02 | L | X | X |
| 75296 | 2-Chloropropane | 9.14E+00 | 8.88E-02 | 1.01E-05 | 3.73E+03 | 5.93E-01 | 1.45E-02 | 25 | 308.70 | 485.00 | 6,286 | 0.0E+00 | 1.0E-01 | L | | |
| 75343 | 1,1-Dichloroethane | 3.16E+01 | 7.42E-02 | 1.05E-05 | 5.06E+03 | 2.30E-01 | 5.61E-03 | 25 | 330.55 | 523.00 | 6,895 | 0.0E+00 | 5.0E-01 | L | | |
| 75354 | 1,1-Dichloroethylene | 5.89E+01 | 9.00E-02 | 1.04E-05 | 2.25E+03 | 1.07E+00 | 2.60E-02 | 25 | 304.75 | 576.05 | 6,247 | 0.0E+00 | 2.0E-01 | L | | |
| 75456 | Chlorodifluoromethane | 4.79E+01 | 1.01E-01 | 1.28E-05 | 2.00E+00 | 1.10E+00 | 2.70E-02 | 25 | 232.40 | 369.30 | 4,836 | 0.0E+00 | 5.0E+01 | L | | |
| 75694 | Trichlorofluoromethane | 4.97E+02 | 8.70E-02 | 9.70E-06 | 1.10E+03 | 3.97E+00 | 9.68E-02 | 25 | 296.70 | 471.00 | 5,999 | 0.0E+00 | 7.0E-01 | L | | |
| 75718 | Dichlorodifluoromethane | 4.57E+02 | 6.65E-02 | 9.92E-06 | 2.80E+02 | 1.40E+01 | 3.42E-01 | 25 | 243.20 | 384.95 | 9,421 | 0.0E+00 | 2.0E-01 | L | | |
| 76131 | 1,1,2-Trichloro-1,2,2-trifluoroetha | 1.11E+04 | 7.80E-02 | 8.20E-06 | 1.70E+02 | 1.97E+01 | 4.80E-01 | 25 | 320.70 | 487.30 | 6,463 | 0.0E+00 | 3.0E+01 | L | | |
| 76448 | Heptachlor | 1.41E+06 | 1.12E-02 | 5.69E-06 | 1.80E-01 | 6.05E+01 | 1.48E+00 | 25 | 603.69 | 846.31 | 13,000 | 1.3E-03 | 1.8E-03 | S | | X |
| 77474 | Hexachlorocyclopentadiene | 2.00E+05 | 1.61E-02 | 7.21E-06 | 1.80E+00 | 1.10E+00 | 2.69E-02 | 25 | 512.15 | 746.00 | 10,931 | 0.0E+00 | 2.0E-04 | L | | |
| 78831 | Isobutanol | 2.59E+00 | 8.60E-02 | 9.30E-06 | 8.50E+04 | 4.83E-04 | 1.18E-05 | 25 | 381.04 | 547.78 | 10,936 | 0.0E+00 | 1.1E+00 | L | | X |
| 78875 | 1,2-Dichloropropane | 4.37E+01 | 7.82E-02 | 8.73E-06 | 2.80E+03 | 1.15E-01 | 2.79E-03 | 25 | 369.52 | 572.00 | 7,590 | 1.9E-05 | 4.0E-03 | L | X | |
| 78933 | Methylethylketone (2-butanone) | 2.30E+00 | 8.08E-02 | 9.80E-06 | 2.23E+05 | 2.29E-03 | 5.58E-05 | 25 | 352.50 | 536.78 | 7,481 | 0.0E+00 | 5.0E+00 | L | | |
| 79005 | 1,1,2-Trichloroethane | 5.01E+01 | 7.80E-02 | 8.80E-06 | 4.42E+03 | 3.73E-02 | 9.11E-04 | 25 | 386.15 | 602.00 | 8,322 | 1.6E-05 | 1.4E-02 | L | | X |
| 79016 | Trichloroethylene | 1.66E+02 | 7.90E-02 | 9.10E-06 | 1.47E+03 | 4.21E-01 | 1.03E-02 | 25 | 360.36 | 544.20 | 7,505 | 4.1E-06 | 2.0E-03 | L | X | |
| 79209 | Methyl acetate | 3.26E+00 | 1.04E-01 | 1.00E-05 | 2.00E+03 | 4.84E-03 | 1.18E-04 | 25 | 329.80 | 506.70 | 7,260 | 0.0E+00 | 3.5E+00 | L | | X |
| 79345 | 1,1,2,2-Tetrachloroethane | 9.33E+01 | 7.10E-02 | 7.90E-06 | 2.96E+03 | 1.41E-02 | 3.44E-04 | 25 | 419.60 | 661.15 | 8,996 | 5.8E-05 | 2.1E-01 | L | | X |
| 79469 | 2-Nitropropane | 1.17E+01 | 9.23E-02 | 1.01E-05 | 1.70E+04 | 5.03E-03 | 1.23E-04 | 25 | 393.20 | 594.00 | 8,383 | 2.7E-03 | 2.0E-02 | L | | |
| 80626 | Methylmethacrylate | 6.98E+00 | 7.70E-02 | 8.60E-06 | 1.50E+04 | 1.38E-02 | 3.36E-04 | 25 | 373.50 | 567.00 | 8,975 | 0.0E+00 | 7.0E-01 | L | | |
| 83329 | Acenaphthene | 7.08E+03 | 4.21E-02 | 7.69E-06 | 3.57E+00 | 6.34E-03 | 1.55E-04 | 25 | 550.54 | 803.15 | 12,155 | 0.0E+00 | 2.1E-01 | S | | X |
| 86737 | Fluorene | 1.38E+04 | 3.63E-02 | 7.88E-06 | 1.98E+00 | 2.60E-03 | 6.34E-05 | 25 | 570.44 | 870.00 | 12,666 | 0.0E+00 | 1.4E-01 | S | | X |
| 87683 | Hexachloro-1,3-butadiene | 5.37E+04 | 5.61E-02 | 6.16E-06 | 3.20E+00 | 3.33E-01 | 8.13E-03 | 25 | 486.15 | 738.00 | 10,206 | 2.2E-05 | 7.0E-04 | L | | X |
| 88722 | o-Nitrotoluene | 3.24E+02 | 5.87E-02 | 8.67E-06 | 6.50E+02 | 5.11E-04 | 1.25E-05 | 25 | 495.00 | 720.00 | 12,239 | 0.0E+00 | 3.5E-02 | L | | X |
| 91203 | Naphthalene | 2.00E+03 | 5.90E-02 | 7.50E-06 | 3.10E+01 | 1.98E-02 | 4.82E-04 | 25 | 491.14 | 748.40 | 10,373 | 3.4E-05 | 3.0E-03 | S | | |
| 91576 | 2-Methylnaphthalene | 2.81E+03 | 5.22E-02 | 7.75E-06 | 2.46E+01 | 2.12E-02 | 5.17E-04 | 25 | 514.26 | 761.00 | 12,600 | 0.0E+00 | 7.0E-02 | S | | X |
| 92524 | Biphenyl | 4.38E+03 | 4.04E-02 | 8.15E-06 | 7.45E+00 | 1.23E-02 | 2.99E-04 | 25 | 529.10 | 789.00 | 10,890 | 0.0E+00 | 1.8E-01 | S | | X |
| 95476 | o-Xylene | 3.63E+02 | 8.70E-02 | 1.00E-05 | 1.78E+02 | 2.12E-01 | 5.18E-03 | 25 | 417.60 | 630.30 | 8,661 | 0.0E+00 | 1.0E-01 | L | | |
| 95501 | 1,2-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 1.56E+02 | 7.77E-02 | 1.90E-03 | 25 | 453.57 | 705.00 | 9,700 | 0.0E+00 | 2.0E-01 | L | | |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 95578 2-Chlorophenol | 3.88E+02 | 5.01E-02 | 9.46E-06 | 2.20E+04 | 1.60E-02 | 3.90E-04 | 25 | 447.53 | 675.00 | 9,572 | 0.0E+00 | 1.8E-02 | L | | X |
| 95636 1,2,4-Trimethylbenzene | 1.35E+03 | 6.06E-02 | 7.92E-06 | 5.70E+01 | 2.52E-01 | 6.14E-03 | 25 | 442.30 | 649.17 | 9,369 | 0.0E+00 | 7.0E-03 | L | | |
| 96184 1,2,3-Trichloropropane | 2.20E+01 | 7.10E-02 | 7.90E-06 | 1.75E+03 | 1.67E-02 | 4.08E-04 | 25 | 430.00 | 652.00 | 9,171 | 5.7E-04 | 4.9E-03 | L | X | |
| 96333 Methyl acrylate | 4.53E+00 | 9.76E-02 | 1.02E-05 | 6.00E+04 | 7.68E-03 | 1.87E-04 | 25 | 353.70 | 536.00 | 7,749 | 0.0E+00 | 1.1E-01 | L | | X |
| 97632 Ethylmethacrylate | 2.95E+01 | 6.53E-02 | 8.37E-06 | 3.67E+03 | 3.44E-02 | 8.40E-04 | 25 | 390.00 | 571.00 | 10,957 | 0.0E+00 | 3.2E-01 | L | | X |
| 98066 tert-Butylbenzene | 7.71E+02 | 5.65E-02 | 8.02E-06 | 2.95E+01 | 4.87E-01 | 1.19E-02 | 25 | 442.10 | 1220.00 | 8,980 | 0.0E+00 | 1.4E-01 | L | | X |
| 98828 Cumene | 4.89E+02 | 6.50E-02 | 7.10E-06 | 6.13E+01 | 4.74E+01 | 1.46E-02 | 25 | 425.56 | 631.10 | 10,335 | 0.0E+00 | 4.0E-01 | L | | |
| 98862 Acetophenone | 5.77E+01 | 6.00E-02 | 8.73E-06 | 6.13E+03 | 4.38E-04 | 1.07E-05 | 25 | 475.00 | 709.50 | 11,732 | 0.0E+00 | 3.5E-01 | S,L | | X |
| 98953 Nitrobenzene | 6.46E+01 | 7.60E-02 | 8.60E-06 | 2.09E+03 | 9.82E-04 | 2.39E-05 | 25 | 483.95 | 719.00 | 10,566 | 0.0E+00 | 2.0E-03 | L | | |
| 100414 Ethylbenzene | 3.63E+02 | 7.50E-02 | 7.80E-06 | 1.69E+02 | 3.22E-01 | 7.86E-03 | 25 | 409.34 | 617.20 | 8,501 | 2.5E-06 | 1.0E+00 | L | | |
| 100425 Styrene | 7.76E+02 | 7.10E-02 | 8.00E-06 | 3.10E+02 | 1.12E-01 | 2.74E-03 | 25 | 418.31 | 636.00 | 8,737 | 0.0E+00 | 1.0E+00 | L | | |
| 100447 Benzylchloride | 6.14E+01 | 7.50E-02 | 7.80E-06 | 5.25E+02 | 1.70E-02 | 4.14E-04 | 25 | 452.00 | 685.00 | 8,773 | 4.9E-05 | 0.0E+00 | L | X | |
| 100527 Benzaldehyde | 4.59E+01 | 7.21E-02 | 9.07E-06 | 3.30E+03 | 9.73E-04 | 2.37E-05 | 25 | 452.00 | 695.00 | 11,658 | 0.0E+00 | 3.5E-01 | L | | X |
| 103651 n-Propylbenzene | 5.62E+02 | 6.01E-02 | 7.83E-06 | 6.00E+01 | 4.37E-01 | 1.07E-02 | 25 | 432.20 | 630.00 | 9,123 | 0.0E+00 | 1.0E+00 | L | | X |
| 104518 n-Butylbenzene | 1.11E+03 | 5.70E-02 | 8.12E-06 | 2.00E+00 | 5.38E-01 | 1.31E-02 | 25 | 456.46 | 660.50 | 9,290 | 0.0E+00 | 1.4E-01 | L | | X |
| 106423 p-Xylene | 3.89E+02 | 7.69E-02 | 8.44E-06 | 1.85E+02 | 3.13E-01 | 7.64E-03 | 25 | 411.52 | 616.20 | 8,525 | 0.0E+00 | 1.0E-01 | L | | |
| 106467 1,4-Dichlorobenzene | 6.17E+02 | 6.90E-02 | 7.90E-06 | 7.90E+01 | 9.82E-02 | 2.39E-03 | 25 | 447.21 | 684.75 | 9,271 | 1.1E-05 | 8.0E-01 | S | | |
| 106934 1,2-Dibromoethane (ethylene dib | 2.50E+01 | 2.17E-02 | 1.19E-05 | 4.18E+03 | 3.04E-02 | 7.41E-04 | 25 | 404.60 | 583.00 | 8,310 | 2.2E-04 | 2.0E-04 | L | | |
| 106990 1,3-Butadiene | 1.91E+01 | 2.49E-01 | 1.08E-05 | 7.35E+02 | 3.01E+00 | 7.34E-02 | 25 | 268.60 | 425.00 | 5,370 | 3.0E-02 | 2.0E-03 | L | | |
| 107028 Acrolein | 2.76E+00 | 1.05E-01 | 1.22E-05 | 2.13E+05 | 4.99E-03 | 1.22E-04 | 25 | 325.60 | 506.00 | 6,731 | 0.0E+00 | 2.0E-05 | L | | |
| 107062 1,2-Dichloroethane | 1.74E+01 | 1.04E-01 | 9.90E-06 | 8.52E+03 | 4.00E-02 | 9.77E-04 | 25 | 356.65 | 561.00 | 7,643 | 2.6E-05 | 0.0E+00 | L | | |
| 107131 Acrylonitrile | 5.90E+00 | 1.22E-01 | 1.34E-05 | 7.40E+04 | 4.21E-03 | 1.03E-04 | 25 | 350.30 | 519.00 | 7,786 | 6.8E-05 | 2.0E-03 | L | | |
| 108054 Vinyl acetate | 5.25E+00 | 8.50E-02 | 9.20E-06 | 2.00E+04 | 2.09E-02 | 5.10E-04 | 25 | 345.65 | 519.13 | 7,800 | 0.0E+00 | 2.0E-01 | L | | |
| 108101 Methylisobutylketone (4-methyl-2 | 9.06E+00 | 7.50E-02 | 7.80E-06 | 1.90E+04 | 5.64E-03 | 1.38E-04 | 25 | 389.50 | 571.00 | 8,243 | 0.0E+00 | 3.0E+00 | L | | |
| 108383 m-Xylene | 4.07E+02 | 7.00E-02 | 7.80E-06 | 1.61E+02 | 3.00E-01 | 7.32E-03 | 25 | 412.27 | 617.05 | 8,523 | 0.0E+00 | 1.0E-01 | L | | |
| 108678 1,3,5-Trimethylbenzene | 1.35E+03 | 6.02E-02 | 8.67E-06 | 2.00E+00 | 2.41E-01 | 5.87E-03 | 25 | 437.89 | 637.25 | 9,321 | 0.0E+00 | 6.0E-03 | L | | |
| 108872 Methylcyclohexane | 7.85E+01 | 7.35E-02 | 8.52E-06 | 1.40E+01 | 4.22E+00 | 1.03E-01 | 25 | 373.90 | 572.20 | 7,474 | 0.0E+00 | 3.0E+00 | L | | |
| 108883 Toluene | 1.82E+02 | 8.70E-02 | 8.60E-06 | 5.26E+02 | 2.72E-01 | 6.62E-03 | 25 | 383.78 | 591.79 | 7,930 | 0.0E+00 | 5.0E+00 | L | | |
| 108907 Chlorobenzene | 2.19E+02 | 7.30E-02 | 8.70E-06 | 4.72E+02 | 1.51E-01 | 3.69E-03 | 25 | 404.87 | 632.40 | 8,410 | 0.0E+00 | 5.0E-02 | L | | |
| 109693 1-Chlorobutane | 1.72E+01 | 8.26E-02 | 1.00E-05 | 1.10E+03 | 6.93E-01 | 1.69E-02 | 25 | 351.60 | 542.00 | 7,263 | 0.0E+00 | 1.4E+00 | L | | X |
| 110009 Furan | 1.86E+01 | 1.04E-01 | 1.22E-05 | 1.00E+04 | 2.21E-01 | 5.39E-03 | 25 | 304.60 | 490.20 | 6,477 | 0.0E+00 | 3.5E-03 | L | | X |
| 110543 Hexane | 4.34E+01 | 2.00E-01 | 7.77E-06 | 1.24E+01 | 6.82E+01 | 1.66E+00 | 25 | 341.70 | 508.00 | 6,895 | 0.0E+00 | 2.0E-01 | L | | |
| 111444 Bis(2-chloroethyl)ether | 1.55E+01 | 6.92E-02 | 7.53E-06 | 1.72E+04 | 7.36E-04 | 1.80E-05 | 25 | 451.15 | 659.79 | 10,803 | 3.3E-04 | 0.0E+00 | L | | |
| 115297 Endosulfan | 2.14E+03 | 1.15E-02 | 4.55E-06 | 5.10E-01 | 4.58E-04 | 1.12E-05 | 25 | 674.43 | 942.94 | 14,000 | 0.0E+00 | 2.1E-02 | S | | X |
| 118741 Hexachlorobenzene | 5.50E+04 | 5.42E-02 | 5.91E-06 | 5.00E-03 | 5.40E-02 | 1.32E-03 | 25 | 582.55 | 825.00 | 14,447 | 4.6E-04 | 2.8E-03 | S | | X |
| 120821 1,2,4-Trichlorobenzene | 1.78E+03 | 3.00E-02 | 8.23E-06 | 4.88E+01 | 5.81E-02 | 1.42E-03 | 25 | 486.15 | 725.00 | 10,471 | 0.0E+00 | 4.0E-03 | L | | |
| 123739 Crotonaldehyde (2-butenal) | 4.82E+00 | 9.56E-02 | 1.07E-05 | 3.69E+04 | 7.99E-04 | 1.95E-05 | 25 | 375.20 | 568.00 | 9 | 5.4E-04 | 0.0E+00 | L | X | |
| 124481 Chlorodibromomethane | 6.31E+01 | 1.96E-02 | 1.05E-05 | 2.60E+03 | 3.20E-02 | 7.81E-04 | 25 | 416.14 | 678.20 | 5,900 | 2.4E-05 | 7.0E-02 | L | X | X |
| 126987 Methacrylonitrile | 3.58E+01 | 1.12E-01 | 1.32E-05 | 2.54E+04 | 1.01E-02 | 2.46E-04 | 25 | 363.30 | 554.00 | 7,600 | 0.0E+00 | 7.0E-04 | L | | |
| 126998 2-Chloro-1,3-butadiene (chloropr | 6.73E+01 | 8.58E-02 | 1.03E-05 | 2.12E+03 | 4.91E-01 | 1.20E-02 | 25 | 332.40 | 525.00 | 8,075 | 0.0E+00 | 7.0E-03 | L | | |
| 127184 Tetrachloroethylene | 1.55E+02 | 7.20E-02 | 8.20E-06 | 2.00E+02 | 7.53E-01 | 1.84E-02 | 25 | 394.40 | 620.20 | 8,288 | 2.6E-07 | 4.0E-02 | L | | |
| 129000 Pyrene | 1.05E+05 | 2.72E-02 | 7.24E-06 | 1.35E+00 | 4.50E-04 | 1.10E-05 | 25 | 667.95 | 936 | 14370 | 0.0E+00 | 1.1E-01 | S | | X |
| 132649 Dibenzofuran | 5.15E+03 | 2.38E-02 | 6.00E-06 | 3.10E+00 | 5.15E-04 | 1.26E-05 | 25 | 560 | 824 | 66400 | 0.0E+00 | 1.4E-02 | S | | X |
| 135988 sec-Butylbenzene | 9.66E+02 | 5.70E-02 | 8.12E-06 | 3.94E+00 | 5.68E-01 | 1.39E-02 | 25 | 446.5 | 679 | 88730 | 0.0E+00 | 1.4E-01 | L | | X |
| 141786 Ethylacetate | 6.44E+00 | 7.32E-02 | 9.70E-06 | 8.03E+04 | 5.64E-03 | 1.38E-04 | 25 | 350.26 | 523.3 | 7633.66 | 0.0E+00 | 3.2E+00 | L | | X |
| 156592 cis-1,2-Dichloroethylene | 3.55E+01 | 7.36E-02 | 1.13E-05 | 3.50E+03 | 1.67E-01 | 4.07E-03 | 25 | 333.65 | 544 | 7192 | 0.0E+00 | 3.5E-02 | L | | X |
| 156605 trans-1,2-Dichloroethylene | 5.25E+01 | 7.07E-02 | 1.19E-05 | 6.30E+03 | 3.84E-01 | 9.36E-03 | 25 | 320.85 | 516.5 | 6717 | 0.0E+00 | 7.0E-02 | L | | X |
| 205992 Benzo(b)fluoranthene | 1.23E+06 | 2.26E-02 | 5.56E-06 | 1.50E-03 | 4.54E-03 | 1.11E-04 | 25 | 715.9 | 969.27 | 17000 | 2.1E-04 | 0.0E+00 | S | X | |
| 218019 Chrysene | 3.98E+05 | 2.48E-02 | 6.21E-06 | 6.30E-03 | 3.87E-03 | 9.44E-05 | 25 | 714.15 | 979 | 16455 | 2.1E-06 | 0.0E+00 | S | X | |
| 309002 Aldrin | 2.45E+06 | 1.32E-02 | 4.86E-06 | 1.70E-02 | 6.95E-03 | 1.70E-04 | 25 | 603.01 | 839.37 | 15000 | 4.9E-03 | 1.1E-04 | S | | X |
| 319846 alpha-HCH (alpha-BHC) | 1.23E+03 | 1.42E-02 | 7.34E-06 | 2.00E+00 | 4.34E-04 | 1.06E-05 | 25 | 596.55 | 839.36 | 15000 | 1.8E-03 | 0.0E+00 | S | | |
| 541731 1,3-Dichlorobenzene | 1.98E+03 | 6.92E-02 | 7.86E-06 | 1.34E+02 | 1.27E-01 | 3.09E-03 | 25 | 446 | 684 | 9230.18 | 0.0E+00 | 1.1E-01 | L | | X |
| 542756 1,3-Dichloropropene | 4.57E+01 | 6.26E-02 | 1.00E-05 | 2.80E+03 | 7.24E-01 | 1.77E-02 | 25 | 381.15 | 587.38 | 7900 | 4.0E-06 | 2.0E-02 | L | | |
| 630206 1,1,1,2-Tetrachloroethane | 1.16E+02 | 7.10E-02 | 7.90E-06 | 1.10E+03 | 9.90E-02 | 2.41E-03 | 25 | 403.5 | 624 | 9768.282525 | 7.4E-06 | 1.1E-01 | L | | X |
| 1634044 MTBE | 7.26E+00 | 1.02E-01 | 1.05E-05 | 5.10E+04 | 2.56E-02 | 6.23E-04 | 25 | 328.3 | 497.1 | 6677.66 | 0.0E+00 | 3.0E+00 | L | | |
| 7439976 Mercury (elemental) | 5.20E+01 | 3.07E-02 | 6.30E-06 | 2.00E+01 | 4.40E-01 | 1.07E-02 | 25 | 629.88 | 1750 | 14127 | 0.0E+00 | 3.0E-04 | L | | |

# Attachment G-3

*Ecological Scoping Checklist*

## G3-1.0 AREAS OF CONCERN 57-006 AND 57-007

### G3-1.1 Part A—Scoping Meeting Documentation

| | |
|---|---|
| **Site ID** | Areas of Concern (AOCs) 57-006 and 57-007 |
| **Form of site releases (solid, liquid, vapor). Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.), and describe potential areas of release. Reference locations on a map as appropriate.** | AOC 57-006 is the former location of a plastic-lined 55-gal. drum that was buried in the ground at Technical Area 57 (TA-57) beneath a trailer (structure 57-23) that served as an analytical chemistry laboratory. The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer was used to dispose of wastewater associated with chemical analyses. The sink drained to a leach field (AOC 57-007) near the trailer. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to the polyethylene drum. When the drum was full, its contents were transported to Los Alamos National Laboratory for disposal. In 1994, the drum was removed as part of a voluntary corrective action (VCA). The chemistry trailer was removed from the site in March 1994. The site of the former waste drum is currently vegetated with grasses. The site of the leach field is currently vegetated with grasses, shrubs, and small trees. The ground surface where the trailer was located is level, and then slopes to the southeast toward a drainage swale. An elevated electrical conduit rack runs across the site roughly parallel to the road. |
| **List of Primary Impacted Media**<br>**(Indicate all that apply.)** | **Surface soil –** X<br>**Surface water/sediment –**<br>**Subsurface –** X<br>**Groundwater –**<br>**Other, explain –** |
| **Vegetation Class based on Geographic Information System (GIS) Vegetation Coverage**<br>**(Indicate all that apply.)** | **Water** –<br>**Bare ground/unvegetated** –<br>**Spruce/fir/aspen/mixed conifer** – X<br>**Ponderosa pine –**<br>**Piñon juniper/juniper savannah** –<br>**Grassland/shrubland** – X<br>**Developed** – X<br>**Burned –** |
| **Is threatened and endangered (T&E) habitat present?**<br>**If applicable, list species known or suspected of using the site for breeding or foraging.** | No threatened and endangered (T&E) species habitat is present at these AOCs. See additional information regarding the Jemez Mountain salamander in Attachment G-4. |
| **Provide a list of neighboring/ contiguous/upgradient sites, including a brief summary of COPCs and the form of releases for relevant sites, and reference a map as appropriate.**<br>**(Use this information to evaluate the need to aggregate sites for screening.)** | None |

| | |
|---|---|
| **Surface Water Erosion Potential Information**<br>Surface water erosion potential is based on site observations. | The ground surface where the trailer was located is level and then slopes to the southeast toward a drainage swale. |

### G3-1.2 Part B—Site Visit Documentation

| | |
|---|---|
| **Site ID** | AOCs 57-006 and AOC 57-007 |
| **Date of Site Visit** | 10/14/2014 |
| **Site Visit Conducted by** | Randall Ryti and Pattie Baucom |

***Receptor Information:***

| | |
|---|---|
| **Estimate cover.** | **Relative vegetative cover (high, medium, low, none)** = Medium-High<br>**Relative wetland cover (high, medium, low, none)** = None<br>**Relative structures/asphalt, etc., cover (high, medium, low, none)** = None |
| **Field Notes on the GIS vegetation class to assist in Verifying the Arcview Information** | Vegetation in the vicinity of the AOCs is aspen, shrub, and grassy meadow. |
| **Are ecological receptors present at the site (yes/ no/uncertain)?**<br>**Describe the general types of receptors present at the site (terrestrial and aquatic), and make notes on the quality of habitat present at the site.** | Terrestrial receptors, including mammals and birds, could use this site for both foraging and nesting. Because the date of the site visit was in October, vertebrate activity would be starting to decrease. However, invertebrates (grasshoppers) and one small mammal were noted in the area. Fossorial activity was noted in the slope leading to the southwest. The area is located within a remote, fairly inactive site, increasing its attractiveness to ecological receptors. |

***Contaminant Transport Information:***

| | |
|---|---|
| **Surface Water Transport/ Field Notes on the Erosion Potential, Including a Discussion of the Terminal Point of Surface Water Transport (if applicable)** | The area near these AOCs is relatively level to modestly sloping to the southeast toward a drainage swale. Thus, there is some potential for migration via surface water transport. |
| **Are there any off-site transport pathways (surface water, air, or groundwater) (yes/no/uncertain)? Provide explanation.** | There is limited potential for erosion and migration from AOC 57-006 given its location on flat ground. The leach field (AOC 57-007) is located on a very modest slope leading to the southeast. Thus, there is some potential for off-site surface water transport from that area. A pathway to groundwater is unlikely because groundwater is greater than 1000 ft below ground surface. |

### *Ecological Effects Information:*

| | |
|---|---|
| **Physical Disturbance**<br>**(Provide a list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.)** | AOC 57-006 is within the developed area (close to an on-site dirt road) but still has moderate vegetative cover (primarily grasses). AOC 57-007 has little evidence of disturbance although it was clear the area had been regraded in the past. Currently, the vegetative cover is high and includes grasses, forbs, shrubs (wild roses), and trees (aspen). |
| **Are there obvious ecological effects (yes/ no/uncertain)?**<br>**Provide explanation and apparent cause (e.g., contamination, physical disturbance, other).** | No. There is minimal to no evidence for ecological effects. |

### *No Exposure/Transport Pathways:*

| |
|---|
| **If there are no complete exposure pathways to ecological receptors on-site and no transport pathways to off-site receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include the likelihood that future construction activities could make contamination more available for exposure or transport.**<br>Not applicable. |

### *Adequacy of Site Characterization:*

| | |
|---|---|
| **Do existing or proposed data provide information on the nature and extent of contamination (yes/ no/uncertain)?**<br>**Provide explanation**<br>**(consider whether the maximum value was captured by existing sample data).** | The investigation approach in the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936) included sampling to determine whether chemicals of potential concern are present and if a release has occurred in the vicinity of these AOCs. The initial results indicated arsenic was greater than the residential screening level. Spot removal and step-out sampling from the AOCs was conducted. |
| **Do existing or proposed data for the site address potential transport pathways of site contamination (yes/no/uncertain)?**<br>**Provide explanation (consider whether other sites should be aggregated to characterize potential ecological risk).** | Samples were collected within and around the leach field as well as in the drainage from the leach field to address potential transport pathways. |

***Additional Field Notes:***

**Provide additional field notes on the site setting and potential ecological receptors.**

Some aspen were cut down several years ago near a power line corridor. However, aspen saplings of 2–3 m in height are evident so there have been little to no impacts of these management efforts. Leach field cobble 20–40-mm size were noted on the ground surface.

### G3-1.3 Part C—Ecological Pathways Conceptual Exposure Model

**Provide answers to Questions A to V to develop the Ecological Pathways Conceptual Exposure Model**

**Question A:**

**Could soil contaminants reach receptors through vapors?**

- **Volatility of the hazardous substance (volatile chemicals generally have Henry's law constant >$10^{-5}$ atm-$m^3$/mol and molecular weight <200 g/mol).**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** Three volatile organic compounds (VOCs) were detected. Most of the detected concentrations were similar to the estimated quantitation limit (EQL).

**Question B:**

**Could the soil contaminants reach receptors through fugitive dust carried in air?**

- **Soil contamination would have to be on the actual surface of the soil to become available for dust.**
- **In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.**

**Answer (likely/unlikely/uncertain):** Likely

**Provide explanation:** Some COPCs were detected in the surface soil.

**Question C:**

**Can contaminated soil be transported to aquatic ecological communities (use SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?**

- **If the SOP 2.01 run-off score* for each SWMU and/or AOC included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (*Note that the runoff score is not the entire erosion potential score; rather, it is a subtotal of this score with a maximum value of 46 points.)**
- **If erosion is a transport pathway, evaluate the terminal point to see whether aquatic receptors could be affected by contamination from this site.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There is no aquatic habitat present at these AOCs.

**Question D:**

**Is contaminated groundwater potentially available to biological receptors through seeps or springs or shallow groundwater?**

- **Known or suspected presence of contaminants in groundwater.**
- **The potential for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** The depth to regional groundwater is greater than 1000 ft. There are no seeps, springs, or shallow groundwater in the vicinity of these AOCs.

**Question E:**

**Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?**

- **The potential exists for contaminants to migrate to groundwater.**
- **The potential exists for contaminants to migrate through groundwater and discharge into habitats and/or surface waters.**
- **Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone.**
- **Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** The depth to regional groundwater is greater than 1000 ft. There are no seeps, springs, or shallow groundwater in the vicinity of these AOCs.

**Question F:**

**Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?**

- **This question is only applicable to release sites located on or near the mesa edge.**
- **Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.**

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** These AOCs are not located near the mesa edge, so mass wasting is not relevant. There is minimal evidence of erosion at the site.

**Question G:**

**Could airborne contaminants interact with receptors through the respiration of vapors?**

- **Contaminants must be present as volatiles in the air.**
- **Consider the importance of the inhalation of vapors for burrowing animals.**
- **Foliar uptake of vapors is typically not a significant exposure pathway.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Plants:** 1

**Terrestrial Animals:** 1

**Provide explanation:** Some VOCs were detected but at very low concentrations.

**Question H:**

**Could airborne contaminants interact with plants through the deposition of particulates or with animals through the inhalation of fugitive dust?**

- **Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.**
- **Exposure through the inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Plants:** 3

**Terrestrial Animals:** 3

**Provide explanation:** Surface soil contamination is present at these AOCs.

**Question I:**

**Could contaminants interact with plants through root uptake or rain splash from surficial soils?**

- **Contaminants in bulk soil may partition into soil solution, making them available to roots.**
- **Exposure of terrestrial plants to contaminants is present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Plants:** 3

**Provide explanation:** Surface soil contamination is present at these AOCs.

**Question J:**

**Could contaminants interact with receptors through food-web transport from surficial soils?**

- **The chemicals may bioaccumulate in animals.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Animals:** 3

**Provide explanation:** COPCs are present in the surface soil.

**Question K:**

**Could contaminants interact with receptors through the incidental ingestion of surficial soils?**

- **Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or groom themselves clean of soil.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Animals:** 3

**Provide explanation:** COPCs are present in the surface soil.

**Question L:**

**Could contaminants interact with receptors through dermal contact with surficial soils?**

- **Significant exposure through dermal contact would generally be limited to organic contaminants that are lipophilic and can cross epidermal barriers.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Animals:** 2

**Provide explanation:** Low concentrations of lipophilic COPCs were detected infrequently in surface soil.

**Question M:**

**Could contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** No radionuclides were identified as COPCs.

**Question N:**

**Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?**

- **Contaminants may be taken up by terrestrial plants whose roots are in contact with surface waters.**
- **Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.**
- **Contaminants in sediment may partition into soil solution, making them available to roots.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Plants:** 0

**Provide explanation:** No water or sediment is present at these AOCs.

**Question O:**

**Could contaminants interact with receptors through food-web transport from water and sediment?**

- **The chemicals may bioconcentrate in food items.**
- **Animals may ingest contaminated food items.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** No water or sediment is present at these AOCs.

**Question P:**

**Could contaminants interact with receptors through the ingestion of water and suspended sediments?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.**
- **Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking water source.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** No water or sediment is present at these AOCs.

**Question Q:**

**Could contaminants interact with receptors through dermal contact with water and sediment?**

- **If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.**
- **Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Animals:** 0

**Provide explanation:** No water or sediment is present at these AOCs.

**Question R:**

**Could suspended or sediment-based contaminants interact with plants or animals through external irradiation?**

- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **Burial of contamination attenuates radiological exposure.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** No water or sediment is present at these AOCs.

**Question S:**

**Could contaminants bioconcentrate in free-floating aquatic plants, attached aquatic plants, or emergent vegetation?**

- **Aquatic plants are in direct contact with water.**
- **Contaminants in sediment may partition into pore water, making them available to submerged roots.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Aquatic Plants/Emergent Vegetation:** 0

**Provide explanation:** There is no aquatic habitat at these AOCs.

**Question T:**

**Could contaminants bioconcentrate in sedimentary or water-column organisms?**

- **Aquatic receptors may actively or incidentally ingest sediment while foraging.**
- **Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.**
- **Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There is no aquatic habitat at these AOCs.

**Question U:**

**Could contaminants bioaccumulate in sedimentary or water column organisms?**

- **Lipophilic organic contaminants and some metals may concentrate in an organism's tissues.**
- **Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Aquatic Animals:** 0

**Provide explanation:** There is no aquatic habitat at these AOCs.

**Question V:**

**Could contaminants interact with aquatic plants or animals through external irradiation?**

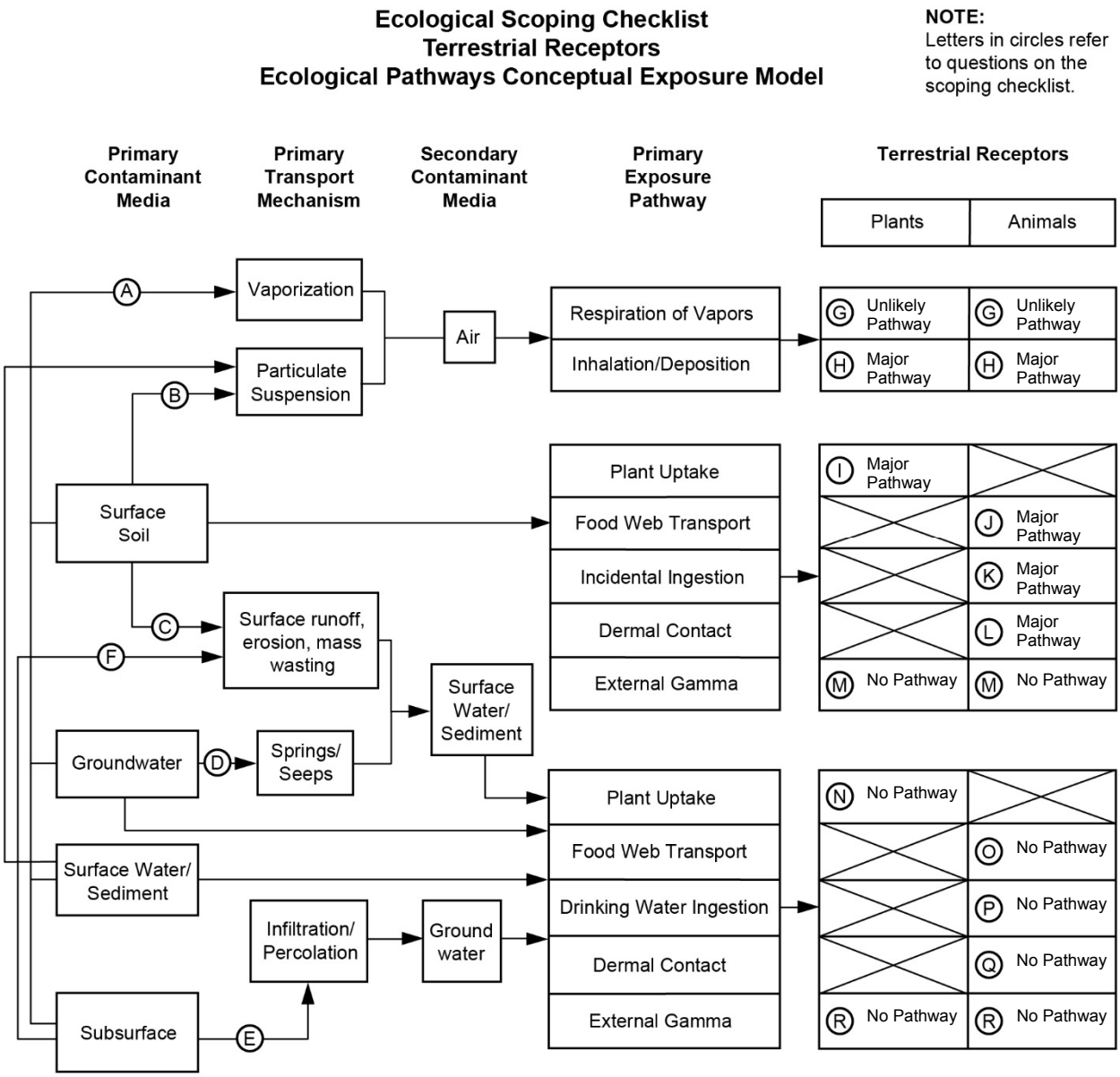
- **External irradiation effects are most relevant for gamma-emitting radionuclides.**
- **The water column acts to absorb radiation; therefore, external irradiation is typically more important for sediment-dwelling organisms.**

**Provide quantification of exposure pathway (0 = no pathway, 1 = unlikely pathway, 2 = minor pathway, 3 = major pathway):**

**Aquatic Plants:** 0

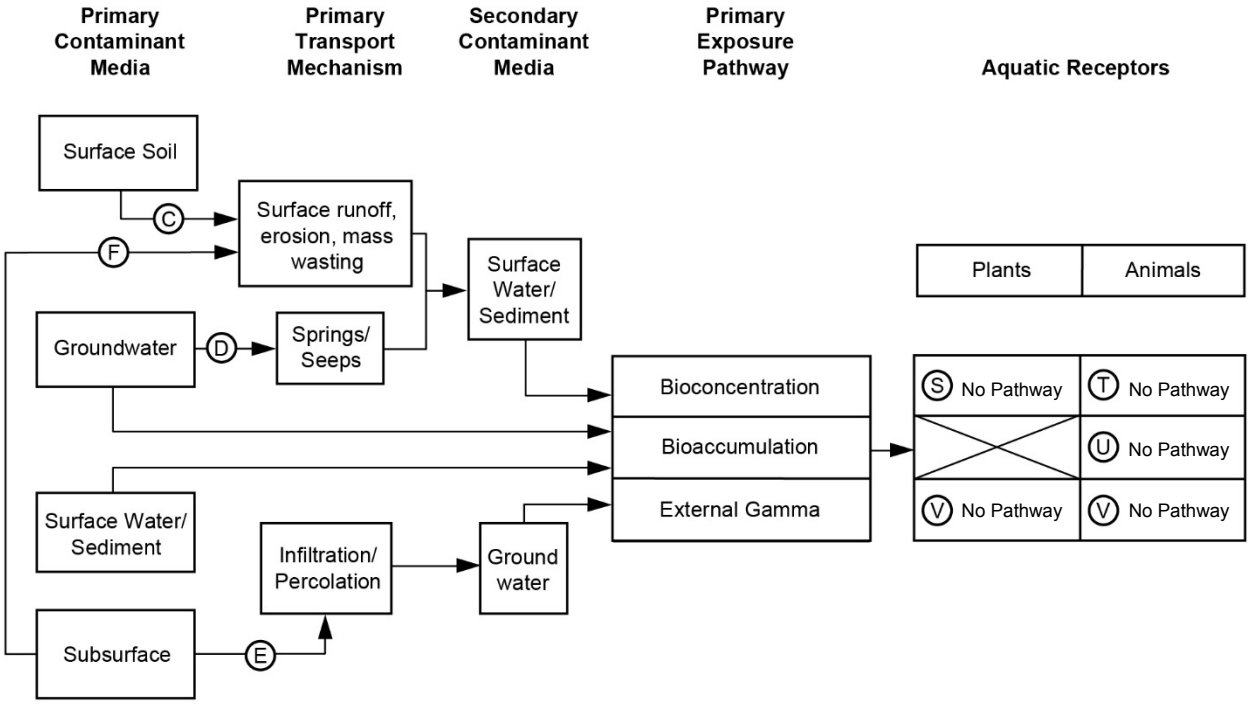
**Aquatic Animals:** 0

**Provide explanation:** There is no aquatic habitat at these AOCs.


Ecological Scoping Checklist
Terrestrial Receptors
Ecological Pathways Conceptual Exposure Model
NOTE:
Letters in circles refer to questions on the scoping checklist.
Primary Contaminant Media
Primary Transport Mechanism
Secondary Contaminant Media
Primary Exposure Pathway
Terrestrial Receptors
Plants
Animals
A
Vaporization
Particulate Suspension
B
Air
Respiration of Vapors
Inhalation/Deposition
G Unlikely Pathway
H Major Pathway
Surface Soil
Plant Uptake
Food Web Transport
Incidental Ingestion
Dermal Contact
External Gamma
I Major Pathway
J Major Pathway
K Major Pathway
L Major Pathway
M No Pathway
C
F
Surface runoff, erosion, mass wasting
Surface Water/ Sediment
Groundwater
D
Springs/ Seeps
N No Pathway
O No Pathway
P No Pathway
Q No Pathway
R No Pathway
Surface Water/ Sediment
Drinking Water Ingestion
Infiltration/ Percolation
Ground water
Subsurface
E

**Ecological Scoping Checklist**
**Aquatic Receptors**
**Ecological Pathways Conceptual Exposure Model**

**NOTE:**
Letters in circles refer to questions on the scoping checklist.



**Signatures and certifications:**

**Checklist completed by:**

| | |
|---|---|
| **Name (printed):** | Randall Ryti |
| **Name (signature):** | Randall Ryti |
| **Organization:** | Neptune and Company, Inc. |
| **Date completed:** | October 29, 2014 |

**Checklist reviewed by:**

| | |
|---|---|
| **Name (printed):** | Richard Mirenda |
| **Name (signature):** | Richard Mirenda |
| **Organization:** | Los Alamos National Laboratory |
| **Date reviewed:** | February 5, 2015 |

## G3-2.0 REFERENCES

*The following list includes all documents cited in this attachment. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the ESH Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

LANL (Los Alamos National Laboratory), April 2012. "Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill)," Los Alamos National Laboratory document LA-UR-12-20545, Los Alamos, New Mexico. (LANL 2012, 214550)

NMED (New Mexico Environment Department), July 11, 2012. "Approval with Modifications, Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill)," New Mexico Environment Department letter to P. Maggiore (DOE-LASO) and M.J. Graham (LANL) from J.E. Kieling (NMED-HWB), Santa Fe, New Mexico. (NMED 2012, 520936)

# Attachment G-4

*Jemez Mountain Salamander Report*

Los Alamos
NATIONAL LABORATORY
EST. 1943

# memorandum

Environmental Protection Division
Environmental Stewardship Services (ENV-ES)

*To/MS:* Todd Haagenstad, ER, M992
*From/MS:* Charles D. Hathcock, ENV-ES, J978
*Phone/Fax:* 5-3366/Fax 5-8858
*Symbol:* ENV-DO-15-0039
*Date:* FEB 10 2015

**SUBJECT: ANALYSIS OF BIOLOGICAL RESOURCE REQUIREMENTS FOR THE INVESTIGATION AND REMEDIATION OF AREAS OF CONCERN (AOCS) 57-006 AND 57-007 IN THE TECHNICAL AREA 57 AGGREGATE AREA (FENTON HILL)**

Enclosed with this distribution is an analysis conducted by ENV-ES biologists to document requirements under the Los Alamos National Laboratory Habitat Management Plan for the closure of AOCs 57-006 and 57-007 at the Fenton Hill facility. This analysis was requested by Todd Haagenstad (ER) and will be included with the AOC closure report to the New Mexico Environment Department.

Enclosures: (1) Analysis of Biological Resource Requirements for the investigation and remediation of areas of concern (AOCs) 57-006 and 57-007 in the Technical Area 57 Aggregate Area (Fenton Hill), LA-UR-15-20706

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# ENCLOSURE 1

Analysis of Biological Resource Requirements for the Investigation and Remediation of Areas of Concern (AOCs) 57-006 and 57-007 in the Technical Area 57 Aggregate Area (Fenton Hill), Los Alamos National Laboratory Report

LA-UR-15-20706

ENV-ES-15-0039

FEB 10 2015

Date: _____

LA-UR-15-20706
February 2015

# Analysis of Biological Resource Requirements for the Investigation and Remediation of Areas of Concern (AOCs) 57-006 and 57-007 in the Technical Area 57 Aggregate Area (Fenton Hill)

Los Alamos
NATIONAL LABORATORY
EST. 1943

Prepared for: Todd Haagenstad, Environmental Restoration (ER)

Prepared by: Charles Hathcock, Biologist
LANL Environmental Stewardship Services (ENV-ES)

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In September 2012 the U.S. Fish and Wildlife Service (USFWS) proposed the Jemez Mountains Salamander (*Plethodon neomexicanus*; JMS) as Endangered under the Endangered Species Act (77 FR 56482) and the final listing of the JMS as Endangered was on September 10, 2013 (78 FR 55599). Critical habitat was designated on November 20, 2013 (78 FR 69569).

Critical habitat was not designated on Los Alamos National Laboratory (LANL) property; however, the species is known to occur on LANL property and Los Alamos National Security, LLC (LANS) biologists delineated habitat (Hathcock 2013) for inclusion into the LANL Habitat Management Plan (LANL 2014; HMP). The purpose of the HMP is to provide a management strategy for the protection of threatened and endangered species and their habitats on LANL property. The HMP provides work requirements that have already been approved by the USFWS to ensure that LANL operations do not adversely affect threatened or endangered species or their habitats.

The entire footprint of Technical Area (TA) -57 is comprised of either developed or undeveloped core habitat for the JMS as defined by LANL's HMP. The previously disturbed footprint at TA-57 is developed core habitat and the undeveloped treed areas are undeveloped core habitat. The east side of New Mexico Highway 126 is listed as Critical Habitat for the JMS by the USFWS. The general area around and including Fenton Hill is within the known range for the species.

Both Areas of Concern (AOCs) 57-006 and 57-007, and their sampling locations, are within developed core habitat for JMS (Figure 1). The only restriction in the HMP for work in developed core habitat for the JMS is to plan soil disturbance activities to avoid monsoon rain events (generally July – mid-September) when the JMS may be found on the surface. In undeveloped core habitat, work activities that disturb the soil or change the canopy cover would not be authorized.

Surveys for the JMS at TA-57 have been conducted by federal and state permitted LANS biologists in 2012, 2013, and 2014 during the monsoon season and no JMSs were detected. Historical surveys were completed at the site on June 23, 1985 and no JMSs were detected. Directly east across NM Highway 126 a survey from 1991 did not detect any JMS. The nearest JMS detection to TA-57 is 0.75 miles NNE in designated critical habitat on the east side of the highway. In a 2 mile radius of TA-57, all of the positive detections of JMS occurred on treed

undeveloped slopes. The TA-57 complex is situated on a flat mesa top with very little change in elevation. The likelihood of JMS occurring on the site is very low and occurrence of a JMS in the developed core habitat areas would essentially be zero. In a mark–recapture study conducted by the New Mexico Department of Game and Fish (NMDGF), the average distance of 32 movements measured via recapture either in the same year or from year to year, measured over the course of approximately 10 years within a 164-ft-by-164-ft (50-m-by-50-m) plot, was 19.6 ft (5.98 m), with a maximum distance moved from original capture site of 60.7 ft (18.5 m) (NMDGF 2000). In this same study, one salamander was observed near the same log nearly 5 years later. The data from this study suggest that JMS generally move very little. Based on this, possible exposure to any of the sample sites in the developed core habitat by a JMS moving across the landscape is null.

Citations:

Hathcock, C.D. 2013. Threatened and Endangered Species Habitat Management Plan Area of Environmental Interest Site Plan for the Jemez Mountains Salamander. Los Alamos National Laboratory report LA-UR-13-25061.

Los Alamos National Laboratory (LANL). 2014. Threatened and Endangered Species Habitat Management Plan for Los Alamos National Laboratory. Los Alamos National Laboratory report LA-UR-14-21863.

New Mexico Department of Game and Fish (NMDGF). 2000. Status of Endemic New Mexico Salamanders Performance Report.

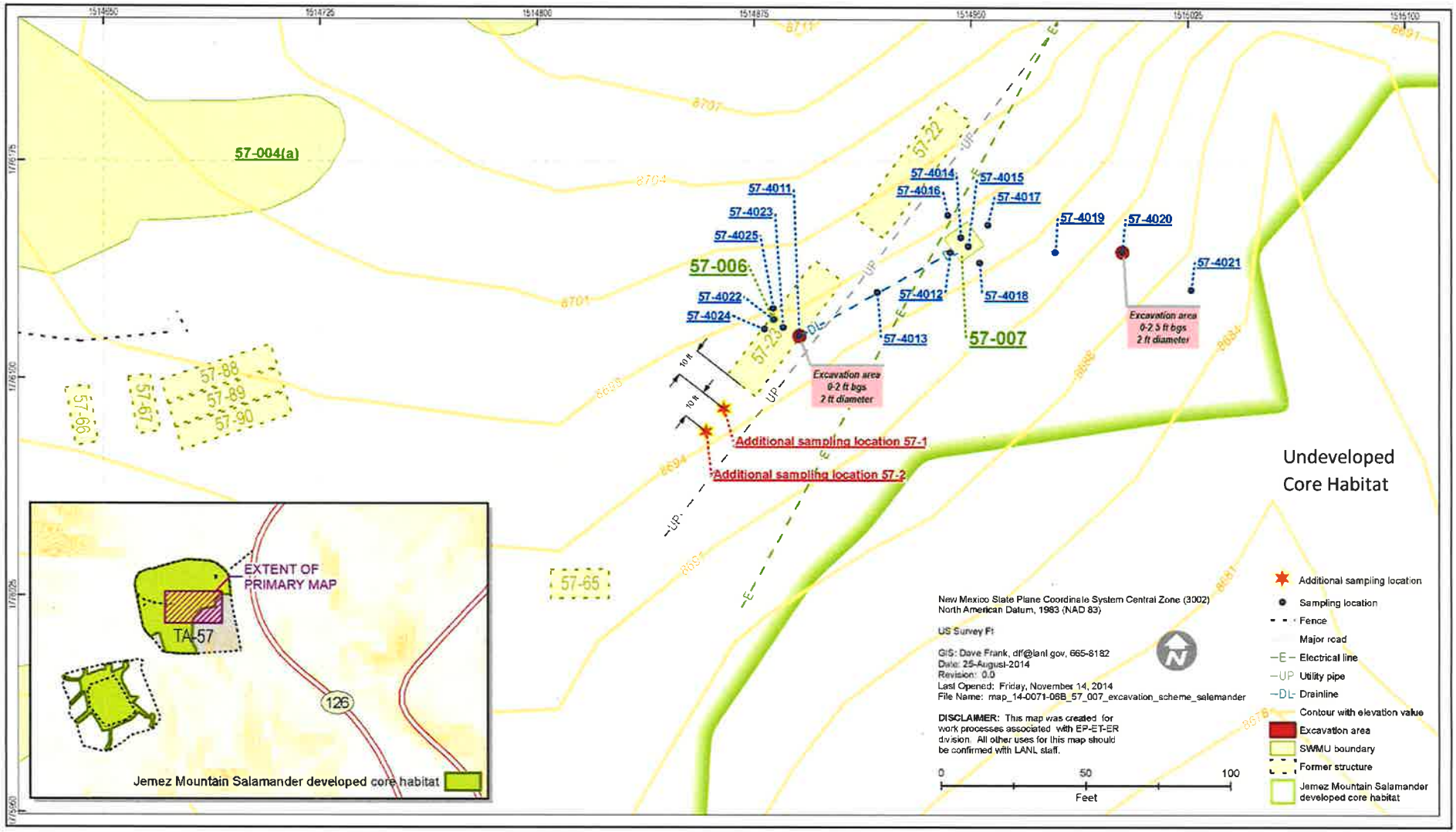


Figure 1. Both AOCs 57-006 and 57-007, and their sampling locations, in relation to developed core habitat for Jemez Mountains salamander.

# Appendix H

*Documentation of Past Investigations and Corrective Actions at New Mexico Oil Conservation Division–Regulated Sites*

The Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill) (hereafter, the work plan) described how sites at Technical Area 57 (TA-57), identified as areas of concern (AOCs), were associated with geothermal energy research, were regulated by the New Mexico Oil Conservation Division (NMOCD), and were closed under a discharge plan issued by NMOCD. The work plan contained a reference to NMOCD's termination of that discharge plan and indicated that no further actions were required by NMOCD for sites regulated under the plan. The New Mexico Environment Department's (NMED's) approval with modifications for the investigation work plan requested supporting documentation related to the NMOCD's termination of the discharge plan, which is provided in this appendix. Specifically, documentation was requested related to past investigations and corrective actions at the closed sites. The five AOCs regulated by NMOCD are 57-001(b), 57-001(c), 57-002, 57-004(a), and 57-004(b).

Activities related to geothermal research at TA-57 (i.e., the Hot Dry Rock Program) were regulated under Discharge Plan GW-031, issued by NMOCD in June 1984 and most recently reissued on June 5, 2000. Discharge Plan GW-031 was terminated on August 29, 2003, following closure of the final regulated activities at TA-57. Activities regulated under the discharge plan included installing and operating geothermal exploration/production wells and storing drilling muds and geothermal fluids in ponds as well as disposing of drilling muds and geothermal fluids.

**AOC 57-004(a)**

AOC 57-004(a) consists of two former settling ponds (GTP-1E and GTP-1W) that were reconfigured into a 1-million-gal. lined pond. Construction began in 1975, and the pond was closed in 2002 as part of the final NMOCD closure activities at TA-57. Final closure activities at TA-57 were conducted in accordance with the Closure Plan for Fenton Hill Geothermal 1-MG Service Pond and EE-2A Production Well prepared in August 2002 (Attachment H-1). The 1-MG Service Pond [AOC) 57-004(a)] and the EE-2A production well were the final two sites at TA 57 regulated under Discharge Plan GW-031. The closure plan was approved by NMOCD on August 15, 2002 (Attachment H-2). Los Alamos National Laboratory (the Laboratory) initiated closure activities in October 2003 and submitted a progress report to NMODC on February 7, 2003 (Attachment H-3). This progress report described closure activities, including removal and characterization of the pond contents, removal of the pond liner, and soil sampling and analysis. The progress report also included a proposed plan for backfilling the 1-MG pond following removal of its contents and the liner. This backfill plan was approved by NMOCD on February 14, 2003 (Attachment H-4). Following approval of the backfill plan, closure activities were completed and a final closure report was submitted by the Laboratory to NMODC on August 13, 2003 (Attachment H-5). The final report also included a request to terminate Discharge Plan GW-031 because all activities regulated by NMOCD since the plan was originally issued had now been closed. NMOCD approved the Laboratory's request to terminate Discharge Plan GW-031 on August 29, 2003 (Attachment H-6).

**AOC 57-004(b)**

AOC 57-004(b), also known as the 5-Million Gallon Pond or the Milagro Pond, is a 5-million-gal., plastic-lined storage pond. The pond was constructed in 1982 and originally used as a holding pond for circulated fluids from geothermal wells in accordance with the discharge plan. In1995, the pond was closed for purposes of geothermal activities and modified for use in the Milagro gamma-ray observatory project. The pond was cleaned out, instrumented with over 700 photomultiplier tubes, refilled with purified water, and covered with a light-proof cover consisting of a synthetic membrane. The water used to fill the pond was treated using granular activated carbon ion exchange (i.e., softening) and disinfected with ultraviolet light.

As part of the modification of the pond for use by the Milagro Project in 1995–1996, it was necessary to remove its contents. NMOCD approved land application of approximately 3.7 million gal. of water from the pond to approximately 22 acres of U.S. Forest Service (USFS) land located southwest of the pond. This discharge occurred from May 1995 to October 1995. The NMOCD approval required the application area to be bermed to prevent runoff from a 100-yr flood and also required the Laboratory to collect soil samples within and downgradient of the land application before and after application and for a period of 5 yr following application (1995–1999). Two samples collected in the application area after application was completed showed elevated concentrations of arsenic (18 mg/kg and 24 mg/kg). Three samples collected downgradient of the application area did not show an increase in arsenic above pre-application concentrations. Samples from the two locations in the application area collected in 1996 1 yr after application showed that arsenic concentrations had attenuated to pre-application concentrations (Attachment H-7).

Along with land application of the water, the sludge in the pond and the pond liner were removed and disposed of off-site. Before it was removed, two samples of the sludge were collected in June 1995. Arsenic concentrations in the sludge were 726 mg/kg and 1410 mg/kg. The pond was then relined in 1996 in accordance with specifications approved by NMOCD (Attachment H-8).

After the Milagro observatory became operational, it was necessary to remove water from the pond in 1998 to perform maintenance. The NMOCD approved land application of approximately 2.5 million gal. of water to 7 acres of USFS land located on the northern boundary of the facility. The discharge occurred from April 1998 to June 1998. Because of the high quality of the water used in the pond, no sampling was required as a condition of discharge. Closure of both land application areas was requested in October 2000. (Attachment H-8).

**AOCs 57-001(b), 57-001(c), and 57-002**

AOCs 54-001(b) and 57-001(c), two former settling ponds, and AOC 57-002, a sludge disposal pit, were closed before1990, and NMOCD closure records are not part of the Resource Conservation and Recovery Act (RCRA) corrective action records. Subsequent to closure under the NMOCD discharge permit, these three AOCs were investigated as part of a RCRA facility investigation (RFI) performed by the Laboratory. The RFI data, therefore, are more representative of current conditions, including the locations and concentrations of residual contaminants, than the NMOCD closure documentation. The RFI report, which also includes AOC 57-004(a), is presented as Attachment H-9. It should be noted, however, that some of the information in the RFI report for AOC 57-004(a) has been superseded by the data collected during NMOCD closure.

# Attachments H-1 to H-9

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*Documentation*
*(on CD included with this document)*

LA-UR-02-5009
August 2002

# LOS ALAMOS NATIONAL LABORATORY

# CLOSURE PLAN FOR FENTON HILL GEOTHERMAL 1-MG SERVICE POND AND EE-2A PRODUCTION WELL

Prepared by:

*Los Alamos National Laboratory*
*Los Alamos, New Mexico 87545*

# LOS ALAMOS NATIONAL LABORATORY

# CLOSURE PLAN FOR FENTON HILL GEOTHERMAL 1-MG SERVICE POND AND EE-2A PRODUCTION WELL

**LA-UR-02-5009**

**August 2002**

Prepared by:

*Los Alamos National Laboratory*
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# TABLE OF CONTENTS

LIST OF TABLES ..... ii
LIST OF FIGURES ..... iii
LIST OF APPENDICES ..... iv
LIST OF ABBREVIATIONS/ACRONYMS ..... v

FENTON HILL CLOSURE PLAN FOR GEOTHERMAL 1-MG SERVICE POND AND PRODUCTION WELL CLOSURE

1.0 INTRODUCTION ..... 1

2.0 SITE DESCRIPTION ..... 1

2.1 1-MG Service Pond ..... 2
2.1.1 Geothermal Fluids ..... 2
2.1.2 Sludge ..... 3
2.2 EE-2A, Production Well ..... 4
2.3 EE-2A, Production Wellhead ..... 4

3.0 CLOSURE REQUIREMENTS ..... 4

4.0 HEALTH AND SAFETY REQUIREMENTS ..... 5

5.0 DECOMMISSIONING ACTIVITIES ..... 6

5.1 Removal of Fluids ..... 6
5.2 Removal of Sludge ..... 6
5.3 1-MG Service Pond ..... 6
5.3.1 1-MG Service Pond Liners ..... 7
5.3.2 Leak Detection Fill ..... 8
5.4 EE-2A Production Well ..... 8

6.0 SITE CHARACTERIZATION ..... 9

6.1 Inspection of Surface beneath the Secondary Liner ..... 9
6.2 Geodetic Survey ..... 9

7.0 SAMPLING ACTIVITIES ..... 9

7.1 Soil Sampling ..... 10
7.2 Liquid Sampling ..... 10
7.3 NORM Surveys ..... 10

8.0 SITE RESTORATION ..... 10

9.0 WASTE MANAGEMENT ..... 11

10.0 POST CLOSURE REPORTING ..... 12

11.0 REFERENCES ..... 12

# LIST OF FIGURES


| FIGURE NO. | TITLE |
|---|---|
| 1 | Fenton Hill - Site Location |
| 2 | 1-Million Gallon Service Pond, Site Grading Plan [1989] |
| 3 | 1-Million Gallon Service Pond, Site Grading Plan Showing Drains [1989] |
| 4 | 1-Million Gallon Service Pond Detail (Leak Detection System) |
| 5 | EE-2A Production Wellhead Schematic |

# LIST OF ABBREVIATIONS/ACRONYMS

| | |
|---|---|
| 1-MG | 1-million gallon |
| ft | feet/foot |
| HDR | Hot Dry Rock Geothermal Project |
| HSR-1 | Health Physics Operations Group |
| in. | inch(es) |
| LANL | Los Alamos National Laboratory |
| NM | New Mexico |
| NORM | naturally occurring radioactive material |
| OCD | Oil Conservation Division |
| P&A | plugging & abandonment |
| PPE | personal protective equipment |
| PVC | poly vinyl chloride |
| SSHSP | Site-Specific Health and Safety Plan |
| TA | technical area |
| $yd^3$ | cubic yard(s) |

# FENTON HILL
# GEOTHERMAL 1-MILLION GALLON SERVICE POND AND EE-2A PRODUCTION WELL CLOSURE PLAN

## 1.0 INTRODUCTION

Los Alamos National Laboratory (LANL) intends to close the 1-million gallon (1-MG) service pond and the EE-2A geothermal production well associated with the Hot Dry Rock (HDR) Geothermal Project at the Technical Area (TA) 57 Fenton Hill site. The TA-57 Fenton Hill site is located approximately 30 miles west of Los Alamos on State Road 126 in Sandoval County, New Mexico, at an elevation of 8,700 feet (ft). Fenton Hill is the site of the first HDR geothermal research experiment in the world and is located at the western margin of the Valles Caldera in Northern New Mexico. The purpose of the experiment was to utilize the natural heat present beneath the surface of the Valles Caldera as geothermal energy for commercial production.

The HDR experiment involved the drilling of two wells into an impermeable rock formation and fracturing the space between the wells. Cold water from the surface was then injected into the first well and heated by geothermal energy from the rock formation. The heated water was returned to the surface through the second well, passed through a turbine or heat exchanger and was re-circulated through the system. The site originally consisted of four wells: two for experimental confirmation of the technology and two for verification of commercial applicability. The HDR experiment has since been concluded and the U.S. Department of Energy has determined that geothermal energy production at the site is cost prohibitive.

This closure plan describes the methods by which the 1-MG service pond and EE-2A production wellhead will be decommissioned. The plugging and abandonment (P&A) of the EE-2A production well is not covered by this closure plan. The closure plan describes existing site conditions, decommissioning procedures for the pond and wellhead, waste management, site characterization, and restoration of the site.

## 2.0 SITE DESCRIPTION

The 1-MG service pond and EE-2A production well are located in the southwest section of TA-57 as indicated on Figure 1. Detailed photographs of the site are provided in

**Table 1**
**Summary of Analytical Results of Geothermal Fluid Sample from the 1-Million Gallon Service Pond at TA-57 Fenton Hill**

| Analyte | Result (mg/L) [a] | Maximum Concentration of Contaminants (40CFR 261.24) (mg/L) |
|---|---|---|
| Silver | <0.01 | 5.0 |
| Aluminum | <0.01 | NA |
| Arsenic | 3.56 | 5.0 |
| Boron | 22.2 | NA |
| Barium | 1.3 | 100.0 |
| Beryllium | <0.002 | NA |
| Cadmium | <0.01 | 1.0 |
| Chlorine | 7612 | NA |
| Cobalt | <0.01 | NA |
| Chromium | <0.01 | 5.0 |
| Copper | <0.01 | NA |
| Fluorine | 1.26 | NA |
| Iron | 0.03 | NA |
| Mercury | 0.0003 | 0.2 |
| Lithium | 10.7 | NA |
| Magnesium | 134 | NA |
| Manganese | 0.039 | NA |
| Molybdenum | 0.02 | NA |
| Sodium | 3220 | NA |
| Nickel | <0.01 | NA |
| Lead | <0.01 | 5.0 |
| PH | 7.91 | NA |
| Selenium | <0.0002 | 1.0 |
| Antimony | <0.1 | NA |
| Sulfate | 179 | NA |
| Strontium | 5.08 | NA |
| Titanium | <0.002 | NA |
| TDS | 36,728 [b] | NA |
| TSS | 32.9 [b] | NA |
| Vanadium | <0.002 | NA |
| Zinc | <0.01 | NA |

a Sample collected on April 18, 2002.
b Sample collected on July 30, 2002.

NA = not applicable
mg/L = milligrams per liter

### 2.1.2 Sludge

Fenton Hill project personnel estimate the volume of sludge located in the 1-MG service pond to be approximately 35 cubic yards ($yd^3$). The exact composition of this material is currently unknown. One representative sample of the sludge will be collected prior to the commencement of closure activities to determine characteristics for waste disposal. This

The closure of the 1-MG service pond and EE-2A production wellhead is not subject to the requirements of the Resource Conservation and Recovery Act because wastes generated due to geothermal exploration are exempt in accordance with 40 CFR 261.4(b)(5). This includes

> *Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil, natural gas or geothermal energy.*

The 1-MG service pond contents (i.e., geothermal fluids, and sludge) currently consist of both exempt geothermal fluids and non-exempt Milagro Project wastewater as described in Section 2.1.1. However, the Milagro Project wastewater has been limited to less then 5% of the total volume of the pond, in accordance with the mixing policy of the NM OCD. This maintains the applicability of the exemption for the overall contents of the pond. The mixing of Milagro Project wastewater with the pond contents was approved by the NM OCD on May 10, 1999 in accordance with a LANL request for modification of the Ground Water Discharge Plan GW-031. The request for modification is provided in Appendix E. The NM OCD approval letter is provided in Appendix F.

The LANL Groundwater Discharge Permit GW-031 regulates the P&A of the EE-2A production well. The P&A of the EE-2A production well is outside of the scope of this closure plan.

## 4.0 HEALTH AND SAFETY REQUIREMENTS

Job hazards associated with closure activities will be identified, controls developed, and workers briefed before closure activities are conducted, in accordance with LANL safety procedures. Personnel involved in closure activities will wear appropriate personal protective equipment (PPE), specified by Health Physics Operations Group (HSR-1) and Industrial Hygiene and Safety Group, and will follow good hygiene practices to protect themselves from exposure to hazardous waste. Minimum PPE requirements will consist of coveralls, steel-toed shoes, and safety glasses. All workers involved in closure activities will be required to have appropriate training including HAZWOPER for general site workers (40 hours and refresher) and TA-57 site specific, as appropriate.

- Removal of approximately 5,800-ft of 4-ft high chain link fence from the perimeter of the pond.
- Removal of the primary and secondary pond liners.
- Excavation and removal of the three concrete reinforced drain bulkheads and piping.
- Excavation and removal of the leak detection piping and fill.
- Excavation and removal of the sump located at the east-end of the pond including the piping connecting it to the pond.
- Excavation and removal of the leak detection well
- Removal of approximately 5 hydrants from the perimeter of the site. These hydrants will be cut and capped below the hydrant assembly. The piping will be abandoned in place.

The fencing, hydrants, concrete, liners, piping, and fill will be staged on-site pending recycling and/or disposal as described in Section 9.0.

### 5.3.1 1-MG Service Pond Liners

The 1-MG service pond consists of a primary and secondary liner system with leak detection and pads. After the geothermal fluids and sludge have been removed from the 1-MG service pond, the primary liner will be pressure washed to remove any excess sludge. The water will be collected and staged with the sludge on-site for disposal as described in Section 9.0. After the liner is cleaned it will be cut into manageable pieces and removed from the service pond for staging on-site prior to waste disposal. The primary liner will be managed to ensure that it meets solid waste landfill criteria as described in 19 NMAC 15.9.712, prior to disposal.

The secondary liner is located beneath the leak detection system (i.e., gravel, sand, perforated piping). The fill material will be removed from the service pond as described in Section 5.3.2. If any evidence of a breach in the primary liner is present in the fill material, the secondary liner will also be pressure washed to ensure that it meets solid waste landfill criteria for disposal. It will then be cut into manageable pieces and removed from the containment for staging on-site prior to waste disposal. The secondary liner will

The well casing, pipe, and concrete removed during the cutting will be staged on-site to be recycled or disposed at a solid waste landfill. Prior to disposal, the waste from cutting will be surveyed for naturally occurring radioactive material (NORM) by LANL HSR-1 personnel. Results of the survey and written authorization from the NM OCD will be required prior to recycling or disposal of the material in accordance with 19 NMAC 15.9.712.

## 6.0 SITE CHARACTERIZATION

The 1-MG service pond is identified as PRS 57-004(b) in LA-UR-96-1062, "RFI Report for Potential Release Sites at TA-57" (LANL, 1996). Section 1.2.1.3 of the RFI report indicates that there is no evidence of contaminate release from the 1-MG service pond and that the sediments will be investigated upon decommissioning of the site. Characterization and/or confirmation soil samples may be collected from the soils underneath the liner and around the drain and feed line excavations by the Environmental Restoration Group prior to the commencement of restoration activities at the site.

### 6.1 Inspection of Surface beneath the Secondary Liner

The ground beneath the secondary liner of the 1-MG service pond will be inspected for moisture accumulation and/or soil discoloration. If any evidence of leakage is detected, the affected soil will be excavated, sampled, and analyzed for contamination. The affected soil will be staged on-site for waste disposal in accordance with the level of contamination as described in Section 9.0.

### 6.2 Geodetic Survey

A geodetic survey will be conducted of the excavated pond area and all associated structures (i.e., sumps, drains, and the EE-2A production well) following complete removal of all equipment and materials associated with the 1-MG service pond.

## 7.0 SAMPLING ACTIVITIES

The following sections describe procedures and methods for sampling, analysis, and documentation applicable to closure activities. Sampling will be conducted in accordance with procedures given in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, " *SW-846* (EPA, 1986).

During backfilling and restoration activities, temporary silt fencing and straw bale check dams will be installed, maintained, and routinely inspected. All disturbed areas will be re-seeded according to the LANL seeding specifications provided in Appendix G and in accordance with U.S. Forest Service requirements. A geodetic survey will be conducted at the site following restoration activities.

Upon completion of the restoration activities, LANL will schedule a site inspection for NM OCD officials to finalize approval of the closure.

## 9.0 WASTE MANAGEMENT

All closure activities will be conducted with waste minimization goals in mind. All waste materials generated will be controlled, handled, and disposed of in accordance with LANL waste management procedures. Several waste streams will be generated during the decommissioning activities associated with this closure plan. Table 2 provides a summary of the anticipated waste streams, the waste type, anticipated volume, and appropriate disposal options.

**Table 2**
**Potential Waste Streams, Types, Volumes, and Disposal Options**

| Waste Stream | Waste Type | Estimated Volume [a] | Disposal Options |
|---|---|---|---|
| 1-MG service pond fluids | Liquid | 30,000 –100,000 gallons | • On-site treatment<br>• NM OCD Permitted Facility |
| Sludge | Solid | 35 $yd^3$ | • NM OCD Permitted Facility |
| Concrete | Solid | 10 – 20 $yd^3$ | • LANL Recycle Program<br>• Solid Waste Facility |
| Piping (metal) | Solid | 100-150 ft | • LANL Recycle Program<br>• Solid Waste Facility [b] |
| Piping (PVC) | Solid | 150 – 200 ft | • LANL Recycle Program<br>• Solid Waste Facility |
| Gravel (Leak Detection System) | Solid | 20 – 60 $yd^3$ | • Backfill<br>• NM OCD Permitted Facility |
| Hydrants/Scrap metal | Solid | <1 $yd^3$ | • LANL Recycle Program |
| Pumps | Solid | <1 $yd^3$ | • LANL Recycle Program |
| Liner | Solid | 150 –200 $yd^3$ | • Solid Waste Facility |

a Estimated from as-built drawings of the 1-MG service pond and EE-2A well casing.
b Must be accompanied by analytical data for NORM and written authorization for disposal from OCD.

ft = feet/foot
LANL = Los Alamos National Laboratory
NM OCD = New Mexico Oil Conservation Division
PVC = polyvinyl chloride
$yd^3$ = cubic yard(s)

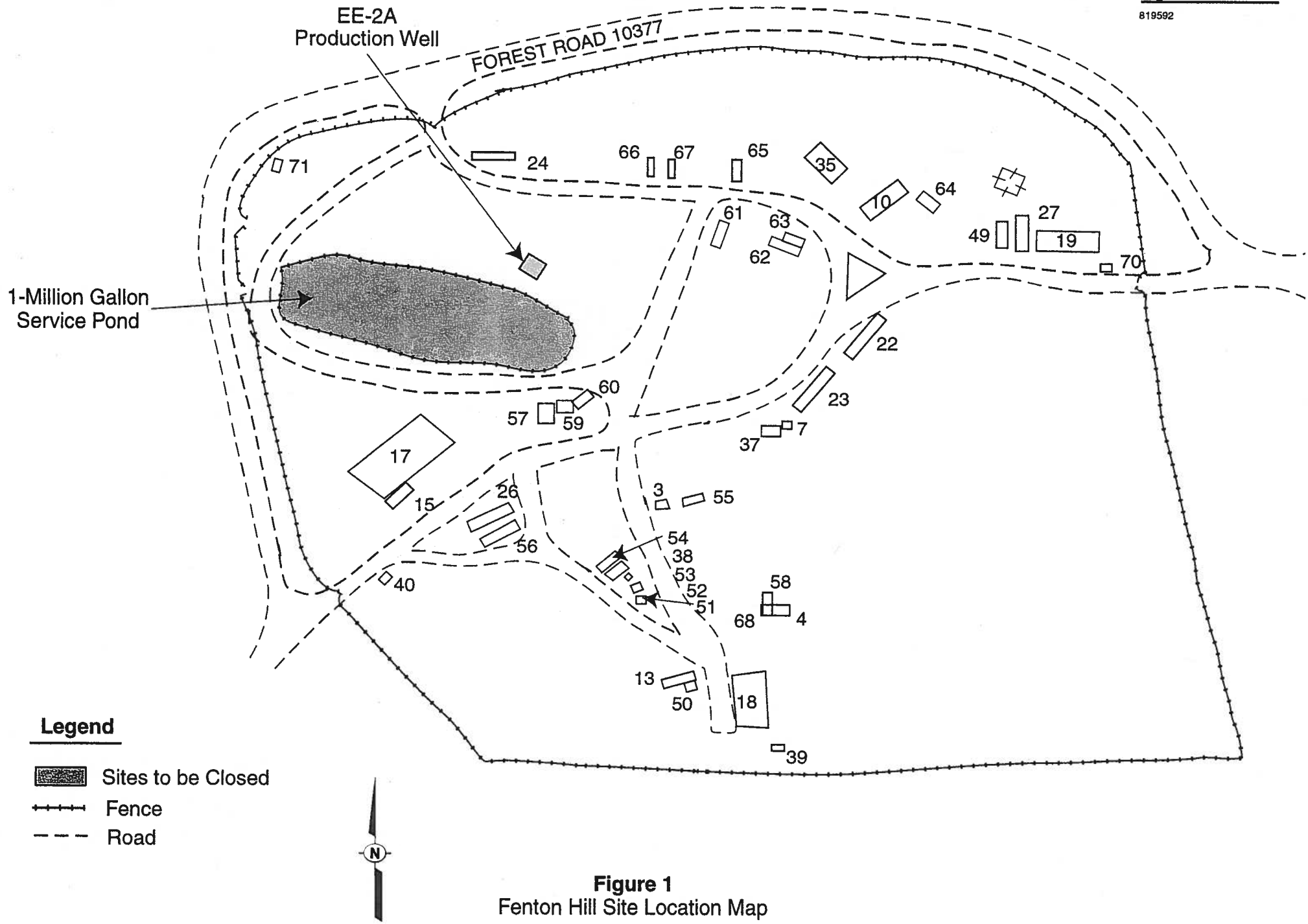



**Figure 1**
Fenton Hill Site Location Map

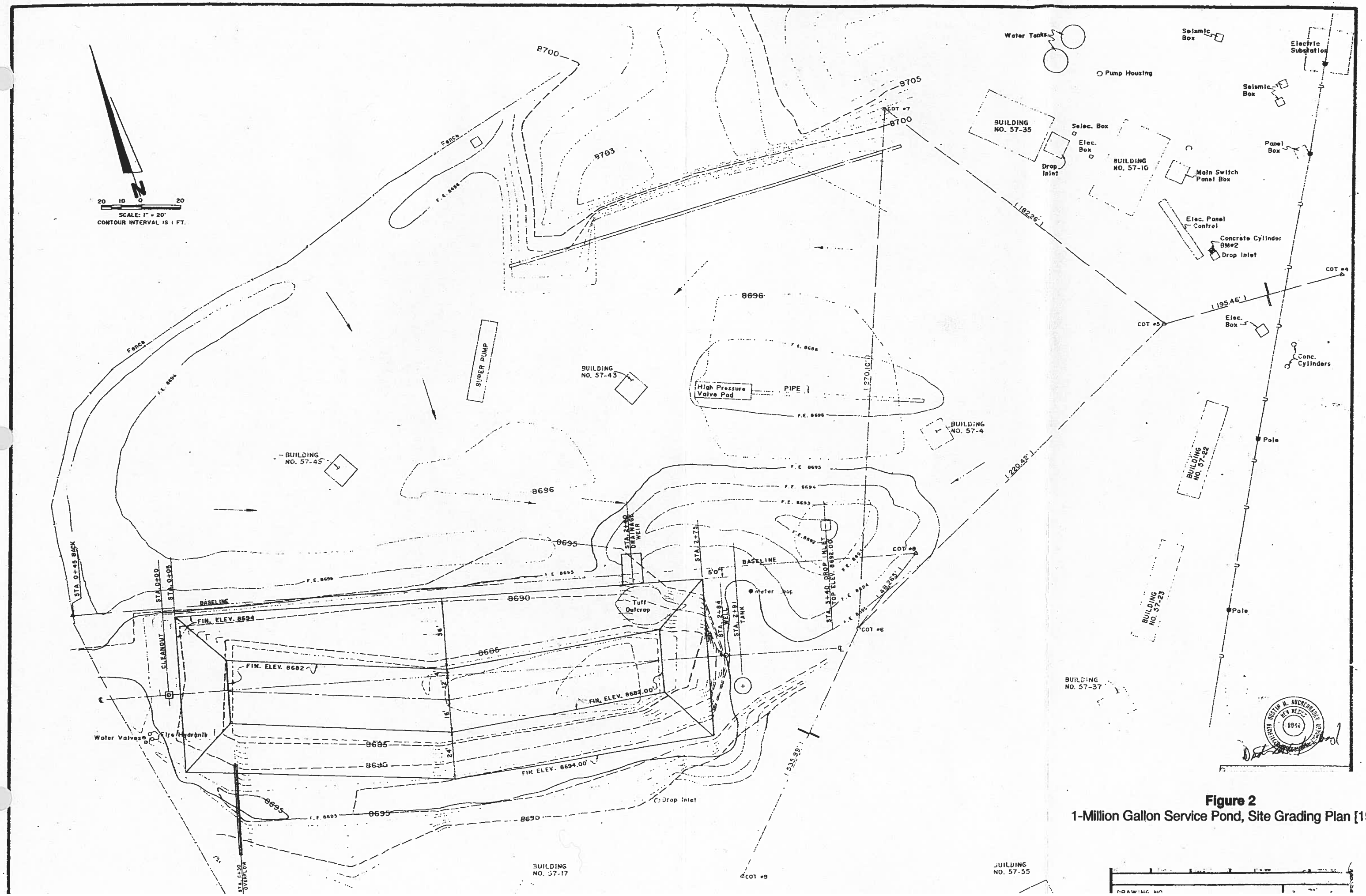



**Figure 2**
1-Million Gallon Service Pond, Site Grading Plan [1989]

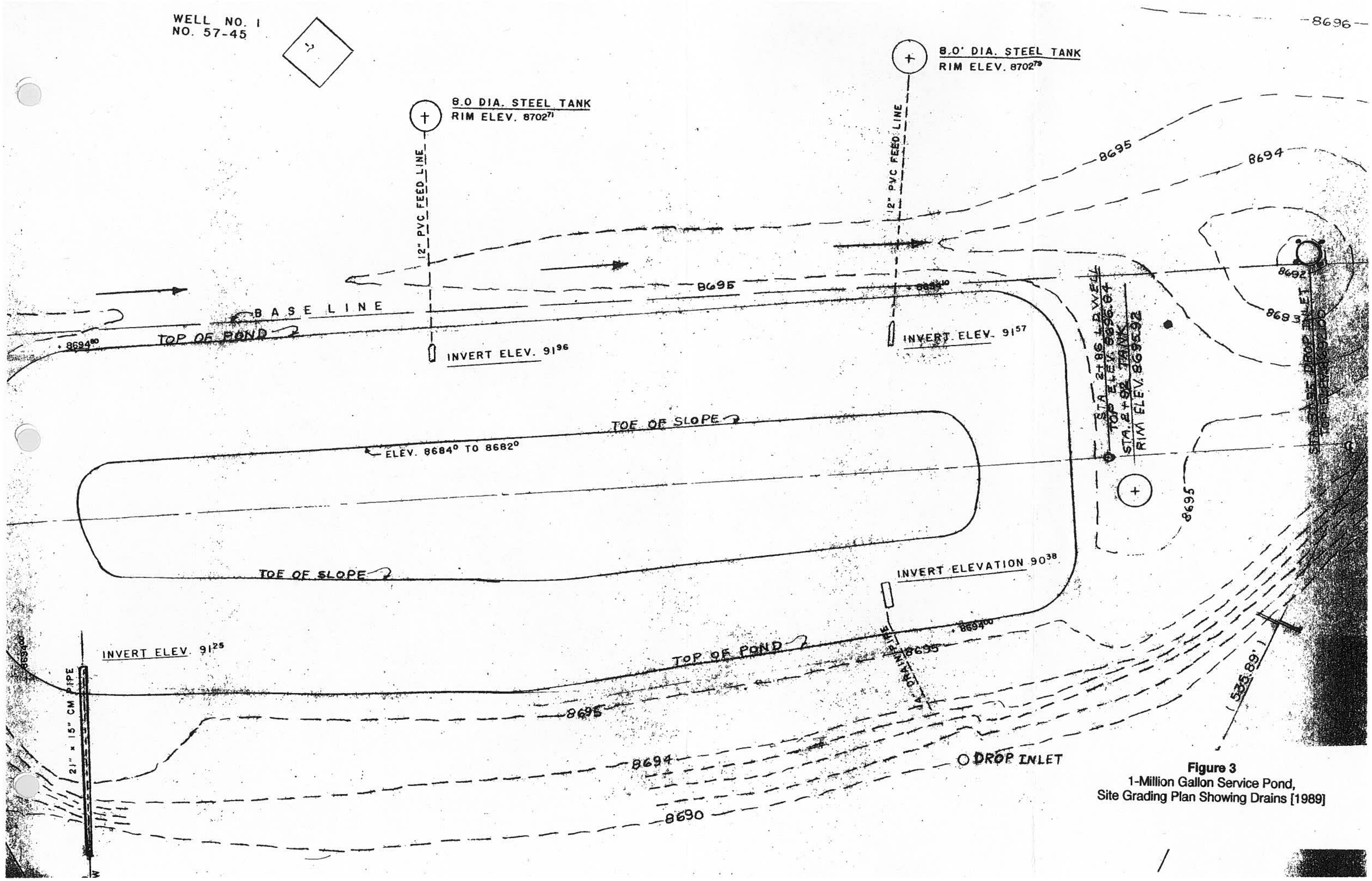



**Figure 3**
1-Million Gallon Service Pond,
Site Grading Plan Showing Drains [1989]

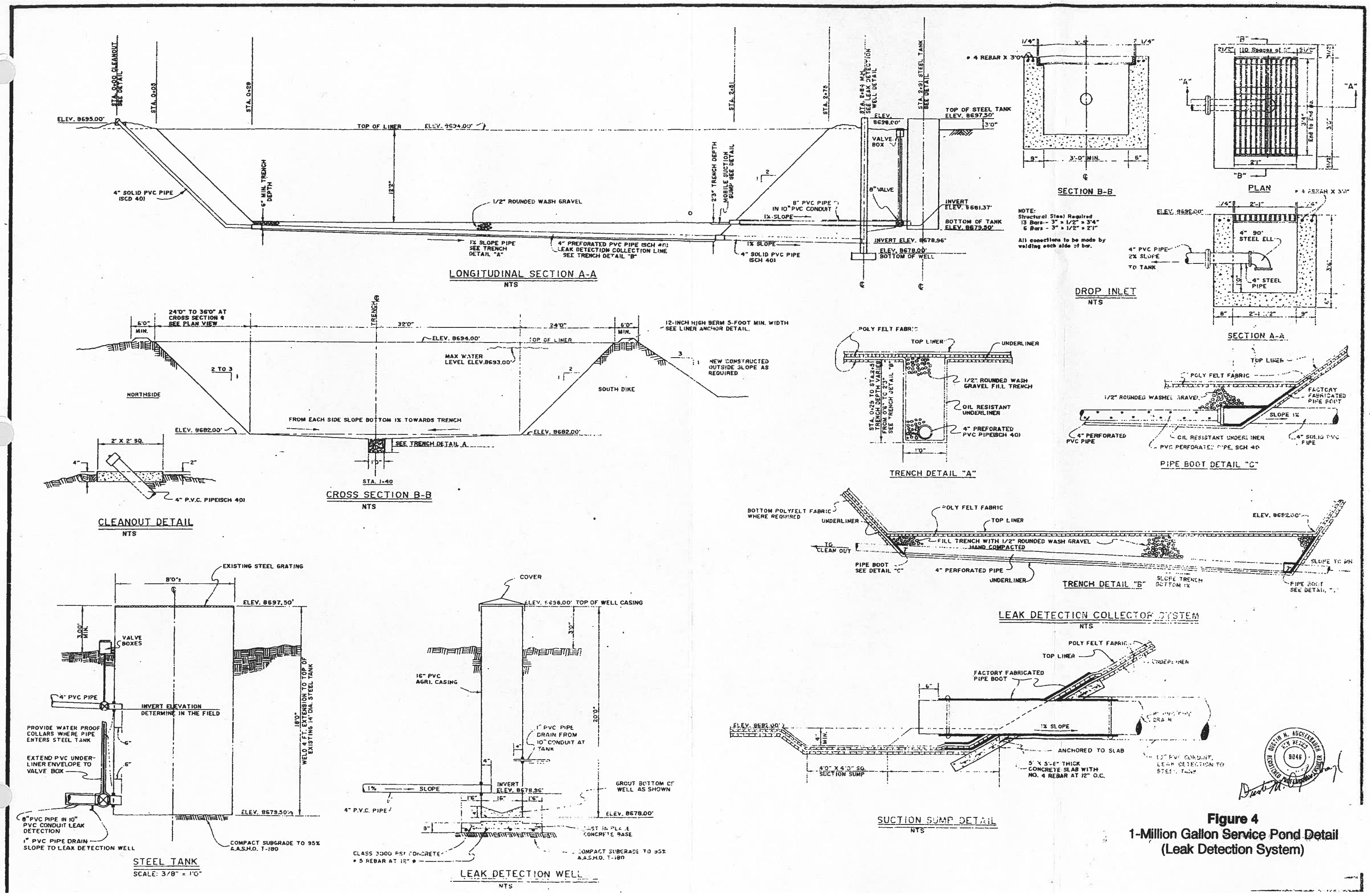



**Figure 4**
**1-Million Gallon Service Pond Detail**
**(Leak Detection System)**

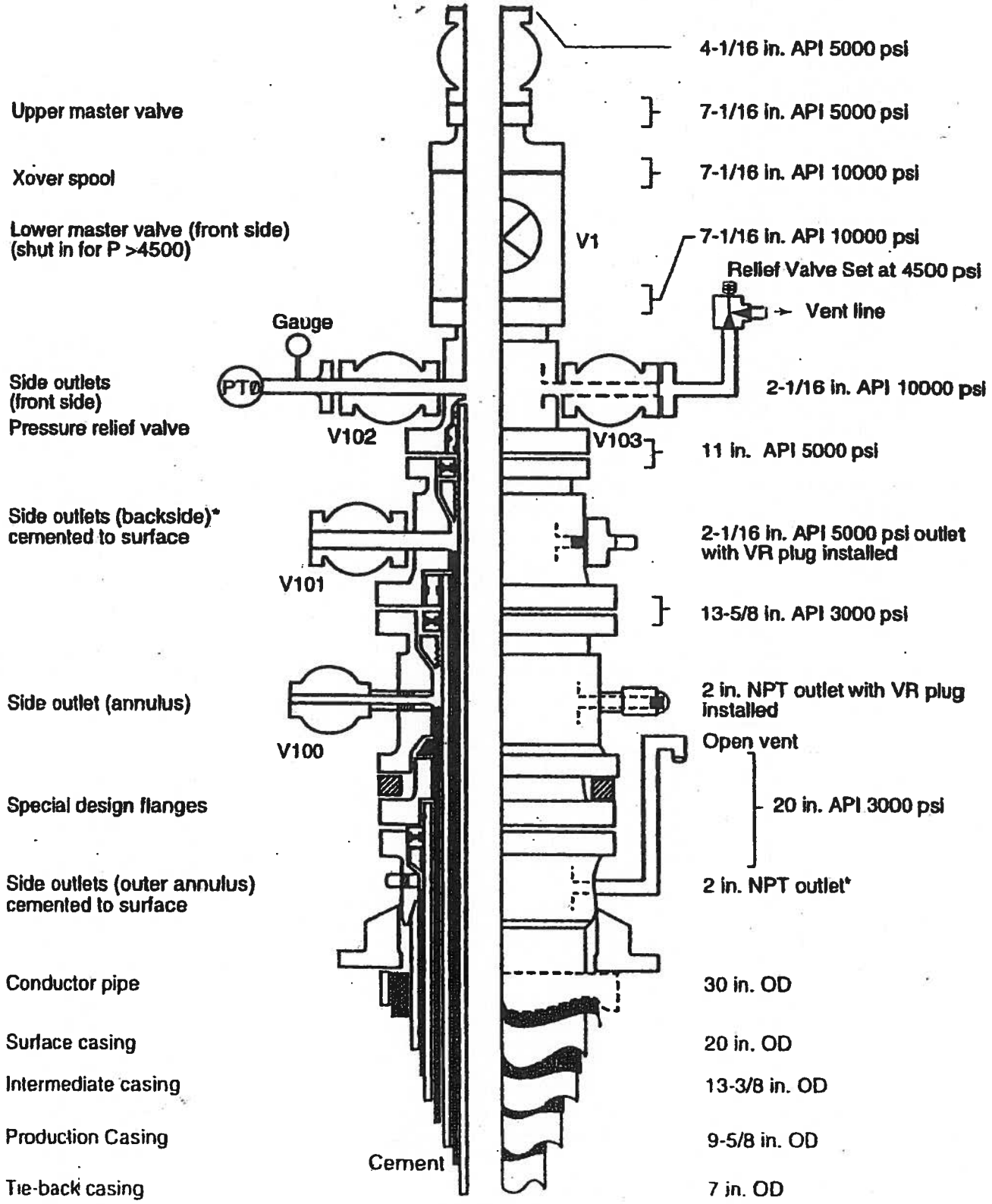



**Figure 5**
EE-2A Production Wellhead Schematic

## CERTIFICATION

I certify under penalty of law that this document and all appendices were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Paul Weber**
EES Division Director
Los Alamos National Laboratory
Operator

14 Aug '02
Date Signed

# APPENDIX A

## Fenton Hill Site Photographs

TA-57, Fenton Hill, Site Photograph Looking Southeast
EE-2A Production Well and Tower
(June 25, 2002)

TA-57, Fenton Hill, Site Photograph Looking Southwest
1-Million Gallon Service Pond
(June 25, 2002)

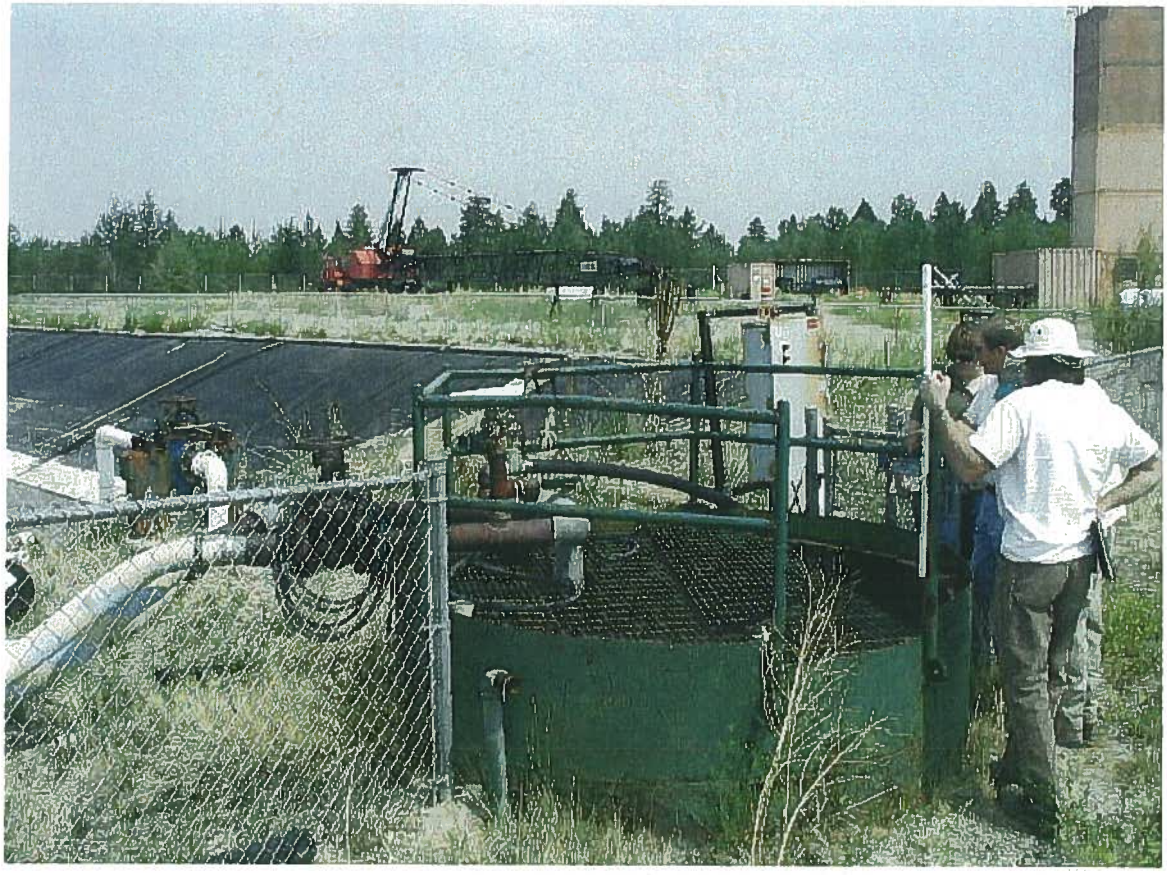
TA-57, Fenton Hill, Site Photograph Looking Northwest
1-Million Gallon Service Pond
(June 25, 2002)

TA-57, Fenton Hill, 1-Million Gallon Service Pond
(June 25, 2002)

TA-57, Fenton Hill, 1-Million Gallon Service Pond Looking Northeast
(June 25, 2002)

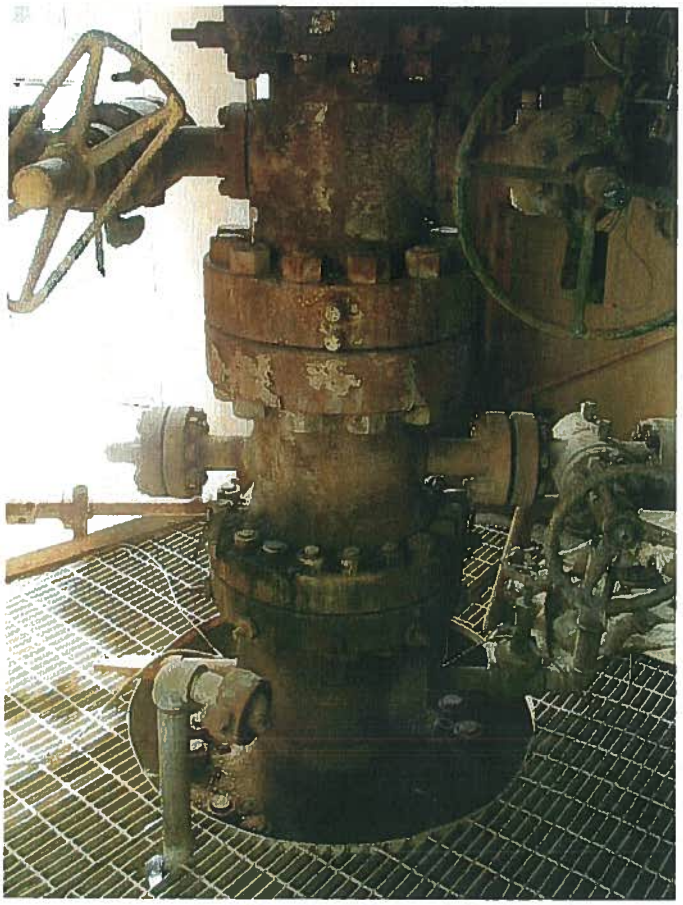
TA-57, Fenton Hill, 1-Million Gallon Service Pond Bunker and Drain
(June 25, 2002)

TA-57, Fenton Hill, 1-Million Gallon Service Pond Sump and Leak Detection Well
(June 25, 2002)



TA-57, Fenton Hill, Sump Exterior
(June 25, 2002)

TA-57, Fenton Hill, Sump Interior
(June 25, 2002)



TA-57, Fenton Hill, EE-2A Well Head
(June 25, 2002)

TA-57, Fenton Hill, Hydrant
(June 25, 2002)

# APPENDIX B

## NM OCD Form C-103 and LANL Plugging and Abandonment Procedures for Geothermal Well EE-2A

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
01 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised March 25, 1999

WELL API NO.
EE-2A (non-API)

5. Indicate Type of Lease
STATE ☐ FEE ☐

6. State Oil & Gas Lease No.
N/A

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:
Oil Well ☐ Gas Well ☐ Other – Experimental geothermal production well

7. Lease Name or Unit Agreement Name:
Fenton Hill Hot Dry Rock Geothermal Project

2. Name of Operator
Los Alamos National Laboratory

8. Well No. – EE-2A

3. Address of Operator
P.O.Box 1663, Los Alamos, NM 87545

9. Pool name or Wildcat
N/A

10. Well Location

Unit Letter_____: well is located 1609 feet from the East line and 1405 feet from the North line

Section 13 Township 19N Range 2E NMPM Sandoval County

10. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
KB

11. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

| NOTICE OF INTENTION TO: | | | | SUBSEQUENT REPORT OF: | | | |
|---|---|---|---|---|---|---|---|
| PERFORM REMEDIAL WORK | ☐ | PLUG AND ABANDON | ☒ | REMEDIAL WORK | ☐ | ALTERING CASING | ☐ |
| TEMPORARILY ABANDON | ☐ | CHANGE PLANS | ☐ | COMMENCE DRILLING OPNS. | ☐ | PLUG AND ABANDONMENT | ☐ |
| PULL OR ALTER CASING | ☐ | MULTIPLE COMPLETION | ☐ | CASING TEST AND CEMENT JOB | ☐ | | |
| OTHER: | | | ☐ | OTHER: | | | ☐ |

12. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation.

Please find detailed procedure and well diagrams attached. It is currently estimated that the abandonment will occur in September, 2002. NMOCD will be notified by LANL of the exact time that the abandonment work will commence at least 48 hours in advance.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Paul G. Weber TITLE Division Leader DATE 9 July '02

Type or print name PAUL G. WEBER Telephone No. 505-667-57

(This space for State use)

APPPROVED BY Ky E Johnson TITLE DISTRICT SUPERVISOR DATE 7-19-02

Conditions of approval, if any:

# PLUGGING AND ABANDONMENT PROCEDURES FOR GEOTHERMAL WELL EE-2A

Fenton Hill Hot Dry Rock Geothermal Project
Los Alamos National Laboratory

July 1, 2002

Geophysics Group – EES-11
Earth and Environmental Sciences Division

Water Quality and Hydrology Group – RRES-WQH
Risk Reduction and Environmental Stewardship Division

REGULATORY APPROVAL:

Mr. Roy Johnson, N.M. Oil Conservation Division Date

EXTERNAL REVIEWERS:

Mr. Fred Oneyear, U.S. Bureau of Land Management
Mr. John Peterson, U.S. Forest Service, Jemez Ranger District
Ms. Linda Gordan, N.M. Office of the State Engineer

**Procedures for abandonment of HDR Well EE-2A**
July 1, 2002

**Current well configuration:** EE-2 was drilled and completed in 1979-80. The original well was damaged following a wellhead failure that ended a massive hydraulic fracturing treatment. Following an extensive well reentry, repair, and plug back procedure, the well was sidetracked and redrilled in 1987-88. The well was completed as a geothermal production well with 7" casing and the annulus cemented to surface. 7-inch OD, 35 lb./ft, S-90, NSCC premium (internal flush) joint threaded and coupled casing was installed from just above the production interval at 10,770 ft to 9,500 ft. A 7-inch OD, 32 lb./ft, C-95, NSCC T&C tie-back string was then installed from 9,500 ft to the surface and cemented-in. The production interval, 10,770' to 12,360' total depth (TD) is uncased open hole. Casing schematics can be found in Attachments 1 and 2. Attachment 3 contains a wellhead diagram. Attachment 4 is a well trajectory survey for well EE-2A.

Although the well was used for geothermal production intermittently for several years, no steam flashing has ever occurred in the wellbore and it is unlikely that any significant scale deposits are present on the inner casing wall.

**P&A procedures:**

The minimum acceptable coiled tubing diameter for the required operations is 1-1/2" OD.

1) A bridge plug will be set in the 7" casing at 10,700 ft
   a) A casing scraper shall be run to the bridge plug setting depth on wireline or coiled tubing prior to running the bridge plug.
   b) The plug will be capable of maintaining a positive seal against a differential pressure of at least 5,000 psi at a temperature of 430° F
   c) The bridge plug may be deployed on wireline or coiled tubing.
   d) The bridge plug shall be tagged with 1000 lb. set down force using the end of the (cementing shoe on the) coiled tubing prior to pumping the first cement plug to assure proper set and depth.
   e) The initial cement plug shall be tagged to confirm proper location prior to proceeding with mud displacement. This is the only cement plug that will be tagged.
2) A plugging mud shall be displaced into the well from the bottom plug to the surface. The plugging mud shall:
   a) Have sufficient viscosity and density to prevent movement of the cement plugs
   b) Be compatible with the cement slurries proposed.
   c) Remain in the hole between the cement plugs
   d) Contain a sufficient quantity of corrosion inhibitor to provide long-term protection from casing degradation.
3) There is a remote possibility that Hydrogen Sulfide gas may be present in the fluid displaced from the well. Standard industry precautions, ie. H2S monitoring equipment, shall be present and operational during fluid displacement.

4) Every effort shall be made by the vendor to minimize the amount of waste water, mud and materials produced by the operations.
5) Cement plugs may be placed sequentially up the hole. It will not be necessary to tag any cement plugs other than the bottom plug.
6) Required cement plug placement depths, as specified by NMOCD, shall be located in the intervals shown on Table 1. The temperature at the bottom of each interval is included. Cement formulations shall be designed accordingly.
7) After Plug #6 is placed, wash the top of the plug out to 5-ft below the bottom of the wellhead and rig down BOPE and the CTU.
8) Demobilize equipment.

**TABLE 1 – NMOCD Plugging Intervals and Estimated Temperature**

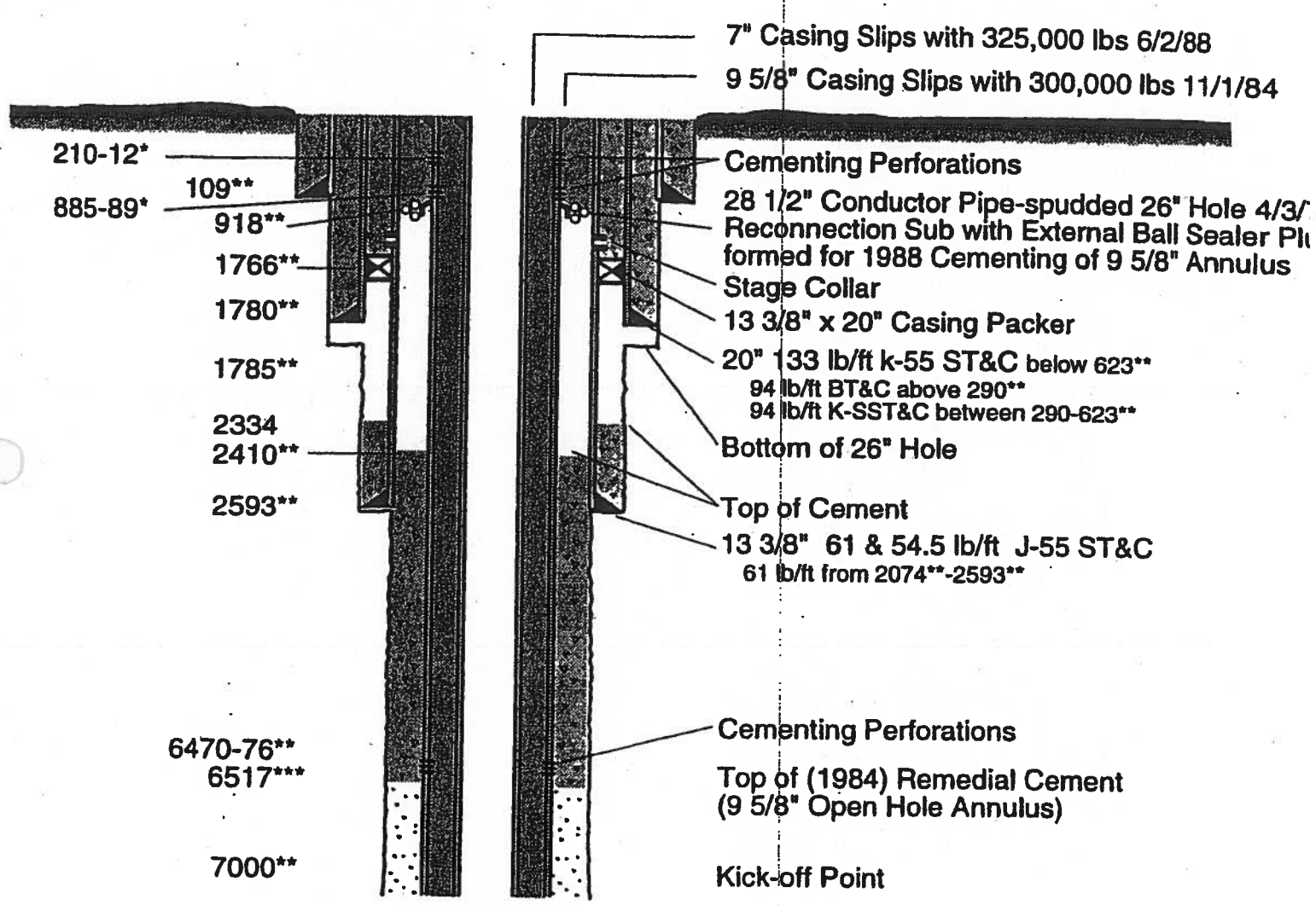
| Plug # | Interval (ft) | Length (linear feet) | Temp.°F * |
|---|---|---|---|
| 1 | 10,700 – 10,500 | 200 | 423 |
| 2 | 9,600 – 9,400 | 200 | 386 |
| 3 | 6,550 – 6,450 | 100 | 285 |
| 4 | 3,550 – 3,450 | 100 | 212 |
| 5 | 2,693 – 2,493 | 200 | 169 |
| 6 | 75 – surface** | 75 | 53 |
| * | Estimated temperature of the hole prior to circulation. | | |
| ** | Circulate out cement to 5-ft below the well head after placing cement. | | |

ATTACHMENT 1

# Present Configuration of EE 2-A

As completed June 17, 1988

(Drawing revised 7/15/91, all depths in ft)



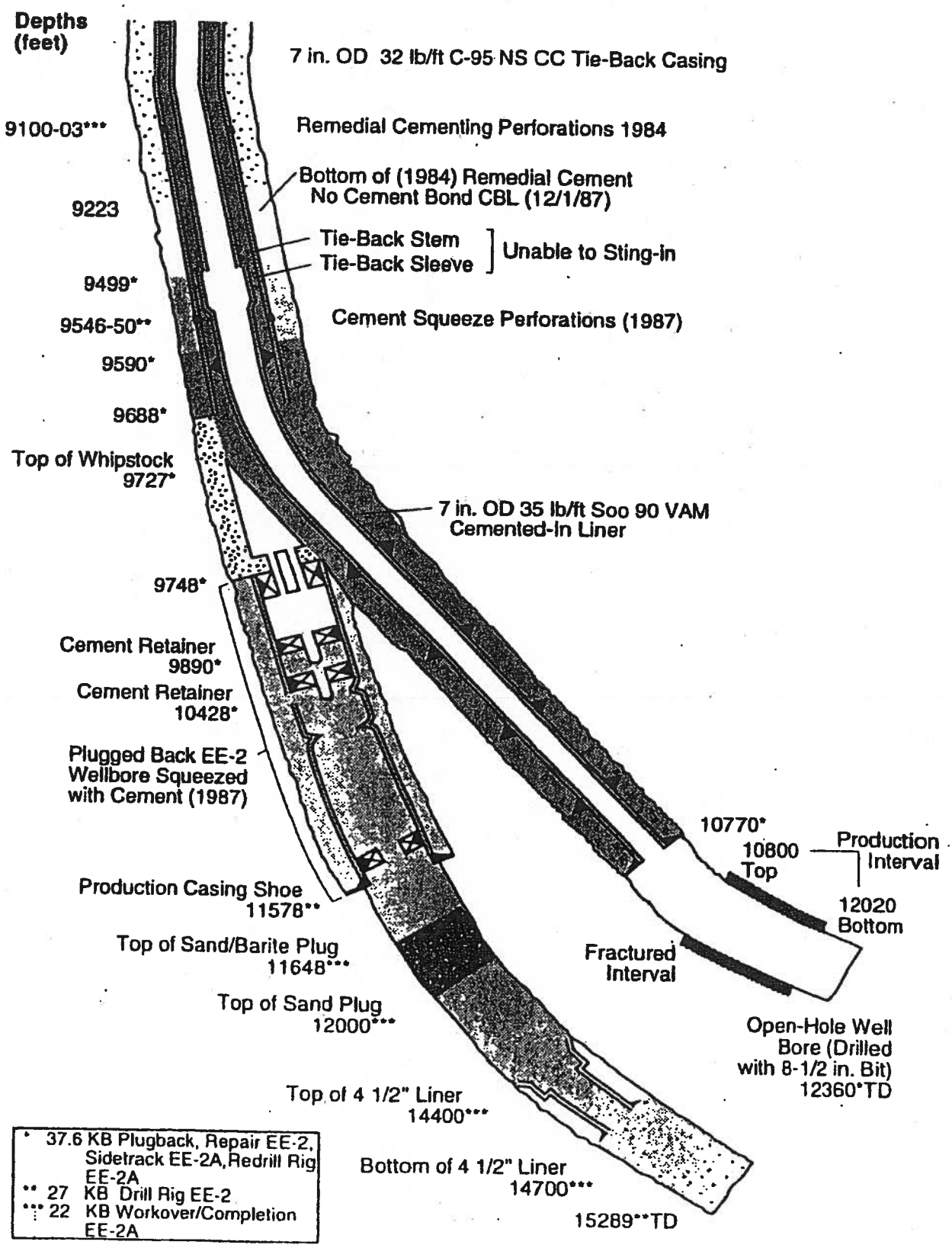

* 37.6 KB Plugback, Repair EE-2, Sidetrack EE-2A, Redrill Rig EE-2A

** 27 KB Drill Rig EE-2

*** 22 KB Workover/Completion EE-2A

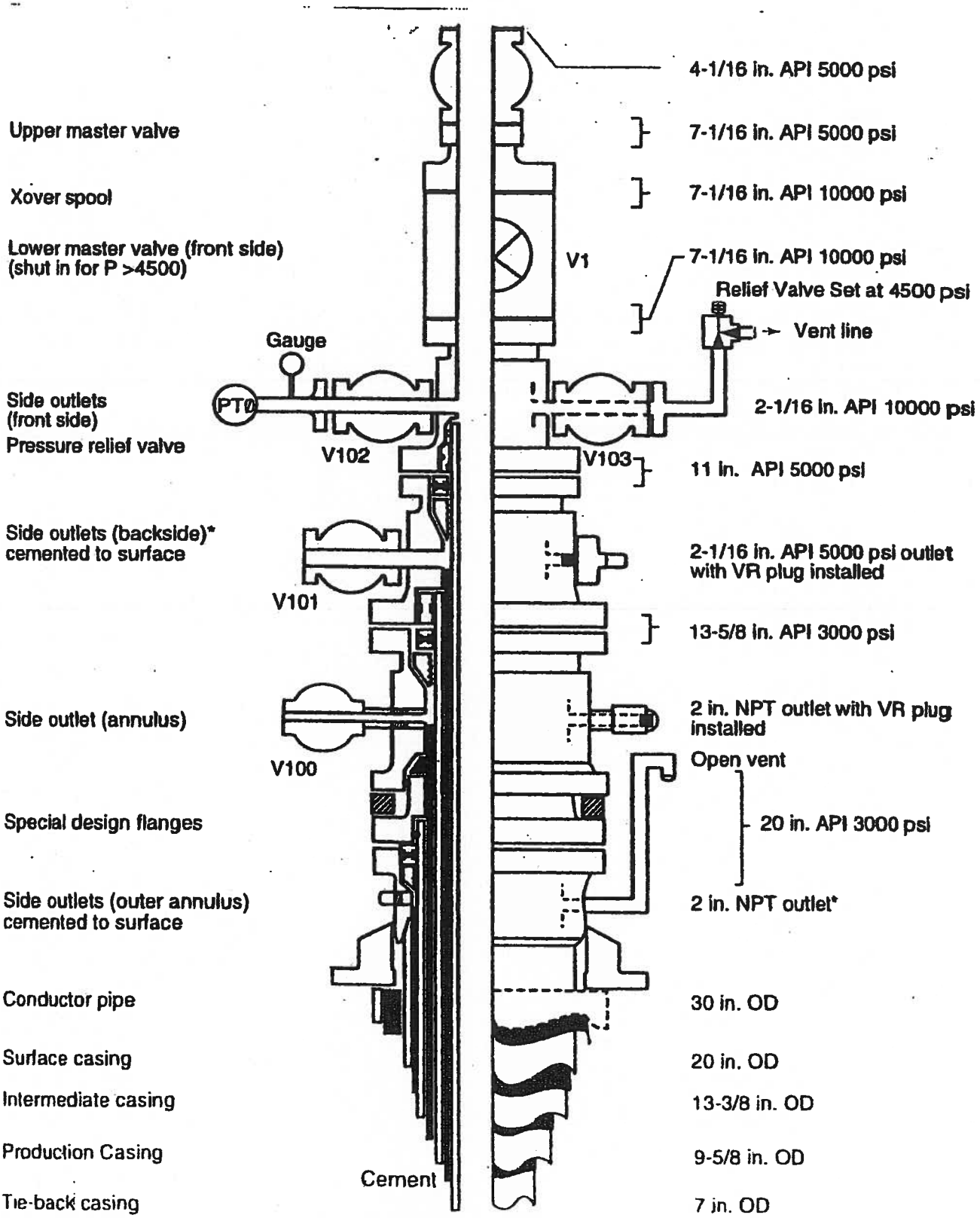
ATTACHMENT 2

# Present Configuration of EE-2A. Completed June 17, 1988
(Drawing revised 7/15/91, all depths in ft)

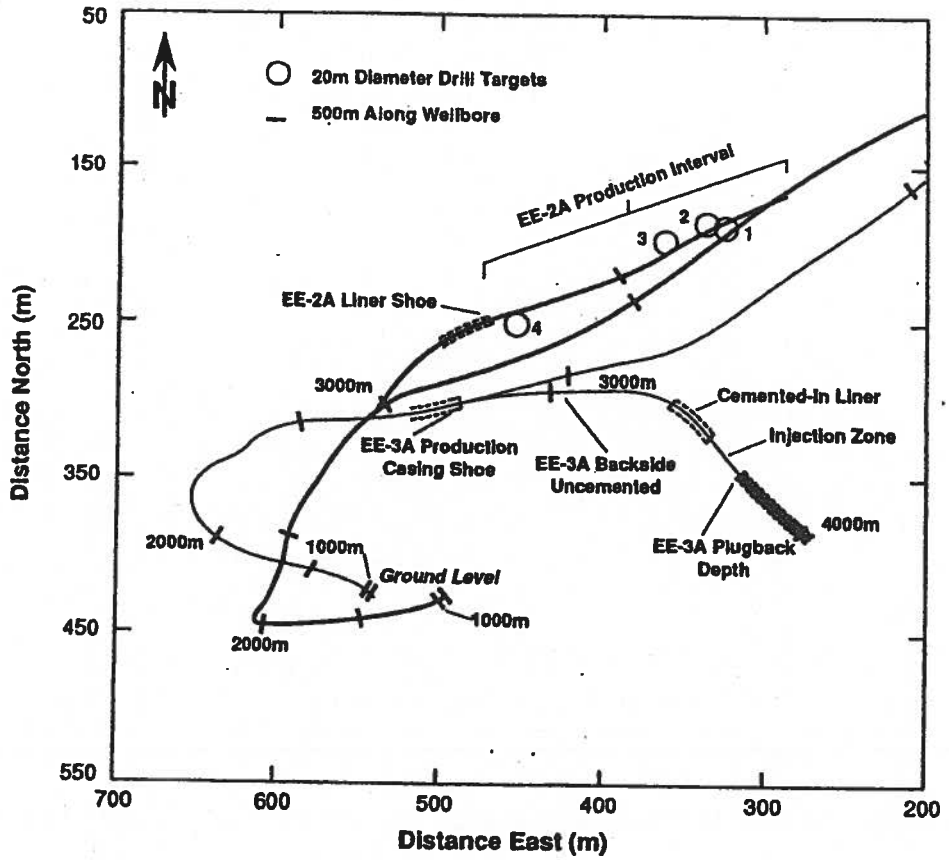


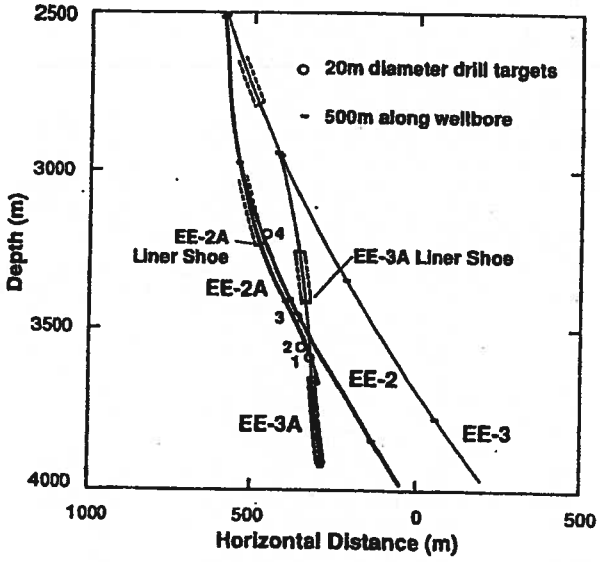
ATTACHMENT 3

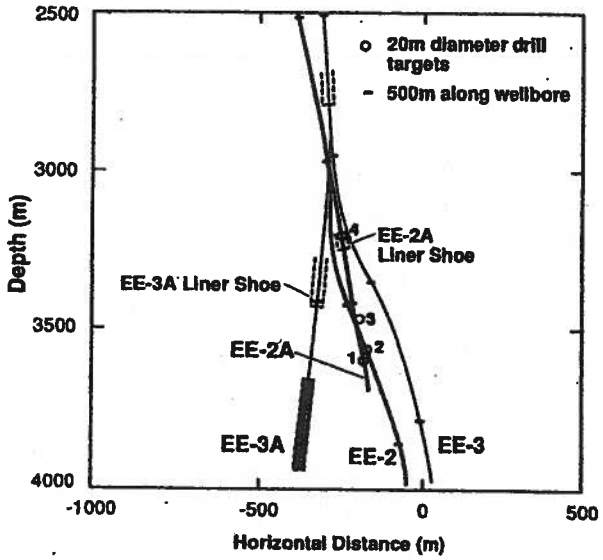
# EE-2A Production Wellhead



ATTACHMENT 4



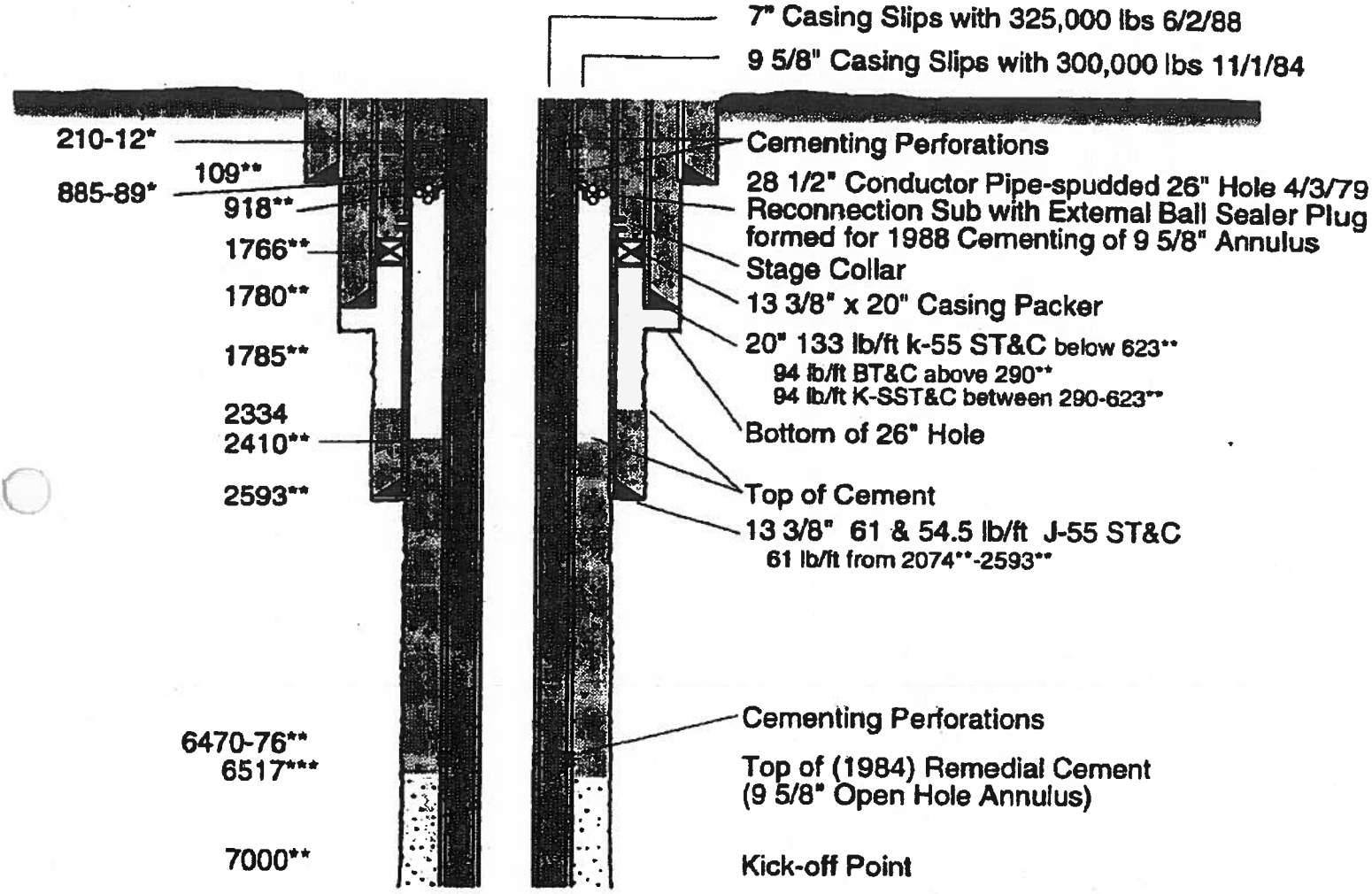




*EE-2A targets and drilled trajectory.*

# APPENDIX C

## EE-2A Well Casing Schematic

# Present Configuration of EE 2-A
As completed June 17, 1988
(Drawing revised 7/15/91, all depths in ft)




* 37.6 KB Plugback, Repair EE-2, Sidetrack EE-2A, Redrill Rig EE-2A
** 27 KB Drill Rig EE-2
*** 22 KB Workover/Completion EE-2A

*Effective 4/30/92*

# APPENDIX D

## 19 NMAC 15.9.712

(1) within one (1) year after the effective date permitted facilities submit the information required in Subsection B, Paragraph (1), Subparagraphs (a, h, i and l) of 19.15.9.711 NMAC not already on file with the Division;

(2) within one (1) year after the effective date unpermitted facilities submit the information required in Subsection B, Paragraph (1), Subparagraphs (a) through (j) and Subsection B, Paragraph (1), Subparagraph (l) of 19.15.9.711 NMAC;

(3) comply with Subsections C and D of 19.15.9.711 NMAC unless the Director grants an exemption from a requirement in these sections based upon a demonstration by the operator that such requirement is not necessary to protect public health and the environment.

[6-6-88...2-1-96; 19.15.9.711 NMAC - Rn, 19 NMAC 15.I.711, 11-30-00]

**19.15.9.712. DISPOSAL OF CERTAIN NON-DOMESTIC WASTE AT SOLID WASTE FACILITIES.**

A. General - Certain non-domestic waste arising from the exploration, development, production or storage of crude oil or natural gas, certain nondomestic waste arising from the oil field service industry, and certain non-domestic waste arising from the transportation, treatment or refinement of crude oil or natural gas, may be disposed of at a solid waste facility.

B. Definitions - The following words and phrases have particular meanings for purposes of this section:

(1) "BTEX." The acronym "BTEX" in this section refers to benzene, toluene, ethelbenzene and xylene.

(2) "Discharge Plan." A "discharge plan" is a plan submitted and approved by the Division pursuant to NMSA 1978, Section 70-2-12(B)(22) (2000 Cum.Supp.) and rules and regulations of the Water Quality Control Commission.

(3) "EPA." The acronym "EPA" refers to the United States Environmental Protection Agency.

(4) "EPA Clean." The phrase "EPA Clean" refers to cleanliness standards established by the EPA in 40 C.F.R. Part 261, Section 261.7(b).

(5) "NESHAP." The acronym "NESHAP" refers to the National Emission Standards for Hazardous Air Pollutants of the EPA, 40 C.F.R. Part 61.

(6) "NORM." The acronym "NORM" refers to naturally occurring radioactive materials regulated by 20 NMAC 3.1, Subpart 14.

(7) "Section." "Section" or "this section" refers to Section 19.15.9.712.

(8) "Solid Waste Facility." A "solid waste facility" is a facility permitted or authorized as a solid waste facility by the New Mexico Environment Department pursuant to the Solid Waste Act, NMSA 1978, Sections 74-9-1 et seq. and rules and regulations of the Environmental Improvement Board, to accept industrial solid waste or other special waste.

(9) "TCLP" The acronym "TCLP" in this section refers to the testing protocol established by the EPA in 40 C.F.R. Part 261, entitled "Toxicity Characteristic Leaching Procedure" or an alternative hazardous constituent analysis approved by the Division.

(10) "TPH." The acronym "TPH" in this section refers to the phrase "total petroleum hydrocarbons."

(11) "Waste." The word "waste" refers to nondomestic waste resulting from the exploration, development, production or storage of crude oil or natural gas pursuant to NMSA 1978, Section 70-2-12(B)(21) and nondomestic waste arising from the oil field service industry, and certain non-domestic waste arising from the transportation, treatment or refinement of crude oil or natural gas pursuant to NMSA 1978, Section 70-2-12(B)(22).

C. Procedure

(1) Waste Listed in Subsection D, Paragraph (1) of Section 19.15.9.712. Waste listed in Subsection D, Paragraph (1) of Section 19.15.9.712 may be disposed of at a solid waste facility without prior written authorization of the Division.

(2) Waste Listed in Subsection D, Paragraph (2) of Section 19.15.9.712. Waste listed in Subsection D, Paragraph (2) of Section 19.15.9.712 may be disposed of at a solid waste facility after testing and prior written authorization of the Division. Before authorization is granted, copies of test results must be provided to the Division and to the solid waste facility where the waste is to be disposed. Disposal may commence only after written authorization of the Division. In appropriate cases and so long as a representative sample is tested, the Division may authorize disposal of a waste stream listed in Subsection D, Paragraph (2) of Section 19.15.9.712 without individual testing of each delivery.

(3) Waste Listed in Subsection D, Paragraph (3) of Section 19.15.9.712. Waste listed in Subsection D, Paragraph (3) of Section 19.15.9.712 may be disposed of at a solid waste facility on a case-by-case basis after testing required at the discretion of the Division and after prior written authorization of the Division. Before authorization is granted, copies of test results must be provided to the Division and to the solid waste facility where the waste is to be disposed. Disposal may commence only after written authorization of the Division.

(4) Simplified Procedure for Holders of Discharge Plans. Holders of an approved discharge plan may amend the discharge plan to provide for disposal of waste listed in Waste Listed in Subsection D, Paragraph (2) of Section 19.15.9.712 and, as applicable, Subsection D, Paragraph (3) of Section 19.15.9.712. If the amendment to the Discharge Plan is approved, wastes listed in Subsection D, Paragraph (2) of Section 19.15.9.712 and Subsection D, Paragraph (3) of Section 19.15.9.712 may be disposed of at a solid waste facility without the necessity of prior written authorization of the Division.

D. Waste Governed By This Section

(1) Waste That Does Not Require Testing Before Disposal:

(a) Barrels, drums, 5-gallon buckets, 1-gallon containers so long as empty and EPA-clean.

(b) Uncontaminated brush and vegetation arising from clearing operations.

(c) Uncontaminated concrete.

(d) Uncontaminated construction debris.

(e) Non-friable asbestos and asbestos contaminated waste material, so long as the disposal complies with all applicable federal and state regulations for nonfriable asbestos materials and so long as asbestos is removed from steel pipes and boilers and, if applicable, the steel recycled.

(f) Detergent buckets, so long as completely empty.

(g) Fiberglass tanks so long as the tank is empty, cut up or shredded, and EPA clean.

(h) Grease buckets, so long as empty and EPA clean.

(i) Uncontaminated ferrous sulfate or elemental sulfur so long as recovery and sale as a raw material is not possible.

(j) Metal plate and metal cable.

(k) Office trash.

(l) Paper and paper bags, so long as empty (paper bags).

(m) Plastic pit liners, so long as cleaned well.

(n) Soiled rags or gloves. If wet, must pass Paint Filter Test prior to disposal.

~~(o) Uncontaminated wood pallets.~~

(2) Waste That Must Be Tested:

(a) Activated alumina must be tested for TPH and BTEX.

(b) Activated carbon must be tested for TPH and BTEX.

(c) Amine filters must be tested for BTEX (and air-dried for at least 48 hours before testing).

(d) Friable asbestos and asbestos-contaminated waste material must be tested pursuant to NESHAP (and so long as the disposal otherwise complies with all applicable federal and state regulations for friable asbestos materials, and so long as asbestos is removed from steel pipes and boilers and, if applicable, the steel should be recycled before disposal).

(e) Cooling tower filters must be tested for TCLP/chromium (and drained and then air-dried for at least 48 hours before testing).

(f) Dehydration filter media must be tested for TPH and BTEX (and drained and then air-dried for at least 48 hours before testing).

(g) Gas condensate filters must be tested for BTEX (and drained and then air-dried for at least 48 hours before testing).

(h) Glycol filters must be tested for BTEX (and drained and then air-dried for at least 48 hours

before testing).

(i) Iron sponge must be oxidized completely and then undergo Ignitability Testing.

(j) Junked pipes, valves, and metal pipe must be tested for NORM.

(k) Molecular sieve must be tested for TPH and BTEX (and must be cooled in a non-hydrocarbon inert atmosphere and hydrated in ambient air for at least 24 hours before testing).

(l) Pipe scale and other deposits removed from pipeline and equipment must be tested for TPH, TCLP/metals and NORM.

(m) Produced water filters must be tested for Corrosivity (and drained and then air-dried for at least 48 hours before testing).

(n) Sandblasting sand must be tested for TCLP/metals or, at the discretion of the Division, TCLP/total metals.

(o) Waste oil filters must be tested for TCLP/metals (and must be drained thoroughly of oil for at least 24 hours before testing and oil and metal parts must be recycled).

(3) Waste That May Be Disposed Of On A Case-By-Case Basis:

(a) Sulfur contaminated soil.

(b) Catalysts.

(c) Contaminated soil other than petroleum contaminated soil.

(d) Petroleum contaminated soil in the event of an emergency declared by the director.

(e) Contaminated concrete.

(f) Demolition debris not otherwise specified herein.

(g) Unused dry chemicals (in addition to any testing required by the Division, a copy of the Material Safety Data Sheet shall be forwarded to the Division and the solid waste facility on each chemical proposed for disposal).

(h) Contaminated ferrous sulfate or elemental sulfur.

(i) Unused pipe dope.

(j) Support balls.

(k) Tower packing materials.

(l) Contaminated wood pallets.

(m) Partial sacks of unused drilling mud (in addition to any testing required by the Division, a copy of the Material Safety Data Sheet shall be forwarded to Division and the solid waste facility at which the partial sacks will be disposed).

(n) Other wastes as applicable.

E. Testing

(1) General - Testing required herein shall be conducted according to the Test Methods for Evaluating Solid Waste, EPA No. SW-846. Any questions concerning the standards or a particular testing facility should be directed to the Division.

(2) Methodology - Testing must be conducted according to the test method listed:

(a) TPH: EPA method 418.1 or 8015 (D-R-O and G-R-O only) or an alternative hydrocarbon analysis approved by the Division.

(b) TCLP: EPA Method 1311 or an alternative hazardous constituent analysis approved by the Division.

(c) Paint Filter Testing: EPA Method 9095A.

(d) Ignitability Test: EPA Method 1030.

(e) Corrosivity: EPA Method 1110.

(f) Reactivity: Test procedures and standards established on a case-by-case basis by the Division.

(g) NORM. 20 NMAC 3.1, Subpart 14.

(3) Limits - To be eligible for disposal pursuant to this section, substances found during testing shall not exceed the following limits:

(a) Benzene: Less than 10 mg/Kg.

(b) BTEX: Less than 500 mg/Kg (sum of all).

(c) TPH: Shall not exceed 1000 mg/Kg.

(d) Hazardous Air Pollutants: Shall not exceed the standards set forth in NESHAP.

(e) TCLP: Shall not exceed the following:

(i) Arsenic: 5.0 mg/l
(ii) Barium: 100.0 mg/l
(iii) Cadmium: 1.0 mg/l
(iv) Chromium: 5.0 mg/l
(v) Lead: 5.0 mg/l
(vi) Mercury: 0.2 mg/l

(vii) Selenium: 1.0 mg/l
(viii) Silver: 5.0 mg/l

**19.15.9.713** This entire section moved and renumbered to 19 NMAC 15.A.32.
[12-30-95, 2-1-96; A, 6-15-99; 19.15.9.713 NMAC - Rn, 19 NMAC 15.I.713; 11-30-00]

**19.15.9.714 DISPOSAL OF REGULATED NATURALLY OCCURRING RADIOACTIVE MATERIAL (REGULATED NORM)**

A. Purpose - This rule establishes procedures for the disposal of regulated naturally occurring radioactive material (Regulated NORM) associated with the oil and gas industry. Any person disposing of Regulated NORM, as defined at 19 NMAC 15.A.7, is subject to this rule and to the New Mexico Environmental Improvement Board regulations at 20 NMAC 3.1, Subpart 14.

B. Nonretrieved Flowlines and Pipelines

(1) The Division will consider a proposal for leaving flowlines and pipelines (hereinafter "pipeline") that contain Regulated NORM in the ground provided such abandonment procedures are performed in a manner to protect the environment, public health, and fresh waters. Division approval is contingent on the applicant meeting the following requirements as a minimum:

(2) An application submitted to the Division must contain the following as a minimum:

(a) The pipeline layout over its entire length on an OCD Form C-102 (Well Location and Acreage Dedication Plat) including the legal description of the location of both ends and all ~~surface ownership along the pipeline.~~

(b) Results of a radiation survey conducted at all accessible points and a surface radiation survey along the complete pipeline route in a form approved by the Division. All surveys are to be conducted consistent with procedures approved by the Division.

(c) The type of material for which the pipeline had been used.

(d) The procedure to be used for flushing hydrocarbons and/or produced water from the pipeline.

(e) An explanation as to why it is more beneficial to leave the pipeline in the ground than to retrieve it.

(f) Proof of notice of the proposed abandonment to all surface owners where the pipeline is located. Additional notification may be required as described in Subsection F of 19.15.9.714 NMAC.

(3) Procedure

(a) Upon approval of the application by the Division, the operator must notify the OCD District office at least 24 hours prior to beginning any work on the pipeline abandonment.

(b) As a condition of completion of the pipeline abandonment, all accessible points must be permanently capped.

# APPENDIX E

## LANL Request for Minor Modification to the Ground Water Discharge Plan GW-031, July 1998

Los Alamos
NATIONAL LABORATORY

*Los Alamos National Laboratory*
*Los Alamos, New Mexico 87545*

Date: July 20, 1998
In Reply Refer To: ESH-18/WQ&H:98-0232
Mail Stop: K497
Telephone: (505) 667-7969

Mr. Roger C. Anderson
Environmental Bureau Chief
Oil Conservation Division
New Mexico Energy, Minerals, and Natural Resources Department
2040 South Pacheco St.
Santa Fe, New Mexico 87505

**SUBJECT: MINOR MODIFICATION OF GROUND WATER DISCHARGE PLAN GW-031**

Dear Mr. Anderson:

Enclosed please find Los Alamos National Laboratory's Minor Modification of Ground Water Discharge Plan GW-031 for the Fenton Hill Geothermal Facility, Sandoval County, New Mexico. Also enclosed is the required $50.00 filing fee. This minor modification is being submitted to your agency in accordance with Section 3107.C of the Water Quality Control Commission Regulations due to the following operational changes which have been implemented, or are being proposed, at the facility:

1) Discontinuation of the Fenton Hill NPDES Permit No. NM0028576,
2) Installation of an enhanced evaporation system on the 1 MG pond, and
3) The proposed mixing of exempt and nonexempt wastes in the 1 MG pond in accordance with N.M. Oil Conservation Division's mixture policy.

If you have any questions concerning this submittal, please feel free to call Bob Beers of my staff at (505) 667-7969.

Sincerely,

Steven R. Rae
Group Leader
Water Quality and Hydrology Group

RB/rj

Enclosures: a/s

Cy: J. Peterson, Jemez Ranger District, U.S. Forest Service, Jemez Springs, New Mexico, w/enc.
W. Whatley, Jemez Pueblo, New Mexico, w/enc.
G. Suazo, CIO, w/enc., MS A117
P. Bustamante, NMED/GWQB, Santa Fe, New Mexico, w/enc.
G. Saums, NMED/SWQB, Santa Fe, New Mexico, w/enc.
B. Koch, DOE/LAAO, w/enc., MS A316
J. Albright, EES-4, w/enc., MS D443
G. Sinnis, P-23, w/enc., MS H803
D. Thomas, P-FM, w/enc., MS D459
J. Thomson, EES-4, w/enc. MS D443
S. Rae, ESH-18, w/enc., MS K497
N. Williams, ESH-18, w/enc., MS K497
WQ&H File, w/enc., MS K497
CIC-10, w/enc., MS A150

## ENCLOSURES

1) Minor Modification of Ground Water Discharge Plan (GW-031)

2) Letter from EPA Approving the Discontinuation of NPDES Permit No. NM0028576

3) Figure 1.0. Schematic of 1 MG Pond Enhanced Evaporation System

4) Table 1.0. Water Quality Data: GAC Filter Backwash Water

5) Table 2.0. Water Quality Data: Softener Regeneration Water

6) Assaigai Analytical Laboratories, Inc. Report: Sample ID Nos. MGRO 5A-11C

7) Figure 2.0. Schematic of Proposed Mixing of Exempt and Nonexempt Wastes

8) Figure 3.0. Schematic of 5 MG Pond to 1 MG Pond Piping

9) Table 3.0. Final Mixture Summary and Estimated Volumes of Exempt and Nonexempt Wastes

## Discontinuation of NPDES Permit No. NM0028576

On December 29, 1997, the EPA approved a request by the U.S. Department of Energy and Los Alamos National Laboratory to discontinue the Fenton Hill Geothermal Site NPDES Permit No. NM0028576. Please find the enclosed copy of the EPA approval letter. The Fenton Hill Geothermal Facility had not discharged through the NPDES outfall since June 1988.

## Enhanced Evaporation System

The Fenton Hill Geothermal Facility's 1 million gallon (MG) pond has been outfitted with an enhanced evaporation system. Figure 1.0 illustrates the system's basic configuration. The evaporation system consists of two segments of 2" PVC pipe, each running the length of the pond, one on the north side and the other on the south. Adjustable hose nozzles are installed at 10 ft. intervals on the 2" lines; a total of 25 nozzles on each side, 50 in all. The spray from each nozzle is directed towards the center of the pond at a 45 degree angle. The nozzles are adjusted to produce a fine mist, maximizing evaporation. All piping and nozzles are contained within the perimeter of the pond's liner. A pressure switch has been installed in the pump control circuitry to shut off the system in the event of a line break or plug. A large duplex basket strainer is installed near the pump to remove solids. The estimated volume being spayed is approximately 2 gallons per minute (gpm) per nozzle or approximately 100 gpm for the entire system.

The enhanced evaporation system is managed to ensure that wind blown drift does not travel beyond the perimeter of the pond's liner. The system is monitored twice daily and as wind conditions change the nozzles are adjusted to confine any drift to within the pond's liner. Under severe wind conditions, the evaporation system will be shut off.

## Mixing of Exempt and Nonexempt Wastes

**Exempt Wastes.** Since 1989, the Fenton Hill Geothermal Facility has retained exclusive use of the 1 MG pond for the containment of geothermal production fluids. These fluids are exempt from Resource Conservation and Recovery Act (RCRA) regulation due to a specific exclusion for geothermal exploration, development, or the production of produced waters and other associated wastes [40 CFR 261.4(b)(5)]. In September 1997, approximately 675,000 gallons of geothermal fluids and sludge were removed from the pond and transported off-site for disposal. The pond had not been cleaned since its construction in 1989.

Currently, geothermal well EE-2 is the only remaining source of geothermal fluids discharging to the 1 MG pond. All of the facility's other geothermal wells were plugged and abandoned in 1996. Fluids vented from EE-2 originate from the Phase II geothermal reservoir. Annual venting volumes from EE-2 have been estimated at approximately 100,000 gallons per year.

**Mixing of Exempt and Nonexempt Wastes (con't)**

**Nonexempt Wastes.** Since 1995, the Milagro Project has been using the 5 MG pond at Fenton Hill for astrophysical research. In December 1995, the Laboratory submitted to the OCD a Notice of Changed Conditions for Discharge Plan GW-031 (ESH-18/WQ&H:95-0574) which detailed the modifications made to the 5 MG pond by the Milagro Project. Due to the nature of the Milagro Project's research, it is necessary for the water in the pond to be ultra-pure. Fill and make-up water for the 5 MG pond come from the Fenton Hill facility's potable water supply well. In addition, the Milagro Project installed a water treatment system with the following components: (1) granular activated carbon (GAC) filtration, (2) ion exchange (water softener), and (3) ultraviolet (UV) disinfection. Maintenance of both the GAC filter and the water softener result in the generation of wastewater discharges.

The GAC filter requires periodic backwashing to maintain efficient operation. Table 1.0 presents the analytical results from sampling of the GAC filter backwash water in December 1997. The sample results show that the GAC filter backwash water is nonhazardous and, with the exception of boron (B), contains no contaminants at concentrations greater than NM WQCC ground water standards. The GAC filter is used during both the filling of the pond and during the routine circulation of pond water. It is estimated that approximately 62,500 gallons of backwash wastewater (25 backwash cycles @ 2500 gallons per cycle) will be generated when the 5 MG pond is filled in 1998 and approximately 4,000 gallons per month during subsequent routine circulation.

The water softener requires periodic regeneration with sodium chloride to maintain efficient operation. Table 2.0 presents the analytical results from sampling of the softener regeneration water in December 1997. As expected, the sample results show that the softener regeneration water contains elevated total dissolved solids (TDS). Softener regeneration is required only during the filling of the pond. It is estimated that approximately 75,000 gallons of regeneration wastewater (30 regeneration cycles @ 2500 gallons per cycle) will be generated when the pond is filled in 1998.

**Mixing.** As illustrated in Figure 2.0, the Laboratory proposes to mix the Milagro Project's nonexempt wastes (softener regeneration wastewater and GAC filter backwash wastewater) with the Geothermal Project's exempt wastes (geothermal production fluids). Mixing would occur in the Geothermal Project's 1 MG pond. Figure 3.0 illustrates how an existing 8" buried cast iron pipe would be used to convey the nonexempt wastes to the 1 MG pond (Note: To control corrosion, after the discharge of high TDS water the pipe will be flushed with fresh water).

**Mixing of Exempt and Nonexempt Wastes (con't)**

The Laboratory's proposal to mix nonexempt and exempt waste meets the following two requirements of the New Mexico Oil Conservation Division's mixture policy (rev. 9/97):

First, sampling and analysis of the nonexempt portion of the waste, the softener regeneration wastewater and the GAC filter backwash wastewater, shows that the waste is nonhazardous (See Table 1.0 and 2.0); and

Second, the total nonexempt portion of the waste constitutes no more than five (5) percent by volume of the final mixture. Table 3.0 presents an estimate of the volume of exempt and nonexempt solids that would accumulate in the 1 MG pond if mixing were to occur for nine years of operation. Using the best information available, the Laboratory estimates that the final mixture will be 3 percent nonexempt wastes.

(Note: A final mixture based upon the volume of solids in the 1 MG pond, rather than the combined volume of solids and liquid, is being proposed due to the facility's capability to evaporate off the liquid fraction.)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

December 29, 1997

REPLY TO: 6WQ-CA

Mr. G. Thomas Todd
Area Manager
Department of Energy
Los Alamos Area Office
Los Alamos, New Mexico 87544

Re: NPDES Permit No. NM0028576-Dept. Of Energy-Los Alamos National Laboratory, Fenton Hill Geothermal Site

Dear Mr. Todd:

In accordance with your request on file in this office that the referenced NPDES Permit No. NM0028576 be discontinued, you are hereby notified that the permit has been discontinued.

Any resumption of the discharge without a permit will be unlawful. Should you again propose to discharge any pollutant from this facility to waters of the United States, it will be necessary to file a new application at least 180 days in advance of the proposed discharge. Any permit issued as a result of such reapplication will contain conditions and limitations consistent with the situation, and the law and the regulations in effect at the time of reissuance, irrespective of any previously issued permit.

If you have any questions, please contact Wilma Turner at the above address or telephone (214) 665-7516.

Sincerely yours,

Jack V. Ferguson, P.E.
Chief
NPDES Branch (6WQ-P)

cc: New Mexico Environment Department

Mr. Mike Saladen
University of California
Management Contractor for Operation
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

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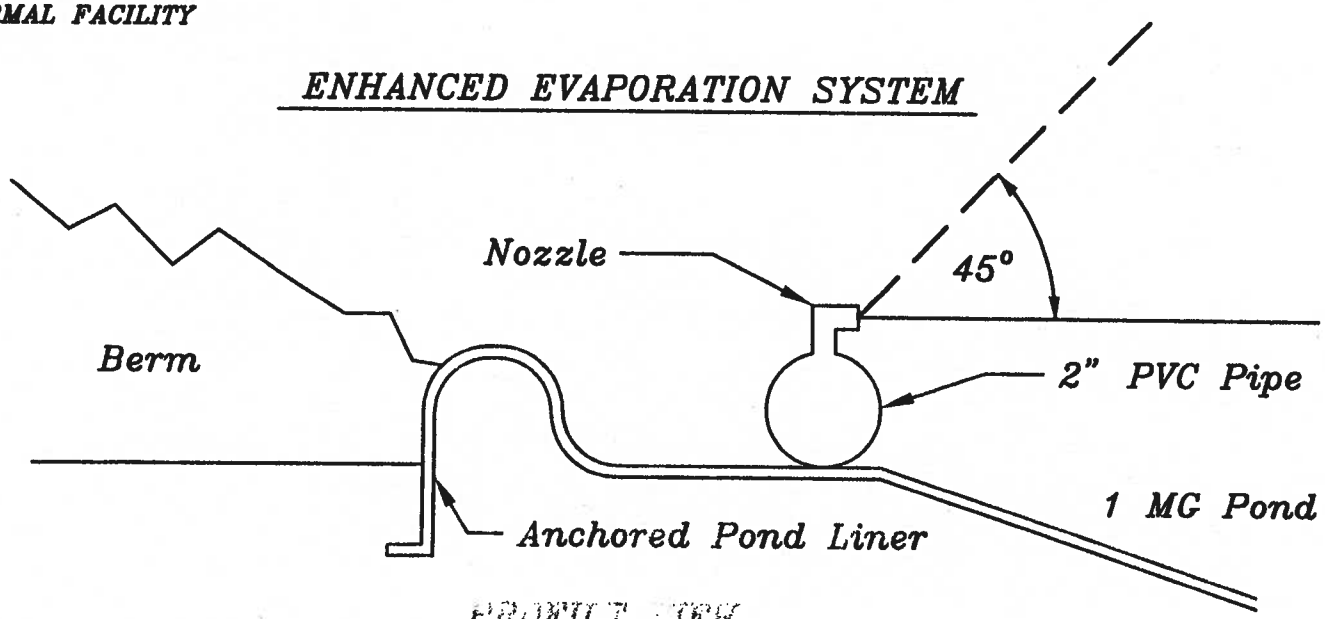
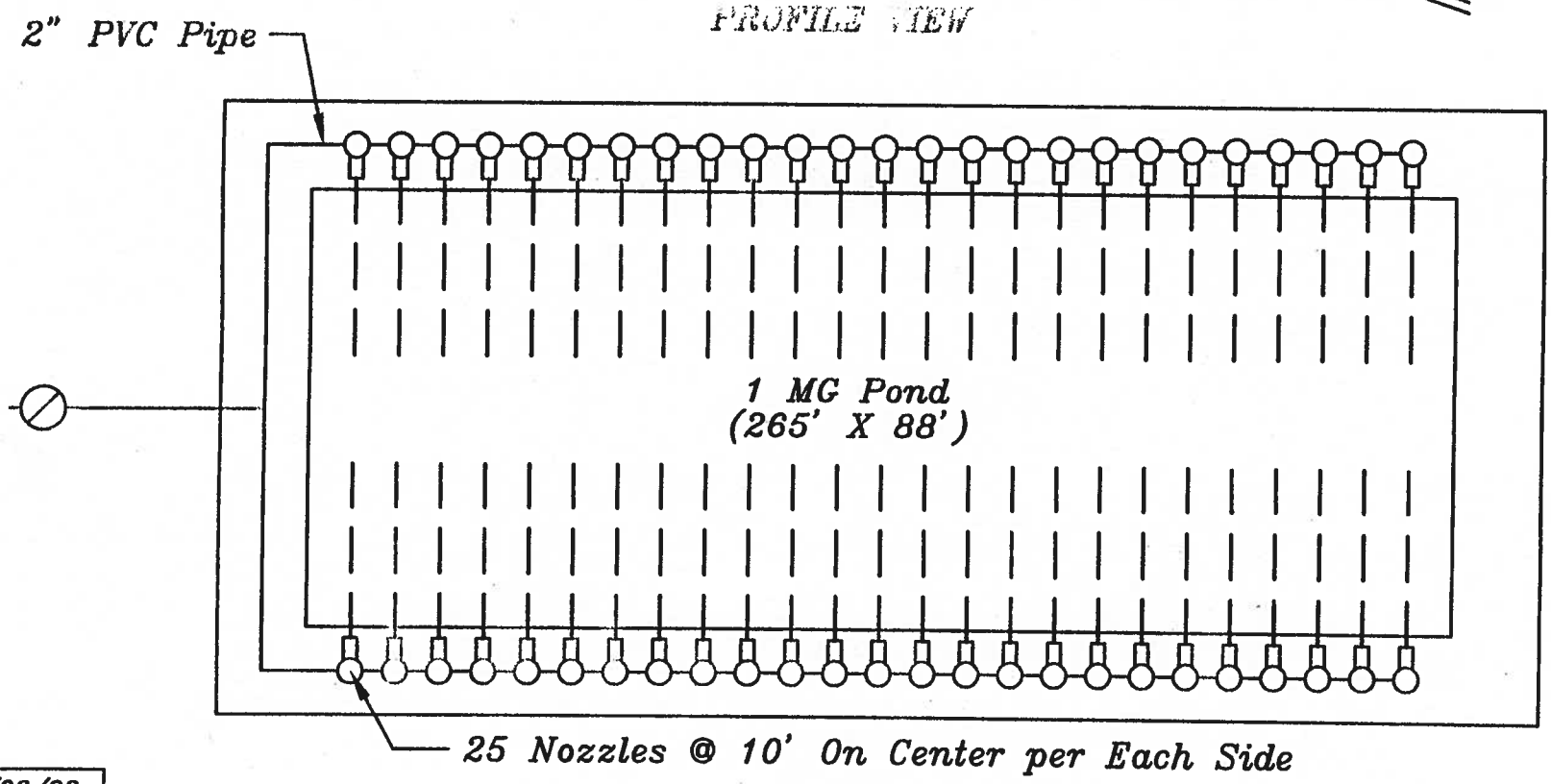
## ENHANCED EVAPORATION SYSTEM




PROFILE VIEW




PLAN VIEW

07/06/98

Figure 1.0

**Milagro Project at Fenton Hill**

Water Quality Data: GAC Filter Backwash Water

Sample Date: 12/12/97

Sample Type: total, unfiltered

Sample ID No.: MGRO-5A, 7A, 8A, 9A, 9B, 10A, and 10B

| Analyte | Results (mg/L) | 40 CFR 261 TCLP Concentration Limits (mg/L) | NM WQCC 3103. Ground Water Standards (mg/L) |
|---|---|---|---|
| Al | <0.5 | | 5.0 |
| As | <0.06 | 5.0 | 0.1 |
| Ba | 0.06 | 100.0 | 1.0 |
| Be | <0.004 | | |
| B | 1.2 | | 0.75 |
| Cd | <0.008 | 1.0 | 0.01 |
| CN | <0.02 | | 0.2 |
| Cr | <0.04 | 5.0 | 0.05 |
| Co | <0.01 | | 0.05 |
| Cu | <0.04 | | 1.0 |
| Fe | 0.6 | | 1.0 |
| Hg | <0.0002 | 0.2 | 0.002 |
| Pb | <0.06 | 0.4 | 0.05 |
| Mn | <0.01 | | 0.2 |
| Mo | <0.02 | | 1.0 |
| Ni | <0.04 | | 0.2 |
| Se | <0.005 | 1.0 | 0.05 |
| Ag | <0.02 | 5.0 | 0.05 |
| Tl | <0.3 | | |
| U | 0.0049 | | 5.0 |
| Zn. | 0.3 | | 10.0 |
| Nitrate-N | <0.2 | | 10.0 |
| pH (standard units) | 7.4 | | between 6 and 9 |
| TDS | 422 | | 1000.0 |
| TSS | 9 | | |
| Chloride | 67.7 | | 250.0 |
| Fluoride | <0.5 | | 1.6 |
| Sulfate | 12.7 | | 600.0 |
| <u>Semi-volatiles</u> | | | |
| SW846-8270 | Non-detect | | |
| <u>Volatiles</u> | | | |
| SW846-8240 | Non-detect | | |

**Milagro Project at Fenton Hill**
Water Quality Data: Softener Regeneration Water
Sample Date: 12/12/97
Sample Type: total, unfiltered
Sample ID Nos.: MGRO-11A, 11B, and 11C

| Analyte (Sample ID No.) | Results (mg/L) | 40 CFR 261 TCLP Concentration Limits (mg/L) | NM WQCC 3103 Ground Water Standards (mg/L) |
|---|---|---|---|
| TDS (11A) | 422 | NA | 1,000 |
| TDS (11B) | 9,930 | NA | 1,000 |
| TDS (11C) | 12,550 | NA | 1,000 |

NOTES:

Softner backwash cycle took 85 minutes to complete. Sample 11A was collected 3 minutes into the cycle, 11B was collected 25 minutes in the cycle, and 11C was collected 55 minutes into the cycle.

*Assaigai Analytical Laboratories, Inc.*

# *Certificate of Analysis*

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126** **FENTON HILL**

Client Sample ID: **MGRO-2A,2B** Sample Matrix: **WATER_COMP**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | **EPA-335 / SM-4500** | | | | | | |
| 12/12/97 | 9712126-02A | W97547 | Cyanide | < 0.02 | mg / L | 0.02 | | MW.1997.1027 - 10 | 12/17/97 |

Client Sample ID: **MGRO-3A,3B** Sample Matrix: **WATER_COMP**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | **EPA-300 Series** | | | | | | |
| 12/12/97 | 9712126-03A | W97543 | Nitrate, Nitrogen | < 0.2 | mg N/ L | 0.2 | | MW.1997.1025 - 16 | 12/16/97 |

Client Sample ID: **MGRO-4A,4B** Sample Matrix: **WATER_COMP**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | **EPA-150.1** | | | | | | |
| 12/12/97 | 9712126-04A | WPH-573 | pH | 7.4 | units | 0.1 | | MT.1997.446 - 4 | 12/13/97 |
| | | | **EPA-160 Series** | | | | | | |
| 12/12/97 | 9712126-04A | WTDS-435 | Total Dissolved Solids | 406 | mg / L | 10 | | MT.1997 476 - 6 | 12/16/97 |
| | | WTSS-484 | Total Suspended Solids | < 4.0 | mg / L | 4 | | MT.1997.469 - 7 | 12/17/97 |
| | | | **EPA-300 Series** | | | | | | |
| 12/12/97 | 9712126-04A | W97543 | Chloride | 71.4 | mg / L | 0.5 | | MW.1997 1025 - 22 | 12/16/97 |
| | | W97543 | Fluoride | < 0.5 | mg / L | 0.5 | | MW.1997 1025 - 13 | |
| | | W97543 | Sulfate | 13.0 | mg / L | 0.5 | | MW.1997 1025 - 13 | |

Client Sample ID: **MGRO 5A** GAC Filter Backwash Sample Matrix: **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | **ASTM-D5174/02** | | | | | | |
| 12/12/97 | 9712126-05A | MT.1998.91 | Uranium, total | 0.0049 | mg/L | 0.0001 | | MT.1998 91 - 2 | 01/09/98 |
| | | | **EPA-200 Series AA/GF** | | | | | | |
| 12/12/97 | 9712126-05A | M97914 | Molybdenum | < 0.02 | mg / L | 0.02 | | MW 1997 1044 - 12 | 12/23/97 |
| | | M97914 | Selenium | < 0.005 | mg / L | 0.005 | | MW.1998.6 - 15 | 01/05/98 |
| | | | **EPA-200.7 ICP** | | | | | | |
| 12/12/97 | 9712126-05A | M97927 | Aluminum | < 0.5 | mg / L | 0.5 | | MW.1998.1 - 23 | 12/31/97 |
| | | M97927 | Arsenic | < 0.06 | mg / L | 0.06 | | MW.1998 1 - 23 | |
| | | M97927 | Barium | 0.06 | mg / L | 0.01 | | MW 1998 1 - 23 | |
| | | M97927 | Beryllium | < 0.004 | mg / L | 0.004 | | MW.1998 1 - 23 | |
| | | M97927 | Boron | 1.2 | mg / L | 0.1 | | MW.1998 21 - 23 | 01/06/98 |
| | | M97927 | Cadmium | < 0.008 | mg / L | 0.008 | | MW.1998 1 - 23 | 12/31/97 |
| | | M97927 | Chromium | < 0.04 | mg / L | 0.04 | | MW.1998.1 - 23 | |
| | | M97927 | Cobalt | < 0.01 | mg / L | 0.01 | | MW 1998.1 - 23 | |
| | | M97927 | Copper | < 0 04 | mg / L | 0.04 | | MW.1998 1 - 23 | |
| | | M97927 | Iron | 0.6 | mg / L | 0.2 | | MW.1998.21 - 23 | 01/06/98 |
| | | M97927 | Lead | < 0 06 | mg / L | 0.06 | | MW 1998.1 - 23 | 12/31/97 |
| | | M97927 | Manganese | < 0.010 | mg / L | 0 01 | | MW 1998.1 - 23 | |
| | | M97927 | Nickel | < 0.04 | mg / L | 0 04 | | MW.1998 1 - 23 | |
| | | M97927 | Silver | < 0.02 | mg / L | 0.02 | | MW 1998.1 - 23 | |
| | | M97927 | Thallium | < 0.3 | mg / L | 0 3 | | MW.1998.1 - 23 | |
| | | M97927 | Zinc | 0.3 | mg / L | 0.1 | B | MW.1998 21 - 23 | 01/06/98 |

*Assaigai Analytical Laboratories, Inc.*

# *Certificate of Analysis*

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126** **FENTON HILL**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | EPA-300 series | | | | | |
| 12/12/97 | 9712126-05A | W97543 | Nitrate, Nitrogen | < 0.2 | mg N/ L | 0.2 | MW 1997 1025 - 8 | 12 16/9 |
| | | | SW846-7470 / EPA-245.1 | | | | | |
| 12/12/97 | 9712126-05A | M97925 | Mercury | < 0.0002 | mg / L | 0.0002 | MW 1997 1051 - 14 | 12/24/9 |

Client Sample ID: **MGRO 7A** GAC FILTER BACKWASH — Sample Matrix: **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit * | Run Group - # | Run Da |
|---|---|---|---|---|---|---|---|---|
| | | | EPA-335.2 Cyanides | | | | | |
| 12/12/97 | 9712126-07A | W97547 | Cyanide | < 0.02 | mg / L | 0.02 | MW.1997 1027 - 11 | 12/17/9 |

Client Sample ID: **MGRO 8A** GAC FILTER BACKWASH — Sample Matrix: **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit * | Run Group - # | Run Dat |
|---|---|---|---|---|---|---|---|---|
| | | | EPA-150.1 pH | | | | | |
| 12/12/97 | 9712126-08A | WPH-573 | pH | 7.4 | units | 0.1 | MT.1997.446 - 1 | 12/13/97 |
| | | | EPA-160 series | | | | | |
| 12/12/97 | 9712126-08A | WTDS-435 | Total Dissolved Solids | 422 | mg / L | 10 | MT 1997 476 - 7 | 12/16/97 |
| | | WTSS-494 | Total Suspended Solids | 9.0 | mg / L | 4 | MT.1997.469 - 8 | 12/17/97 |
| | | | EPA-300.0 Anions | | | | | |
| 12/12/97 | 9712126-08A | W97543 | Chloride | 67.7 | mg / L | 0.5 | MW.1997 1025 - 23 | 12/16/97 |
| | | W97543 | Fluoride | < 0.5 | mg / L | 0.5 | MW.1997.1025 - 7 | |
| | | W97543 | Sulfate | 12.7 | mg / L | 0.5 | MW.1997 1025 - 7 | |

Client Sample ID: **MGRO 9A** GAC FILTER BACKWASH — Sample Matrix: **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|
| | | | SW846-8270 / EPA-625 Semi-Volatiles | | | | | |
| 12/12/97 | 9712126-09A | X97468 | 1,2,4-Trichlorobenzene | < 2.2 | ug / L | 1 | XG.1997 373 - 10 | 12/19/97 |
| | | X97468 | 1,2-Dichlorobenzene | < 2.2 | ug / L | 1 | XG.1997.373 - 10 | |
| | | X97468 | 1,3-Dichlorobenzene | < 2.2 | ug / L | 1 | XG.1997 373 - 10 | |
| | | X97468 | 1,4-Dichlorobenzene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | 1-Methylnaphthalene | < 2.2 | ug / L | 1 | XG.1997 373 - 10 | |
| | | X97468 | 2,3,4,6-Tetrachlorophenol | < 110 | ug / L | 50 | XG.1997 373 - 10 | |
| | | X97468 | 2,4,5-Trichlorophenol | < 22 | ug / L | 10 | XG.1997 373 - 10 | |
| | | X97468 | 2,4,6-Trichlorophenol | < 22 | ug / L | 10 | XG.1997.373 - 10 | |
| | | X97468 | 2,4-Dichlorophenol | < 22 | ug / L | 10 | XG.1997 373 - 10 | |
| | | X97468 | 2,4-Dimethylphenol | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | 2,4-Dinitrophenol | < 110 | ug / L | 50 | XG.1997 373 - 10 | |
| | | X97468 | 2,4-Dinitrotoluene | < 22 | ug / L | 10 | XG.1997.373 - 10 | |
| | | X97468 | 2,6-Dinitrotoluene | < 22 | ug / L | 10 | XG.1997 373 - 10 | |
| | | X97468 | 2-Chloronaphthalene | < 2.2 | ug / L | 1 | XG.1997 373 - 10 | |
| | | X97468 | 2-Chlorophenol | < 2.2 | ug / L | 1 | XG.1997 373 - 10 | |
| | | X97468 | 2-Methylnaphthalene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | 2-Methylphenol | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | 2-Nitroaniline | < 22 | ug / L | 10 | XG.1997 373 - 10 | |
| | | X97468 | 2-Nitrophenol ccc | < 22 | ug / L | 10 | XG.1997 373 - 10 | |
| | | X97468 | 3+4 Methylphenol | < 2.2 | ug / L | 1 | XG.1997 373 - 10 | |
| | | X97468 | 3,3'-Dichlorobenzidine | < 22 | ug / L | 10 | XG.1997 373 - 10 | |
| | | X97468 | 3-Nitroaniline | < 22 | ug / L | 10 | XG.1997 373 - 10 | |

*Assaigai Analytical Laboratories, Inc.*

# *Certificate of Analysis*

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126 FENTON HILL**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12/12/97 | 9712126-09A | X97468 | 4,6-Dinitro-2-methylphenol | < 22 | ug / L | 10 | XG 1997 373 - 10 | 12 19 9 |
| | | X97468 | 4-Bromophenyl-phenylether | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | 4-Chloro-3-methylphenol | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | 4-Chloroaniline | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | 4-Chlorophenyl-phenylether | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | 4-Nitroaniline | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | 4-Nitrophenol | < 44 | ug / L | 20 | XG 1997 373 - 10 | |
| | | X97468 | Acenaphthene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Acenaphthylene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Aniline | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | Anthracene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Azobenzene&1,2-Diphenylhydrazine | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Benzo (a) anthracene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Benzo(a)pyrene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Benzo(b & k)fluoranthene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Benzo(g,h,i)perylene | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | Benzoic acid | < 220 | ug / L | 100 | XG 1997 373 - 10 | |
| | | X97468 | Benzyl alcohol | < 110 | ug / L | 50 | XG 1997 373 - 10 | |
| | | X97468 | bis (2-Chloroethyl) ether | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | bis(2-Chloroethoxy)methane | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | bis(2-Chloroisopropyl)ether | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | bis(2-Ethylhexyl)phthalate | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | Butylbenzylphthalate | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Chrysene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | di-n-Butylphthalate | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | di-n-Octylpthalate | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | Dibenz(a,h)anthracene | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | Dibenzofuran | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Diethylphthalate | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Dimethylphthalate | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Fluoranthene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Fluorene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Hexachlorobenzene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Hexachlorobutadiene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Hexachlorocyclopentadiene | < 110 | ug / L | 50 | XG 1997 373 - 10 | |
| | | X97468 | Hexachloroethane | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Indeno(1,2,3-cd)pyrene | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | Isophorone | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | n-Nitroso-di-n-propylamine | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | n-Nitroso-dimethyl-amine | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | n-Nitrosodiphenylamine | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Naphthalene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Nitrobenzene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Pentachlorophenol | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | Phenanthrene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Phenol | < 22 | ug / L | 10 | XG 1997 373 - 10 | |
| | | X97468 | Pyrene | < 2.2 | ug / L | 1 | XG 1997 373 - 10 | |
| | | X97468 | Pyridine | < 22 | ug / L | 10 | XG 1997 373 - 10 | |

*Assaigai Analytical Laboratories, Inc.*

# *Certificate of Analysis*

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126** **FENTON HILL**

Client Sample ID: **MGRO 9B** GAC FILTER BACKWASH Sample Matrix: **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit * | Run Group - # | Run Da |
|---|---|---|---|---|---|---|---|---|
| | | | SW846-8270 / EPA 625 Semi-Volatiles | | | | | |
| 12/12/97 | 9712126-10A | X97468 | 1,2,4-Trichlorobenzene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | 12/19/9 |
| | | X97468 | 1,2-Dichlorobenzene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | 1,3-Dichlorobenzene | < 2.0 | ug / L | 1 | XG.1997.373 - 11 | |
| | | X97468 | 1,4-Dichlorobenzene | < 2.0 | ug / L | 1 | XG.1997.373 - 11 | |
| | | X97468 | 1-Methylnaphthalene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | 2,3,4,6-Tetrachlorophenol | < 100 | ug / L | 50 | XG.1997 373 - 11 | |
| | | X97468 | 2,4,5-Trichlorophenol | < 20 | ug / L | 10 | XG.1997.373 - 11 | |
| | | X97468 | 2,4,6-Trichlorophenol | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | 2,4-Dichlorophenol | < 20 | ug / L | 10 | XG.1997.373 - 11 | |
| | | X97468 | 2,4-Dimethylphenol | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | 2,4-Dinitrophenol | < 100 | ug / L | 50 | XG.1997.373 - 11 | |
| | | X97468 | 2,4-Dinitrotoluene | < 20 | ug / L | 10 | XG.1997.373 - 11 | |
| | | X97468 | 2,6-Dinitrotoluene | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | 2-Chloronaphthalene | < 2.0 | ug / L | 1 | XG.1997.373 - 11 | |
| | | X97468 | 2-Chlorophenol | < 2.0 | ug / L | 1 | XG.1997.373 - 11 | |
| | | X97468 | 2-Methylnaphthalene | < 2.0 | ug / L | 1 | XG 1997.373 - 11 | |
| | | X97468 | 2-Methylphenol | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | 2-Nitroaniline | < 20 | ug / L | 10 | XG.1997.373 - 11 | |
| | | X97468 | 2-Nitrophenol ccc | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | 3+4 Methylphenol | < 2.0 | ug / L | 1 | XG.1997.373 - 11 | |
| | | X97468 | 3,3'-Dichlorobenzidine | < 20 | ug / L | 10 | XG.1997.373 - 11 | |
| | | X97468 | 3-Nitroaniline | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | 4,6-Dinitro-2-methylphenol | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | 4-Bromophenyl-phenylether | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | 4-Chloro-3-methylphenol | < 20 | ug / L | 10 | XG 1997 373 - 11 | |
| | | X97468 | 4-Chloroaniline | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | 4-Chlorophenyl-phenylether | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | 4-Nitroaniline | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | 4-Nitrophenol | < 41 | ug / L | 20 | XG 1997 373 - 11 | |
| | | X97468 | Acenaphthene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Acenaphthylene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Aniline | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | Anthracene | < 2.0 | ug / L | 1 | XG 1997 373 - 11 | |
| | | X97466 | Azobenzene&1,2-Diphenylhydrazine | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Benzo (a) anthracene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Benzo(a)pyrene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Benzo(b & k)fluoranthene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Benzo(g,h,i)perylene | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | Benzoic acid | < 200 | ug / L | 100 | XG 1997 373 - 11 | |
| | | X97468 | Benzyl alcohol | < 100 | ug / L | 50 | XG.1997 373 - 11 | |
| | | X97468 | bis (2-Chloroethyl) ether | < 2.0 | ug / L | 1 | XG.1997.373 - 11 | |
| | | X97468 | bis(2-Chloroethoxy)methane | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | bis(2-Chloroisopropyl)ether | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | bis(2-Ethylhexyl)phthalate | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | Butylbenzylphthalate | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |

# *Certificate of Analysis*

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126 FENTON HILL**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12/12/97 | 9712126-10A | X97468 | Chrysene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | 12/19/97 |
| | | X97468 | di-n-Butylphthalate | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | di-n-Octylpthalate | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | Dibenz(a,h)anthracene | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | Dibenzofuran | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Diethylphthalate | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Dimethylphthalate | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Fluoranthene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Fluorene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Hexachlorobenzene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Hexachlorobutadiene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Hexachlorocyclopentadiene | < 100 | ug / L | 50 | XG.1997 373 - 11 | |
| | | X97468 | Hexachloroethane | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Indeno(1,2,3-cd)pyrene | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | Isophorone | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | n-Nitroso-di-n-propylamine | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | n-Nitroso-dimethyl-amine | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | n-Nitrosodiphenylamine | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Naphthalene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Nitrobenzene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Pentachlorophenol | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | Phenanthrene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Phenol | < 20 | ug / L | 10 | XG.1997 373 - 11 | |
| | | X97468 | Pyrene | < 2.0 | ug / L | 1 | XG.1997 373 - 11 | |
| | | X97468 | Pyridine | < 20 | ug / L | 10 | XG.1997 373 - 11 | |

Client: Sample ID: **MGRO 10A** [illegible] BACKWASH Sample Matrix: **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | SW846-8240 Volatiles | | | | | | |
| 12/12/97 | 9712126-11A | X97483 | 1,1 Dichloroethane | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | 12/24/97 |
| | | X97483 | 1,1 Dichloroethene | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,1,1 Trichloroethane | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,1,1,2 Tetrachloroethane | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,1,2 Trichloroethane | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,1,2,2 Tetrachloroethane | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,2 Dibromoethane (EDB) | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,2 Dichlorobenzene | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,2 Dichloroethane | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,2 Dichloropropane | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,2,3 Trichloropropane | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,3 Dichlorobenzene | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 1,4 Dichloro-2-butene | < 10 | ug / L | 10 | | XG.1997 380 - 7 | |
| | | X97483 | 1,4 Dichlorobenzene | < 1.0 | ug / L | 1 | | XG.1997 380 - 7 | |
| | | X97483 | 2-Butanone (MEK) | < 5.0 | ug / L | 5 | | XG.1997 380 - 7 | |
| | | X97483 | 2-Chloroethylvinylether | < 5.0 | ug / L | 5 | | XG.1997 380 - 7 | |
| | | X97483 | 2-Hexanone (MBK) | < 5.0 | ug / L | 5 | | XG.1997 380 - 7 | |
| | | X97483 | 4-Methyl-2-pentanone (MIBK) | < 5.0 | ug / L | 5 | | XG.1997 380 - 7 | |
| | | X97483 | Acetone | < 5.0 | ug / L | 5 | | XG.1997 380 - 7 | |

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# *Certificate of Analysis*

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126 FENTON HILL**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 12/12/97 | 9712126-11A | X97483 | Acrolein | < 20 | ug / L | 20 | XG.1997 380 - 7 | 12/24/97 |
| | | X97483 | Acrylonitrile | < 20 | ug / L | 20 | XG.1997.380 - 7 | |
| | | X97483 | Benzene | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | Bromodichloromethane | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | Bromoform | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | Bromomethane | < 5.0 | ug / L | 5 | XG.1997 380 - 7 | |
| | | X97483 | Carbon disulfide | < 5.0 | ug / L | 5 | XG.1997 380 - 7 | |
| | | X97483 | Carbon tetrachloride | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | Chlorobenzene | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | Chlorodibromomethane | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | Chloroethane | < 5.0 | ug / L | 5 | XG.1997.380 - 7 | |
| | | X97483 | Chloroform | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | Chloromethane | < 5.0 | ug / L | 5 | XG.1997.380 - 7 | |
| | | X97483 | cis-1,2 dichloroethene | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | cis-1,3 dichloropropene | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | Dibromomethane | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | Ethyl methacrylate | < 5.0 | ug / L | 5 | XG.1997.380 - 7 | |
| | | X97483 | Ethylbenzene | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | Freon 113 | < 5.0 | ug / L | 5 | XG.1997 380 - 7 | |
| | | X97483 | Freon 12 | < 10 | ug / L | 10 | XG.1997 380 - 7 | |
| | | X97483 | Iodomethane | < 5.0 | ug / L | 5 | XG.1997.380 - 7 | |
| | | X97483 | Methyl t-butyl ether (MTBE) | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | Methylene chloride | < 10 | ug / L | 10 | XG.1997.380 - 7 | |
| | | X97483 | o-Xylene | < 1.0 | ug / L | 1 | XG.1997.380 - 7 | |
| | | X97483 | p/m Xylenes | < 2.0 | ug / L | 2 | XG.1997 380 - 7 | |
| | | X97483 | Styrene | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | t-1,2 Dichloroethene | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | t-1,3 Dichloropropene | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | Tetrachloroethene | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | Toluene | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | Trichloroethene | < 1.0 | ug / L | 1 | XG.1997 380 - 7 | |
| | | X97483 | Trichlorofluoromethane | < 5.0 | ug / L | 5 | XG.1997 380 - 7 | |
| | | X97483 | Vinyl acetate | < 5.0 | ug / L | 5 | XG.1997 380 - 7 | |
| | | X97483 | Vinyl chloride | < 5.0 | ug / L | 5 | XG.1997.380 - 7 | |

Client: [redacted]
Sample ID: [redacted] WATER

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|
| | | | [redacted] | | | | | |
| 12/12/97 | 9712126-12A | X97483 | 1,1 Dichloroethane | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | 12/24/97 |
| | | X97483 | 1,1 Dichloroethene | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | |
| | | X97483 | 1,1,1 Trichloroethane | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | |
| | | X97483 | 1,1,1,2 Tetrachloroethane | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | |
| | | X97483 | 1,1,2 Trichloroethane | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | |
| | | X97483 | 1,1,2,2 Tetrachloroethane | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | 1,2 Dibromoethane (EDB) | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | |
| | | X97483 | 1,2 Dichlorobenzene | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | |
| | | X97483 | 1,2 Dichloroethane | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | |
| | | X97483 | 1,2 Dichloropropane | < 1.0 | ug / L | 1 | XG.1997 380 - 8 | |

# *Certificate of Analysis*

Client: **LOS ALAMOS NATIONAL LABS**
Project: **9712126 FENTON HILL**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 12/12/97 | 9712126-12A | X97483 | 1,2,3 Trichloropropane | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | 12.24.9 |
| | | X97483 | 1,3 Dichlorobenzene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | 1,4 Dichloro-2-butene | < 10 | ug / L | 10 | XG.1997.380 - 8 | |
| | | X97483 | 1,4 Dichlorobenzene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | 2-Butanone (MEK) | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | 2-Chloroethylvinylether | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | 2-Hexanone (MBK) | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | 4-Methyl-2-pentanone (MIBK) | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Acetone | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Acrolein | < 20 | ug / L | 20 | XG.1997.380 - 8 | |
| | | X97483 | Acrylonitrile | < 20 | ug / L | 20 | XG.1997.380 - 8 | |
| | | X97483 | Benzene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Bromodichloromethane | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Bromoform | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Bromomethane | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Carbon disulfide | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Carbon tetrachloride | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Chlorobenzene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Chlorodibromomethane | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Chloroethane | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Chloroform | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Chloromethane | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | cis-1,2 dichloroethene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | cis-1,3 dichloropropene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Dibromomethane | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Ethyl methacrylate | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Ethylbenzene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Freon 113 | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Freon 12 | < 10 | ug / L | 10 | XG.1997.380 - 8 | |
| | | X97483 | Iodomethane | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Methyl t-butyl ether (MTBE) | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Methylene chloride | < 10 | ug / L | 10 | XG.1997.380 - 8 | |
| | | X97483 | o-Xylene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | p/m Xylenes | < 2.0 | ug / L | 2 | XG.1997.380 - 8 | |
| | | X97483 | Styrene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | t-1,2 Dichloroethene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | t-1,3 Dichloropropene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Tetrachloroethene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Toluene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Trichloroethene | < 1.0 | ug / L | 1 | XG.1997.380 - 8 | |
| | | X97483 | Trichlorofluoromethane | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Vinyl acetate | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |
| | | X97483 | Vinyl chloride | < 5.0 | ug / L | 5 | XG.1997.380 - 8 | |

Client Sample ID: **MGR0111A** [redacted]

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|
| | | | [redacted] | | | | | |
| 12/12/97 | 9712126-13A | WTDS-435 | Total Dissolved Solids | 426 | mg / L | 10 | MT 1997 476 - 8 | 12/16/97 |

*Assaigai Analytical Laboratories, Inc.*

# *Certificate of Analysis*

Client: **LOS ALAMOS NATIONAL LABS**

Project: **9712126** **FENTON HILL**

Client Sample ID **MGRO 11B** SOFTENER REGEN. WATER — Sample Matrix **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | EPA-160 Series | | | | | | |
| 12/12/97 | 9712126-14A | WTDS-435 | Total Dissolved Solids | 9930 | mg / L | 10 | | MT.1997.476 - 9 | 12/16/97 |

Client Sample ID **MGRO 11C** SOFTENER REGEN. WATER — Sample Matrix **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | EPA-160 Series | | | | | | |
| 12/12/97 | 9712126-15A | WTDS-435 | Total Dissolved Solids | 12550 | mg / L | 10 | | MT.1997.476 - 10 | 12/16/97 |

Client Sample ID **MGRO 12** — Sample Matrix **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | [illegible] | | | | | | |
| 12/12/97 | 9712126-16A | MT.1998.91 | Uranium, total | 0.0029 | mg/L | 0.0001 | | MT.1998.91 - 3 | 01/09/98 |
| | | | EPA-200.7 Trace A/ICP | | | | | | |
| 12/12/97 | 9712126-16A | M97914 | Molybdenum | < 0.02 | mg / L | 0.02 | | MW.1997.1044 - 13 | 12/23/97 |
| | | M97914 | Selenium | < 0.005 | mg / L | 0.005 | | MW.1998.6 - 16 | 01/05/98 |
| | | | EPA-200.7/ICP | | | | | | |
| 12/12/97 | 9712126-16A | M97927 | Aluminum | < 0.5 | mg / L | 0.5 | | MW.1998.1 - 26 | 12/31/97 |
| | | M97927 | Arsenic | < 0.06 | mg / L | 0.06 | | MW.1998.1 - 26 | |
| | | M97927 | Barium | < 0.01 | mg / L | 0.01 | | MW.1998.1 - 26 | |
| | | M97927 | Beryllium | < 0.004 | mg / L | 0.004 | | MW.1998.1 - 26 | |
| | | M97927 | Boron | 1.4 | mg / L | 0.1 | | MW.1998.21 - 26 | 01/06/98 |
| | | M97927 | Cadmium | < 0.008 | mg / L | 0.008 | | MW.1998.1 - 26 | 12/31/97 |
| | | M97927 | Chromium | < 0.04 | mg / L | 0.04 | | MW.1998.1 - 26 | |
| | | M97927 | Cobalt | < 0.01 | mg / L | 0.01 | | MW.1998.1 - 26 | |
| | | M97927 | Copper | < 0.04 | mg / L | 0.04 | | MW.1998.1 - 26 | |
| | | M97927 | Iron | < 0.2 | mg / L | 0.2 | | MW.1998.21 - 26 | 01/06/98 |
| | | M97927 | Lead | < 0.06 | mg / L | 0.06 | | MW.1998.21 - 26 | |
| | | M97927 | Manganese | < 0.010 | mg / L | 0.01 | | MW.1998.1 - 26 | 12/31/97 |
| | | M97927 | Nickel | < 0.04 | mg / L | 0.04 | | MW.1998.1 - 26 | |
| | | M97927 | Silver | < 0.02 | mg / L | 0.02 | | MW.1998.1 - 26 | |
| | | M97927 | Thallium | < 0.3 | mg / L | 0.3 | | MW.1998.1 - 26 | |
| | | M97927 | Zinc | 0.7 | mg / L | 0.1 | B | MW.1998.21 - 26 | 01/06/98 |
| | | | [illegible] | | | | | | |
| 12/12/97 | 9712126-16A | M97925 | Mercury | < 0.0002 | mg / L | 0.0003 | | MW.1997.1051 - 17 | 12/24/97 |

Client Sample ID **MGRO 13** — Sample Matrix **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | EPA-335.2/SM-4500 | | | | | | |
| 12/12/97 | 9712126-17A | W97547 | Cyanide | < 0.02 | mg / L | 0.02 | | MW.1997.1027 - 13 | 12/17/97 |

Client Sample ID **MGRO 14** — Sample Matrix **WATER**

| Collect | Fraction | QC Group | Analyte | Result | Units | Limit | * | Run Group - # | Run Date |
|---|---|---|---|---|---|---|---|---|---|
| | | | EPA-300 Series | | | | | | |
| 12/12/97 | 9712126-18A | W97543 | Nitrate, Nitrogen | < 0.2 | mg N/ L | 0.2 | | MW.1997.1025 - 18 | 12/16/97 |

# MIXING OF EXEMPT AND NON-EXEMPT WASTES

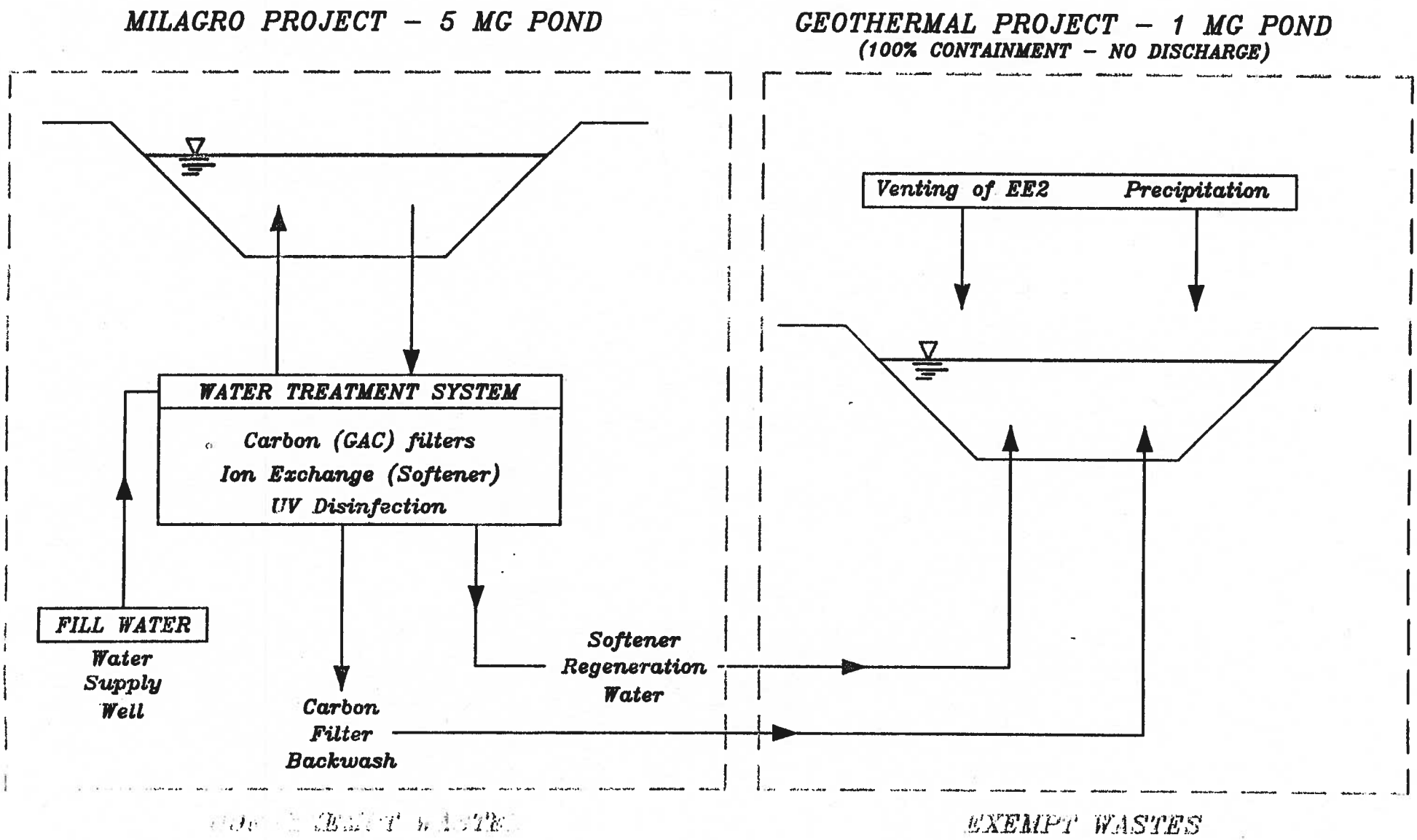
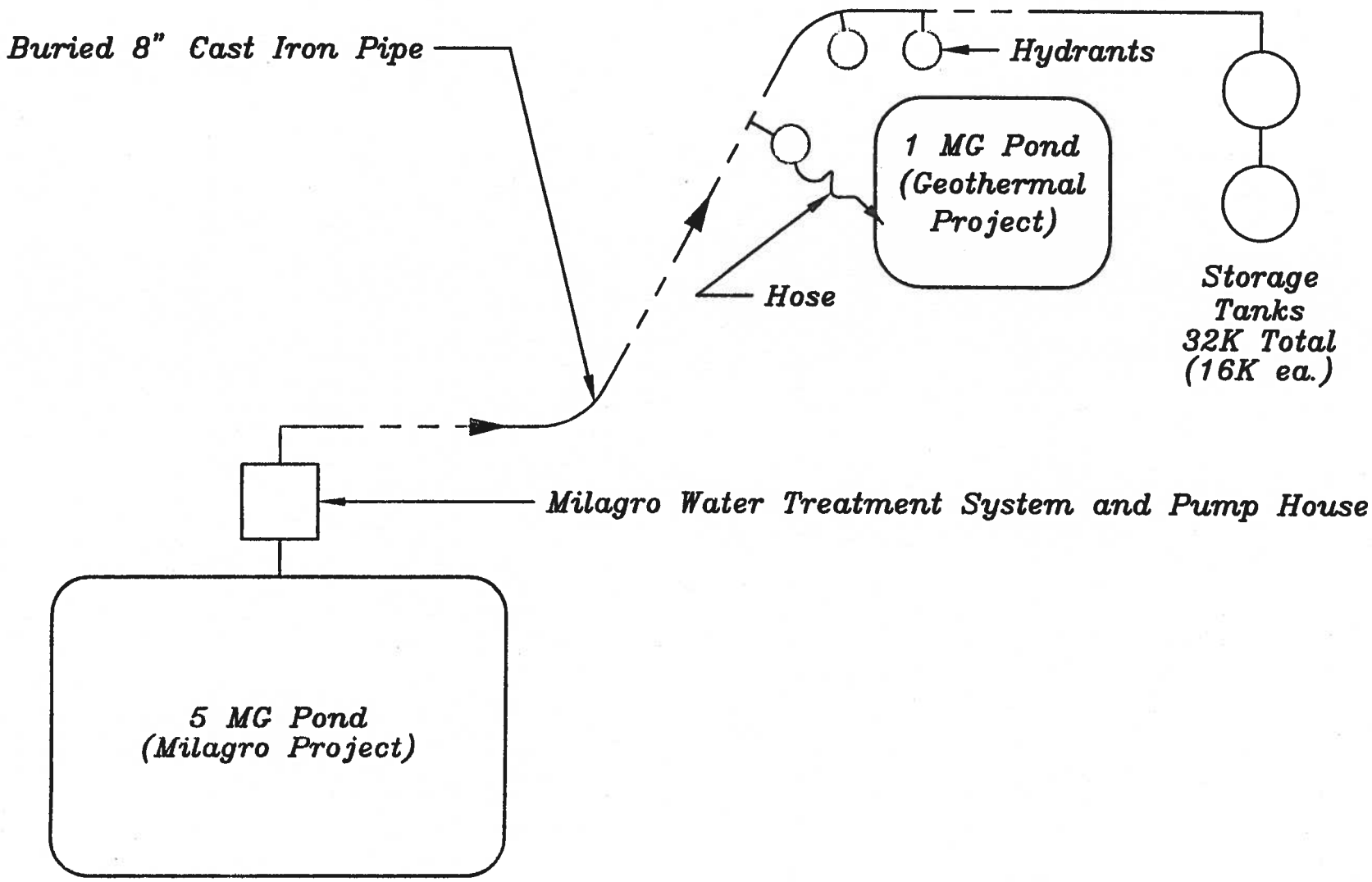





Figure 2.0

## 5 MG POND to 1 MG POND PIPING SCHEMATIC




07/01/98

Figure 3.0

| FINAL MIXTURE SUMMARY: 1 MG Pond: 1998-2006[1] | |
|---|---|
| Total Estimated Nonexempt Solids ($ft^3$) | 106 |
| Total Estimated Exempt Solids ($ft^3$) | 4,184 |
| Percent of Final Mixture that is Nonexempt | 3% |

**Milagro Project Nonexempt Wastes: Softener Regeneration & GAC Filter Backwash Wastewater**

| Years | Source | Wastewater Volume (gal) | Wastewater Volume (liters) | TDS (mg/L) | TDS (kg) | TSS (mg/L) | TSS (kg) | Total Solids TSS+TDS (kg) | Total Solids Volume ($ft^3$)[2] |
|---|---|---|---|---|---|---|---|---|---|
| 1998 | GAC Filter | 78,500 | 297,123 | 422 | 125 | 9 | 3 | 134 | 3 |
| 1998 | Softener | 75,000 | 283,875 | 12,550 | 3,563 | 9 | 3 | 3,572 | 88 |
| 1999 | GAC Filter | 48,000 | 181,680 | 422 | 77 | 9 | 2 | 78 | 2 |
| 2000 | GAC Filter | 48,000 | 181,680 | 422 | 77 | 9 | 2 | 78 | 2 |
| 2001 | GAC Filter | 48,000 | 181,680 | 422 | 77 | 9 | 2 | 78 | 2 |
| 2002 | GAC Filter | 48,000 | 181,680 | 422 | 77 | 9 | 2 | 78 | 2 |
| 2003 | GAC Filter | 48,000 | 181,680 | 422 | 77 | 9 | 2 | 78 | 2 |
| 2004 | GAC Filter | 48,000 | 181,680 | 422 | 77 | 9 | 2 | 78 | 2 |
| 2005 | GAC Filter | 48,000 | 181,680 | 422 | 77 | 9 | 2 | 78 | 2 |
| 2006 | GAC Filter | 48,000 | 181,680 | 422 | 77 | 9 | 2 | 78 | 2 |
| | | | | | Estimated volume of nonexempt solids after 9 years of operation ($ft^3$) | | | | 106 |

**Geothermal Project Exempt Wastes: 1 MG Pond[4]**

| Year | Source | Wastewater Volume (gal) | Wastewater Volume (liters) | % Solids | Solids Volume (gal) | Solids Volume ($ft^3$) |
|---|---|---|---|---|---|---|
| 2006 | Geothermal | 25,000 | 94,625 | 20 | 18,925 | 2,536 |
| | Geothermal | 650,000 | 2,460,250 | 0.5[3] | 12,301 | 1,648 |
| | | | Estimated volume of exempt solids after 9 years of operation ($ft^3$) | | | 4,184 |

NOTES:
[1] Final mixture is based upon nine years of operation.
[2] Weight-to-volume conversions are based upon an estimated solids weight of 90 $lbs/ft^3$.
[3] A percent solids of 0.5% is equivalent to a TDS/TSS concentration of 5,000 ppm. Analysis of the 1 MG pond water on 5/5/97 showed a TDS concentration of 5,034 ppm.
[4] The estimated volume of solids in the 1 MG pond in the year 2006 are based upon the volume of solids removed during pond cleaning in Sept., 1997, after 9 years of operation.

# APPENDIX F

## NM OCD Approval of July 1998 Minor Modification Request, May 1999

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

May 10, 1999

**CERTIFIED MAIL**
**RETURN RECEIPT NO.** Z 559 573 595

Mr. Steven Rae
Los Alamos National Laboratory
MS K497
Los Alamos, NM 87545

Subject: Minor Modification of Ground Water Discharge Plan GW-031

Dear Mr. Rae:

The New Mexico Oil Conservation Division (NMOCD) is receipt of Los Alamos National Laboratory's (LANL) letter dated July 20, 1998 requesting a minor modification to the existing discharge plan GW-031. The NMOCD hereby approves of the minor modification subject to the following conditions:

1. All waste will be disposed of at an OCD approved facility.

2. The 8" (inch) buried cast iron pipe using to convey the wastewater from the 5 (mmgal) pond to the 1 (mmgal) pond shall be tested to demonstrate mechanical integrity at present and then every 5 years thereafter, or prior to discharge plan renewal. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing. **LANL shall perform this mechanical integrity test and submit the results by June 15, 1999.**

Please be advised that NMOCD approval of this minor modification does not relieve LANL of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve LANL of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions, please contact Wayne Price of my staff at (505-827-7155). On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

Roger Anderson
Environmental Bureau Chief

xc: Roy Johnson

# APPENDIX G

## LANL Draft Seeding Specification

SECTION 02936

SEEDING

**********

**LANL MASTER CONSTRUCTION SPECIFICATION**

When editing to suit project, author shall add job-specific requirements and delete only those portions that in no way apply to the activity (e.g., a component that does not apply). To seek a variance from applicable requirements, contact the LEM Civil POC.

When assembling a specification package, include applicable specifications from all Divisions, especially Division 1, General Requirements.

Delete information within "stars" during editing.

Specification developed for ML-3 projects. For ML-1 / ML-2, additional requirements and QA reviews are required.

**********

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Preparation of seedbed.

B. Seeding.

C. Mulching and erosion control blankets.

D. Watering and maintenance.

1.2 RELATED SECTIONS

A. Section 02270, Slope Protection and Erosion/Sediment Control

1.3 SUBMITTALS

A. Submit the following in accordance with Section 01330, Submittal Procedures:

1. Catalog data, including sources of supply for amendments, mulch, tackifier, fertilizer and erosion control blankets.

2. Certification substantiating that material complies with specified requirements. Submit certified seed bag tags and copies of seed invoices identified by project name.

3. Installation instructions, including proposed seeding schedule. Coordinate with specified maintenance periods to provide maintenance from date of final acceptance. Once schedule is accepted, revise dates only with LANL approval after documentation of delays.

## 1.4 QUALITY ASSURANCE

A. Contractor Qualifications:

1. Perform work by a single firm experienced with the type and scale of work required and having equipment and personnel adequate to perform the work satisfactorily.

B. Material Quality Control:

1. Provide seed mixture in containers showing species percentages in seed mix; test information including, purity, germination and noxious/restricted weeds; net weight; date of packaging; and location of packaging.

2. Furnish seed labeled in accordance with the requirements of federal and New Mexico statutes and regulations governing seed labeling. Such resulting requirements include but are not necessarily limited to: Federal Seed Act and Amendments, rules and regulations established by the United States Department of Agriculture; the New Mexico Seed Law; and all resulting regulations or restrictions established by New Mexico State University or other authorized entity.

3. In addition, ensure seed mix and its application complies with the requirements of all other federal and New Mexico statutes and regulations governing seeds, plants, and weeds. These requirements include but are not necessarily limited to: the Noxious Weed Control Act and all rules, regulations, or control measures by a noxious weed control district embracing Los Alamos County, New Mexico; and the Harmful Plant Act.

## 1.5 DELIVERY, STORAGE AND HANDLING

A. Deliver packaged materials in sealed containers showing weight, analysis and name of manufacturer. Protect materials from deterioration during delivery and while stored at site. Opened or wet seed shall be rejected and returned to the responsible party.

# PART 2 PRODUCTS

## 2.1 PRODUCT OPTIONS AND SUBSTITUTIONS

A. Comply with 01630, Product Options and Substitutions.

## 2.2 SEED

A. Obtain native grass seed from sources whose origin would ensure site adaptability at LANL. Plant sources from New Mexico or surrounding states are preferred.

B. Obtain shrub and wildflower seed from sources whose origin would ensure site adaptability at LANL. Plant sources from New Mexico or surrounding states are preferred.

C. Cover crops (e.g., annual barley, oats, winter rye, etc.) may be used only as a temporary stabilization measure and shall not be used in conjunction with a perennial seed mix.

D. Furnish certification, showing origin of seed and pure live seed (PLS) content as determined by a certified authority. Provide bags of seed that are tagged and sealed in accordance with the State Department of Agriculture or other local certification authority within the state of origin. The tag or label shall indicate analysis of seed and date of analysis, which shall not be more than 9 months prior to delivery date. Seed may be premixed by the seed dealer and appropriate data indicated on the bag label for each variety.

E. Seed mixture shall be:

**********

Develop seed mixture from the following guidelines. Choose a minimum of 5 grass species from the list. Should wildflowers be included in the mix, use a ratio of 80 – 90 percent grasses and 10-20 percent wildflowers. Choose 3 –5 species from the forb and wildflowers list.

**********

**NATIVE PERENNIAL MIX**

| Common Name | Scientific Name | % of Mix |
|---|---|---|
| **Grasses** | | |
| Blue grama* | *Bouteloua gracilis* | 5 – 10% |
| Galleta grass* | *Hilaria jamesii* | 5- 10% |
| Mutton grass | *Poa fendleriana* | 10-15% |
| Sideoats grama* | *Bouteloua curtipendula* | 10-15% |
| Arizona fescue† | *Festuca arizonica* | 10 – 15% |
| Prairie junegrass† | *Koeleria macrantha* | 5 – 10% |
| Bottlebrush squirreltail* | *Elymus elymoides* | 15 – 20% |
| Little bluestem† | *Schizachyrium scoparium* | 10 – 15% |
| Indian ricegrass* | *Oryzopsis hymenoides* | 10 – 15% |
| Mountain brome† | *Bormus marginatus* | 10 – 15% |
| Sand dropseed* | *Sporobolus cryptandrus* | 1 - 8% |
| Thickspike wheatgrass | *Agropyron dasystachyum* | 20 – 25% |
| Needle and Thread grass* | *Stipa comata* | 5 – 10% |
| New Mexico needlegrass* | *Stipa neomexicana* | 10 - 15% |
| Sheep fescue | *Festuca ovina* | 10 – 15% |
| **Forbs/ Wildflowers** | | 1% |
| Firewheel | *Gaillardia pulchella* | 2% |
| Evening primrose | *Oenothera caespitosa* | 1% |
| Gooseberry leaf Globemallow | *Sphaeralcea grossulariafolia* | 1.5% |

| Common Name | Scientific Name | % of Mix |
|---|---|---|
| Scarlet gilia | *Ipomopsis aggregata* | 1% |
| Plains aster | *Aster biglovii* | 1% |
| Western yarrow | *Achillea millifolium* | ½% |
| Fringed sage | *Artemisia frigida* | 1% |
| Blue flax | *Linum perenne lewisii* | 4% |
| Scarlet bulgler | *Penstemon barbatus* | 2% |
| Palmer penstemon | *Penstemon palmerii* | 2% |
| Prairie coneflower | *Ratibida columnifera* | 1% |
| Showy golden-eye | *Heliomerus multiflora* | 1% |
| Purple geranium | *Geranium caespitosum* | 5% |

***Species particularly suited for especially dry sites**
**†Species particularly suited for higher elevations (above 7000 ft.)**

## 2.3 STRAW MULCH

A. Straw shall be stalks from oats, wheat, rye, barley, or rice that are free from noxious weeds, mold, or other objectionable material. At least 65 percent of the herbage by weight of each bale of straw shall be 10 inches in length or longer. Rotted, brittle or molded straw is not acceptable. Straw from introduced grasses is acceptable if cut prior to seed formation. If possible, provide marsh grass composed of mid to tall native grasses (usually tough and wiry grass and grass-like plants found in the lowland areas within the Rocky Mountain Region).

## 2.4 HYDRAULIC MULCH/TACKIFIER

A. Provide mulch material consisting of 100 percent virgin wood fibers manufactured expressly from whole wood chips, such as Eco-Fibre, Conwed, etc. Process chips in such a manner as to contain no growth or germination inhibiting factors. Do not produce fiber from recycled material such as sawdust, paper, cardboard, or residue from pulp and paper plants. Provide materials free from contaminants such as lead paint, varnish or other metal contaminants. Hydraulic mulch shall contain non-toxic dye to assist in visually determing even distribution. Mulch material shall meet the following specifications:

| Parameter | Value |
|---|---|
| pH at 3% consistency | 4.5 +/- 0.5 |
| Ash content | 0.8% +/- 0.2% |
| Moisture holding capacity | 1250 (grams water/100 grams oven dry fiber) |
| Moisture content | 12% +/- 3% (Wet weight basis) |

B. Combine mulch with an organic plantago based tackifier, such as M-binder, etc., that has no growth or germination inhibiting factors and is nontoxic. Apply the uniform mixture to the seeded area.

C. Bagged mulch/tackifier mix that is homogenous within the unit package may also be used. Tackifier shall adhere to the fibers during manufacturing to prevent separation during shipment and to avoid chemical agglomeration during mixing in the hydraulic mulching equipment.

## 2.5 EROSION CONTROL BLANKET

A. Provide erosion control blankets of a uniform web of interlocking excelsior wood fibers, weed-free straw, or a combination of straw and coir fibers.

**********
Use an appropriate blanket chosen for the site conditions and functionality for the desired growing seasons.
**********

1. 3:1 slopes or gentler

| | |
|---|---|
| Single netted blankets | A machine produced erosion control blanket using 100 percent straw or excelsior fibers sewn into a medium weight photo degradable bottom net. Minimum weight of blanket 0.5 lbs/ square yard, such as Greenfix America WS05, etc. |

2. 3:1 – 2:1 slopes

| | |
|---|---|
| Double netted blankets | A machine produced erosion control blanket using 100 percent straw or excelsior fibers sewn into a medium weight photo degradable top net and a light weight photo degradable bottom net. Minimum weight of blanket 0.7 lbs/ square yard, such as Greenfix America WS072, etc. |

3. 2:1 slopes and steeper and/or 2 growing seasons of protection

| | |
|---|---|
| Straw/ coir blend blankets | A machine produced straw /coir fiber erosion control blanket using 70 percent straw /30 percent coir fibers sewn into a heavy weight photo degradable top net and a medium weight photo degradable bottom net. Minimum weight of blanket 0.7 lbs/square yard, such as Greenfix America CFS072R, etc. |

B. Staples: U-shaped, 11 gauge or heavier steel wire, minimum leg length of 8 inches after bending, with a throat approximately 2 inches wide.

C. Wood Stakes: Use 2 x 2 x 12 inch pine or fir stakes, beveled at one end, in place of wire staples in tuff locations.

## 2.6 BONDED FIBER MATRIX

A. Provide Bonded Fiber Matrix (BFM) composed of natural color, long strand wood fiber, produced by therm-mechanical defribration of wood chips and joined together by a high strength non-toxic adhesive, such as Eco-Ageis, etc. The product shall be composed of 90 percent wood fiber, 9 percent blended hydrocolloid-based binder, and 1 mineral activators, all by total weight. The BFM shall be 100 percent biodegradable and non-toxic to fish and wildlife, and it shall not contain any synthetic fibers.

## 2.7 AMENDMENTS / SOIL ADDITIONS

A. Fertilizer: Apply slow-release organic fertilizers such as Biosol Mix, Biosol, Osmocote, composted manure or approved equal to minimize deficiencies of the topsoil. If composted manure is to be applied, test the nutrient content and interpret before it is used.

B. Water: Clean, fresh, and free of substances or matter that could inhibit vigorous growth.

C. Sand: Clean, washed, and free of toxic materials.

D. Wood chips: Wood chips shall have a relatively large surface area to volume ratio to be more easily broken down in the soil. Incorporate wood chips at low rates (0.5 ton/ acre) in order to assure the Carbon to Nitrogen ratio in soil is at favorable conditions for plant germination and growth. If higher rates are used, add nitrogen fertilizer to assure nutrient availability to plants.

# PART 3 EXECUTION

## 3.1 PREPARATION

A. Preparation of the Seedbed:

1. Prepare seedbed to a maximum depth of 4 inches by tilling with a disc harrow or chiseling tool. Uproot all competitive vegetation during seedbed preparation and work soil uniformly, leaving surface rough to reduce surface erosion. Remove large clods and stones, or other foreign material that would interfere with seeding equipment.

2. Do not till on ground that is already loose to a depth of 2 inches or more that has undergone regrading and fill. Till newly cut slopes.

3. Perform tillage across slope when practical and perform in 2 directions whenever one pass is insufficient to adequately break up soil. Do not till up and down slopes, as this will create excessive surface erosion problems.

4. Do not do work when moisture content of soil is unfavorable or ground is otherwise in a non-tillable condition. To minimize dust problems for adjoining areas, do not till when wind speeds are over 10 mph.

5. The extent of seedbed preparation shall not exceed the area on which the entire seeding operation can be accomplished within a 24-hour period.

B. Soil Amendments/Additions: Uniformly apply slow release organic fertilizer to prepared seedbed in accordance with manufacturer recommended rates.

C. Prepare seedbed again if prior to seeding LANL Construction Inspector determines that rain or some other factor has affected prepared surfaces and that it may prevent seeding to proper depth.

D. On excessively steep slopes (steeper than 2:1), hydraulic/broadcast seeding may be appropriate. If seeding in this fashion, multiply application rate of seed by a factor of 2.

E. If cover crop has been established in area to be seeded, mow cover crop early in growing season before cover crop is ready to drop seeds.

## 3.2 APPLICATION OF SEED

A. General:

1. Avoid seeding between August 1 and September 30. Do not seed during windy weather, or when topsoil is dry, saturated or frozen.

2. Equip seed boxes used for drill and broadcast seeding with an agitator.

3. To prevent stratification of seed mix, do not run seed box agitators while seeding is not being performed.

4. If seed mix is transported to site in a seed box or other equipment that subjects mix to shaking or similar movement that has the potential to cause stratification, remix seed prior to application.

5. Calibrate seeding equipment in presence of LANL Construction Inspector to determine that equipment setting is appropriate to distribute seed at the specified rates.

6. Unless otherwise shown on Drawings, seed areas disturbed by or denuded by construction operations or erosion.

7. Use markers to ensure that no gaps will exist between passes of seeding equipment.

8. If cover crop has been established, mow the crop and drill seed perennial seed mix into the crop stubble.

B. Drill Seeding:

When drill seeding, plant seed mix at a rate of 20 - 25 PLS lbs/acre. Uniformly apply prescribed mix over area to be seeded as follows:

1. Accomplish seeding operations, where practical, by drilling in a direction across slope.

2. Plant seeds approximately 1/4 inch deep.

3. Do not exceed 4 inches distance between drilled furrows. If furrow openers on drill exceed 4 inches, drill area twice to obtain a 4-inch distance between furrows.

4. Seed with grass wheels, rate control attachments, seed boxes with agitators, and separate boxes for small seed.

C. Broadcast Seeding:

When broadcast seeding, plant seed mix at a rate of 32 - 37 PLS lbs/acre.

1. Where it is not practical to accomplish seeding by drilling, mechanically broadcast seed by use of a hydraulic mulch slurry blower, rotary spreader, or a seeder box with a gear feed mechanism. If seeding is done with a slurry blower, use highest pressure and smallest nozzle opening that will accommodate the seed.

2. Immediately following seeding operation, lightly rake seedbed or loosen with a chain harrow to provide approximately 1/4 inch of soil cover over most of the seed.

3. If hydraulically applying mulch as part of the broadcast seeding process, use a 2 step process. Apply seed with a tracer (200 – 300 lbs/ acre) amount of mulch across entire seeded area. Once seed is applied, apply full complement of mulch (to equal 2000 lbs/ acre). This shall allow seed to be in good contact with soil surface and not suspended in mulch matrix.

4. Prohibit vehicles and other equipment from traveling over the seeded areas.

3.3 STRAW MULCH: Slopes Flatter than 2:1, Non-Irrigated Projects

A. For locations that have not been hydraulically mulched, immediately following raking/chaining operation, add straw mulch to seeded areas.

1. Apply straw mulch at a minimum rate of 1.5 tons per acre of air-dry material. Spread straw mulch uniformly over area either by hand or with a mechanical mulch spreader to achieve 80 percent ground cover. When spread by hand, tear bales of straw apart and fluff before spreading. Depth of applied straw mulch shall not exceed 3 inches. Do not mulch when wind velocity exceeds 10 mph.

2. Wherever use of crimping equipment is practical, place mulch in manner noted above and anchor it into the soil to a minimum depth of 2 inches. Use a crimper or heavy disc such as a mulch tiller, with flat serrated discs at least 1/4 inch in thickness, having dull edges, and spaced no more than 9 inches apart. Provide discs of sufficient diameter to prevent frame of equipment from dragging the mulch. Where practical, perform crimping in 2 (opposite) directions. Do not use Sheep's Foot Rollers, heavy equipment tracks, and standard disc cultivators for crimping.

3. If straw mulched areas cannot be anchored by crimping, use hydraulic mulch wood fibers with tackifier. Mix slurry in a tank with an agitation system and spray under pressure uniformly over the soil surface. Keep all materials in uniform suspension throughout the mixing and suspension cycle when using hydraulic mulching equipment. Mix 100 lb. of wood fiber with 150 lbs. of tackifier to anchor straw mulch. Apply mixture at a rate of 250 lbs/acre.

4. Use both horizontal and vertical movements in the applicator to achieve an even application of the slurry material.

3.4 HYDRAULIC MULCHING/TACKIFIER: Slopes Flatter than 2:1, Irrigated Projects

A. Immediately following raking/chaining operation, apply hydraulic mulch fibers with tackifier to seeded areas. Mix slurry in a tank with an agitation system and spray, under pressure, uniformly over soil surface. Apply mulch evenly across landscape at a rate of 2000 lbs/ acre.

B. Use both horizontal and vertical movements in applicator to achieve an even application of slurry material. Keep all materials in uniform suspension throughout mixing and suspension cycle when using hydraulic mulching equipment.

C. When using plantago based tackifier as mulch, apply tackifier at a rate of 100 lbs/acre. When applied alone for dust control, apply tackifier at a rate of 150 lbs/acre.

D. Prohibit foot/vehicle traffic from hydraulically mulched areas.

3.5 EROSION CONTROL BLANKET: Slopes 3:1 and Steeper, Irrigated and Non-Irrigated Projects

A. Place blankets over native grass seeding immediately following the raking/chaining operation.

B. When using single netted products for 3:1 or flatter slopes, place blanket with netting on top and the wood/ straw fibers in contact with soil over entire seeded area.

C. For slope installations, the following guidelines shall be used:

1. Begin at top of slope and anchor its blanket in a 6 inch deep by 6-inch wide trench. Backfill trench and tamp earth firmly.

2. Unroll blanket downslope in direction of water flow.

3. Overlap edges of adjacent parallel rolls 2 to 3 inches and staple every 3 feet.

4. When blankets are spliced, place blankets end over end (shingle style) with 6-inch overlap. Staple through overlapped area, approximately 12 inches apart.

5. Lay blankets loosely and maintain direct contact with soil – do not stretch.

6. Staple blankets sufficiently to anchor blanket and maintain contact with soil. Place staples down the center and staggered with the staples placed along the edges. Steep slopes (1:1 – 2:1) require 2 staples per square yard. Moderate slopes (2:1 – 3:1) require 1 to 2 staples per square yard. Gentle slopes require 1 staple per square yard. Use a common row of staples on adjoining blankets.

D. Use wood stakes on tuff slopes, in place of wire staples. Use same installation rate as for staples. Drive stakes in perpendicular to slope and leave 2 inches exposed above soil grade.

3.6 BONDED FIBER MATRIX (BFM): Slopes 2:1 and Steeper, Irrigated and Non-Irrigated Projects

A. Hydraulically apply BFM over seeded area (or apply seed with a tracer amount, 200-300 lbs/ acre) immediately following raking/chaining operations and in accordance with manufacturer's specified procedures. Hydraulically apply BFM as a viscous mixture. Upon drying, it shall form a continuous, porous and erosion resistant mat. Upon drying, matrix shall not inhibit germination and growth of plants in and beneath the layer. Matrix shall retain its form despite re-wetting.

B. Apply matrix uniformly across area and apply in multiple directions to ensure a 100 percent soil surface coverage.

C. Apply at a rate of approximately 3,500-lbs/ acre in a manner that achieves uniform coverage of all exposed soils.

D. Prohibit vehicle traffic on hydraulic BFM applications.

3.7 WATERING

A. Where temporary watering is required for seeded areas, provide temporary water system which may be a sprinkler system, or a water truck with a spray boom or any other method satisfactory to distribute a uniform coverage of clean water (free or oil, acid, salt or other substances harmful to plants) to previously seeded and mulched areas.

B. If a temporary sprinkler system is used, keep all pipe connections tight to avoid leakage and loss of water, and to prevent washing or erosion of growing areas. Maintain sprinklers in proper working order during watering.

C. Do not drive trucks with spray systems on seeded areas and ensure water force does not cause movement of mulch or seed on the ground.

D. Water revegetated areas only if areas were planted between April 15 and July 31.

E. Apply water at a maximum of 1/2 inch/hour for 2 hours. Additional applications of water may be made as designated by LANL Construction Inspector. Water source will be approved by LANL, prior to use.

3.8 MAINTENANCE

A. Begin maintenance immediately after planting.

B. Maintain seeded areas for not less than 60 days after final acceptance of work and longer as required to achieve final stabilization as described in Section 3.10 ACCEPTANCE.

C. Reseed void areas greater than 6 square feet or repetitive voids greater than 2 square feet amounting to more than 10 percent of any area that appears the growing season following installation.

D. Keep revegetated areas free of noxious weeds until acceptance by LANL. Contact LANL Construction Inspector prior to application of any control measure.

## 3.9 CLEANUP AND PROTECTION

A. After completion of work, clear site of excess soil, waste material, debris and objects that may hinder maintenance and detract from neat appearance of site.

B. Protect work and materials from damage due to seeding operations, operations by other contractors and trades, and trespassers. Maintain protection during installation and maintenance periods. Treat, repair or replace damaged work as directed.

## 3.10 ACCEPTANCE

A. Seeded areas will be reviewed for acceptance by LANL when final stabilization has been achieved. Final stabilization is defined as "All soil disturbing activities at the site have been completed and a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed."

B. In the event that all other work required by the Contract is completed before final stabilization is achieved or because seasonal limitations prevent seeding, partial acceptance of the work shall be made with final acceptance delayed until satisfactory vegetative growth has been established.

END OF SECTION

AUGUST 15, 2002

**Price, Wayne**

**To:** bbeers@lanl.gov
**Cc:** Foust, Denny; Johnson, Roy
**Subject:** Closure Plan for Fenton Hill Geothermal 1-MG Service Pond and EE-2A Production Well

Dear Mr. Beers:

The OCD is in receipt of the above subject plan dated August 14, 2002 and hereby approves of the plan with the following conditions:

1. All waste shall be disposed of at an OCD approved site.

2. A final report shall be submitted for OCD approval by June 30, 2003.

Please be advised that NMOCD approval of this plan does not relieve Los Alamos National Laboratory of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Los Alamos National Laboratory of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Sincerely:

Wayne Price

Wayne Price
New Mexico Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, NM 87505
505-476-3487
fax: 505-476-3462
E-mail: WPRICE@state.nm.us

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Los Alamos
NATIONAL LABORATORY

*Risk Reduction & Environmental Stewardship Division*
*Water Quality & Hydrology Group (RRES-WQH)*
PO Box 1663, MS K497
Los Alamos, New Mexico 87545
(505) 667-7969 / Fax: (505) 665-9344

Date: February 7, 2003
Refer to: RRES-WQH: 03-031

Mr. Wayne Price
Petroleum Engineering Specialist
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**SUBJECT: PROGRESS REPORT AND PROPOSED BACKFILL PLAN, 1-MG SERVICE POND, FENTON HILL GEOTHERMAL FACILITY**

Dear Mr. Price:

As you are aware, since October 2002, Los Alamos National Laboratory has been in the process of closing the Fenton Hill Hot Dry Rock Geothermal Facility's 1-million gallon (MG) service pond. After making significant progress, the Laboratory is entering the final stages of closure. I would like to provide you with a progress report on the work completed to-date. In addition, this letter presents the Laboratory's proposed plan for backfilling the pond for your review and approval. Progress report information is contained within Section I while the proposed backfill plan is presented in Section II.

**Section I-Progress Report**

In accordance with the requirements of the Laboratory's Closure Plan for the Fenton Hill 1-MG Service Pond (LA-UR-02-5009, August 2002), closure activities to-date have generated the following documents:

1. Analytical results from sampling the 1-MG pond sludge;
2. Disposal records for the 1-MG pond geothermal fluids and sludge;
3. Disposal records for the liners, geofiber matting, and gravel;
4. Photographs of the site during closure activities;
5. NORM survey results of the leak collection piping;
6. Forest Service letter requesting sampling of the soil beneath the liners;
7. Sampling and Analysis Plan for characterizing the soil beneath the liners;
8. Total metals and SVOA analytical results from sampling the soil beneath the liners;
9. TCLP analytical results from sampling the soil beneath the liners;
10. Geodetic survey of the 1-MG pond and associated structures;
11. LANL response to the Forest Service's request for additional information; and
12. Forest Service letter approving the Laboratory's proposed backfill plan.

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By

A brief discussion of each of the above documents is presented below.

1. Sludge Sampling Analytical Results

In accordance with Section 2.1.2 of the Closure Plan, a representative sample of sludge from the 1-MG service pond was collected on October 21, 2002, and submitted to General Engineering Laboratories, Charleston, SC, for the following analyses: volatile organics analysis (VOA), semi-volatile organics analysis (SVOA), total metals, and TCLP metals. Attachment 1 contains copies of the analytical reports.

2. Geothermal Fluids and Sludge Disposal Records

Key Energy Services, Inc., Farmington, NM, (OCD Permit No. NM-01-0011) transported 201,600 gallons or 4,800 barrels (60 truckloads @ 80 bbls/load) of geothermal fluids to a commercial evaporation pit at TNT Environmental, Inc., Lindrith, NM (OCD Permit No. NM-01-0008). Attachment 2 contains copies of the disposal tickets for the geothermal fluids.

In addition, Key Energy transported 43,680 gallons or 1,040 barrels of liquefied sludge to TNT's commercial land farm in Lindrith, NM. Attachment 2 contains copies of the disposal tickets for the sludge.

3. Liner Disposal Records

L&R Oilfield Services, a subcontractor to Key Energy Services, removed the primary and secondary liners and associated geofiber matting from the 1-MG service pond (see pictures of liner removal in Attachment 4). The liner was steam-cleaned prior to removal. The primary and secondary liners were recycled by L&R while the geofiber matting was disposed of at Waste Management's Rio Rancho landfill. Attachment 3 contains a copy of the disposal ticket for the geofiber matting.

Approximately 25 cubic yards of gravel from the 1-MG service pond's leak collection system was removed by L&R and disposed of at Envirotech, Inc., Farmington, NM. Attachment 3 contains a copy of the disposal ticket for the leak collection system gravel.

4. Photographs of Closure Activities

Attachment 4 contains photographs of closure activities conducted at the 1-MG service pond.

5. NORM Survey Results

In accordance with Section 7.3 of the Closure Plan, the leak collection system piping (4" perforated PVC pipe) was surveyed by Laboratory radiological technicians for Naturally Occurring Radioactive Material (NORM). Attachment 5 contains the survey results from the 100 readings taken from the 200 feet of pipe. The maximum reading of 1.54 micro R per hour is well below the 50 micro R per hour limit established by regulation (20.3.1.14 NMAC).

6. Forest Service Request for Confirmation Sampling

In a September 27, 2002, letter (Attachment 6) to Los Alamos National Laboratory, Mr. Leonard Atencio, Forest Supervisor, Santa Fe National Forest, requested that a minimum of two confirmation samples be collected from the soils beneath the 1-MG service pond's secondary liner. In addition, Mr. Atencio requested that if there is any visual evidence of leakage then the suspected material should also be sampled.

In response to the elevated concentrations of total arsenic in the crusher fines, the Laboratory initiated the following:

1. Three surface samples (RC57-03-49714, RC57-03-49718, and RC57-03-49720) were submitted to General Engineering Laboratories, Charleston, SC, for TCLP metals analysis. Attachment 9 contains a copy of General Engineering Laboratories' analytical report;

2. Two new surface samples of the crusher fines (FH#1 and FH#2) were collected from the 1-MG service pond at locations above the pond's overflow and submitted to the EES analytical laboratory for total arsenic analysis; and

3. A tuff sample from outside of the 1-MG service pond was collected and submitted to the EES analytical laboratory for total arsenic analysis.

Analytical results from the above sampling are presented in Table 1.0 below.

**Table 1.0. Underliner Soil Sampling Results for Fenton Hill 1-MG Service Pond**

| Sample ID# | Sample Date | Location (Depth) | Sample Type | Total Arsenic[1] (ppm) | TCLP Arsenic[2,3] (mg/L) |
|---|---|---|---|---|---|
| **Samples Collected From The Bottom of the Pond** | | | | | |
| RC57-03-49714 | 11/18/02 | surface 0"-6" | crusher fines | 272 | 0.120 |
| RC57-03-49715 | 11/18/02 | depth 18"-24" | tuff | 23.7 | |
| RC57-03-49716 | 11/18/02 | surface 0"-6" | crusher fines | 197 | |
| RC57-03-49717 | 11/18/02 | depth 10"-16" | tuff | 52.5 | |
| RC57-03-49718 | 11/18/02 | surface 0"-6" | crusher fines | 232 | 0.104 |
| RC57-03-49719 | 11/18/02 | depth 18"-24" | tuff | 8.84 | |
| RC57-03-49720 | 11/18/02 | surface 0"-6" | crusher fines | 254 | 0.130 |
| RC57-03-49721 | 11/18/02 | depth 18"-24" | tuff | 26.6 | |
| RC57-03-49722 | 11/18/02 | surface 0"-6" | crusher fines | 204 | |
| RC57-03-49723 | 11/18/02 | depth 18"-24" | tuff | 8.85 | |
| **Samples Collected From Above the Pond's Overflow Pipe** | | | | | |
| FH#1 | 11/24/02 | surface 0"-6" | crusher fines | 232 | |
| FH#2 | 11/24/02 | surface 0"-6" | crusher fines | 332 | |
| **Samples Collected Outside of the Pond** | | | | | |
| FH#3 | 11/24/02 | surface 0"-6" | tuff | 2.57 | |

[1]Analysis by the Laboratory's EES analytical laboratory.
[2]Analysis by General Engineering Laboratories, Charleston, SC.
[3]Per 40CRF 261.24, the TCLP concentration limit for arsenic is 5.0 mg/L.

The elevated concentrations of total arsenic (232 ppm and 332 ppm) in the two surface samples collected above the 1-MG service pond's overflow suggest that the arsenic in the crusher fines is naturally occurring and not due to contamination from leaking geothermal fluids. Further, the TCLP concentration of arsenic in the crusher fines (0.120 mg/L, 0.104 mg/L, 0.130 mg/L) is well below the regulatory level (5.0 mg/L) to be a characteristic hazardous waste (40CFR 261.24).

Visual inspection of the soils beneath the liners by Laboratory personnel did not show any evidence of leakage. The crusher fines lining the pond did not display any staining, discoloration, or areas of saturation (see photographs in Attachment 4). The low moisture content of the core samples collected from the bottom of the pond support the visual record; the moisture content of the ten samples collected ranged from 5.6% to 12.48% with an average moisture content of 6.9% (see Attachment 8).

7. Sampling and Analysis Plan for Underliner Soils

In response to the Forest Service's request, a Sampling and Analysis Plan (SAP) was prepared by the Laboratory to characterize the soils beneath the 1-MG service pond liners prior to backfilling. Attachment 7 contains a copy of the SAP. This SAP should be considered an addendum to the August 2002 Closure Plan.

The objectives of the SAP were to collect a sufficient number of samples to (1) perform a human health screening assessment, and (2) define the nature and extent of any potential contamination encountered. Based upon prior sampling activities conducted at the site, the minimum number of samples required to meet these objectives was determined to be five sets of inorganic and one set of organic samples. Each set consist of two samples collected from two depths.

8. and 9. Underliner Soil Sampling Analytical Results

In accordance with the Sampling and Analysis Plan referenced above, on November 18, 2002, the Laboratory collected ten inorganic samples from five locations in the bottom of the 1-MG service pond using a Simco coring rig. Attachment 4 contains photographs of the sampling activities. The core barrel was drilled to a depth of approximately two feet at each location; a surface sample (0"-6") and a depth sample (18"-24") were prepared at each of the locations. Samples were submitted to the Laboratory's Earth and Environmental Sciences (EES) analytical laboratory for total metals analysis. The surface samples (0"-6") consisted of crusher fines that were imported from a crusher pit near Jemez Pueblo, NM, during the construction of the pond to "bed" the liner. The depth samples (18"-24") consisted of native tuff. In one location (RC57-03-49717), due to the hardness of the tuff the core was unable to penetrate to the target depth of 24". As a result, the depth sample at this location was collected from the 10"-16" interval.

Analytical results from the November 18th sampling are presented in Attachment 8. All results were below the Environmental Protection Agency's Preliminary Remediation Goals (PRGs) for soil with the exception of arsenic (As). Table 1.0 below presents a summary of the arsenic results.

Total arsenic concentrations in the crusher fines (surface samples) ranged from 204 ppm to 272 ppm with an average concentration of 232 ppm. In contrast, total arsenic concentrations in the tuff (depth samples) ranged from 8.8 ppm to 52.5 ppm with an average concentration of 24 ppm. On average, the data shows a ten-fold reduction (232 ppm to 24 ppm) in the concentration of total arsenic from the surface (0"-6") to depth (10"-24").

In addition to the ten inorganic samples collected, two organic samples were submitted to General Engineering Laboratories, Charleston, SC, for semi-volatile organics analysis (SVOA). Sample results are presented in Attachment 8. No target compounds were detected in either of the samples at concentrations greater than the analytical laboratory's reporting limit.

In response to the elevated concentrations of total arsenic in the crusher fines, the Laboratory initiated the following:

1. Three surface samples (RC57-03-49714, RC57-03-49718, and RC57-03-49720) were submitted to General Engineering Laboratories, Charleston, SC, for TCLP metals analysis. Attachment 9 contains a copy of General Engineering Laboratories' analytical report;

2. Two new surface samples of the crusher fines (FH#1 and FH#2) were collected from the 1-MG service pond at locations above the pond's overflow and submitted to the EES analytical laboratory for total arsenic analysis; and

3. A tuff sample from outside of the 1-MG service pond was collected and submitted to the EES analytical laboratory for total arsenic analysis.

Analytical results from the above sampling are presented in Table 1.0 below.

**Table 1.0. Underliner Soil Sampling Results for Fenton Hill 1-MG Service Pond**

| Sample ID#[1] | Sample Date | Location (Depth) | Sample Type | Total Arsenic (ppm) | TCLP Arsenic[2,3] (mg/L) |
|---|---|---|---|---|---|
| **Samples Collected From The Bottom of the Pond** | | | | | |
| RC57-03-49714 | 11/18/02 | surface 0"-6" | crusher fines | 272 | 0.120 |
| RC57-03-49715 | 11/18/02 | depth 18"-24" | tuff | 23.7 | |
| RC57-03-49716 | 11/18/02 | surface 0"-6" | crusher fines | 197 | |
| RC57-03-49717 | 11/18/02 | depth 10"-16" | tuff | 52.5 | |
| RC57-03-49718 | 11/18/02 | surface 0"-6" | crusher fines | 232 | 0.104 |
| RC57-03-49719 | 11/18/02 | depth 18"-24" | tuff | 8.84 | |
| RC57-03-49720 | 11/18/02 | surface 0"-6" | crusher fines | 254 | 0.130 |
| RC57-03-49721 | 11/18/02 | depth 18"-24" | tuff | 26.6 | |
| RC57-03-49722 | 11/18/02 | surface 0"-6" | crusher fines | 204 | |
| RC57-03-49723 | 11/18/02 | depth 18"-24" | tuff | 8.85 | |
| **Samples Collected From Above the Pond's Overflow Pipe** | | | | | |
| FH#1 | 11/24/02 | surface 0"-6" | crusher fines | 232 | |
| FH#2 | 11/24/02 | surface 0"-6" | crusher fines | 332 | |
| **Samples Collected Outside of the Pond** | | | | | |
| FH#3 | 11/24/02 | surface 0"-6" | tuff | 2.57 | |

[1]Analysis by the Laboratory's EES analytical laboratory.
[2]Analysis by General Engineering Laboratories, Charleston, SC.
[3]Per 40CRF 261.24, the TCLP concentration limit for arsenic is 5.0 mg/L.

The elevated concentrations of total arsenic (232 ppm and 332 ppm) in the two surface samples collected above the 1-MG service pond's overflow suggest that the arsenic in the crusher fines is naturally occurring and not due to contamination from leaking geothermal fluids. Further, the TCLP concentration of arsenic in the crusher fines (0.120 mg/L, 0.104 mg/L, 0.130 mg/L) is well below the regulatory level (5.0 mg/L) to be a characteristic hazardous waste (40CFR 261.24).

In summary, the data strongly suggest that the crusher fines imported to construct the 1-MG service pond contain elevated concentrations of naturally occurring arsenic. Further, the data suggest that the arsenic in the crusher fines is tightly bound and not highly mobile under the extraction conditions of the TCLP method (EPA Method 1311). And finally, the data confirms that the arsenic in the crusher fines is below the regulatory level to be a characteristic hazardous waste.

10. Geodetic Survey of the 1-MG Service Pond
In accordance with Section 6.2 of the Closure Plan, the Laboratory conducted a geodetic survey of the 1-MG service pond and associated structures. Attachment 10 contains a copy of the survey results.

11. LANL Response to the Forest Service's Request for Additional Information
On January 16, 2003, the Laboratory submitted a Progress Report and Proposed Backfill Plan (essentially a mirror of this report) to Mr. John Peterson, Jemez District Ranger. On January 27, 2003, the Forest Service verbally requested additional information on the Laboratory's Progress Report and Proposed Backfill Plan. Attachment 11 contains a copy of the Laboratory's February 3, 2003, response to the Forest Service's request.

12. Forest Service Letter Approving the Laboratory's Proposed Backfill Plan
Attachment 12 contains a fax copy of a February 3, 2003, letter from Mr. John Peterson, Jemez District Ranger, approving the Laboratory's proposed plan to bury the crusher fines in the bottom of the 1-MG service pond.

**Section II-Proposed Backfill Plan**
The information collected under the Closure Plan and presented above indicate the following:

- The data suggest that the crusher fines in the 1-MG service pond contain elevated concentrations of naturally occurring arsenic.
- The data confirms that the arsenic in the crusher fines is below the regulatory level to be a characteristic hazardous waste.
- The data suggest that the arsenic in the crusher fines does not pose a significant threat to ground water. This is supported by the low mobility of the arsenic, as demonstrated by the TCLP results, and the depth to ground water at the site. Depth to ground water beneath the 1-MG service pond is approximately 380 feet.

Based upon the above, the Laboratory proposes to consolidate the crusher fines into the bottom of the 1-MG service pond and backfill over them. Backfill material will come from the earthen berm that forms the southern boundary of the 1-MG service pond. This berm will provide approximately 1000 $yd^3$ of backfill material. Additional material will be imported, if necessary. A minimum of 6 feet of cover will be maintained over the buried crusher fines. As specified in Section 8.0 of the Closure Plan, all disturbed areas will be re-seeded according to Laboratory and Forest Service requirements.

Please contact me at (505) 667-7969 should you have any questions regarding this progress report and proposed plan for completing closure of the 1-MG service pond.

Sincerely,

Bob Beers
Water Quality & Hydrology Group

BB/yg

Attachments: a/s

Cy: M. Kieling, NM OCD, Santa Fe, New Mexico, w/att.
J. Peterson, Forest Service, Jemez Ranger District, Jemez Springs, New Mexico, w/o att.
A. Ferrell, Forest Service, Jemez Ranger District, Jemez Springs, New Mexico, w/o att.
C. Linn, Forest Service, Santa Fe National Forest, Santa Fe, New Mexico, w/o att.
J. Vozella, DOE/OLASO, w/o att., MS A316
G. Turner, DOE/OLASO, w/att., MS A316
J. Holt, ADO, w/o att., MS A104
C. Webster, ADSR, w/o att., MS A127
P. Weber, EES-DO, w/o att., MS D446
J. Hansen, EES-DO, w/ att., MS D446
J. Thomson, EES-11, w/ att., MS D443
S. Archuleta, P-FM, w/o att., MS D410
B. Ramsey, RRES-DO w/o att., MS J591
K. Hargis, RRES-DO, w/o att., MS J591
D. Stavert, RRES-EP, w/o att., MS J591
S. Rae, RRES-WQH, w/att., MS K497
D. Rogers, RRES-WQH, w/o att., MS K497
D. McInroy, RRES-R, w/o att., MS M992
T. Rust, RRES-R, w/att., MS M992
T. Grieggs, RRES-SWRC, w/o att., MS K490
B. Kopp, RRES-SWRC, w/o att., MS M992
H. Wheeler-Benson, RRES-SWRC, w/att., MS K490
E. Louderbough, LC-ESH, w/att., MS A187
RRES-WQH File, w/att., MS K497
IM-5, w/att., MS A150

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# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**
Governor
**Joanna Prukop**
Cabinet Secretary

**Lori Wrotenbery**
Director
**Oil Conservation Division**

February 14, 2003

**CERTIFIED MAIL**
**RETURN RECEIPT 3929 9765**

Mr. Bob Beers
Los Alamos National Laboratory
P.O. Box 1663, MS K497
Los Alamos, New Mexico 87545

Re: Discharge Plan GW-031 1-MG Service Pond Closure Plan
Fenton Hill Geothermal Facility
Sandoval County, New Mexico

Dear Mr. Beers:

The New Mexico Oil Conservation Division (OCD) is in receipt of your "Progress Report and Proposed Backfill Plan, 1-MG Service Pond at the Fenton Hill Geothermal Facility" dated February 07, 2003. The NMOCD hereby approves of your closure plan and request that a final report be submitted for our files.

Please be advised that NMOCD approval of this closure plan does not relieve Los Alamos National Laboratory of responsibility should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Los Alamos National Laboratory of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Sincerely;

Wayne Price

Wayne Price-Pet. Engr. Spec.

cc: OCD Aztec Office

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Los Alamos
NATIONAL LABORATORY

*Risk Reduction & Environmental Stewardship Division*
*Water Quality & Hydrology Group (RRES-WQH)*
PO Box 1663, MS K497
Los Alamos, New Mexico 87545
(505) 667-7969 / Fax: (505) 665-9344

Date: August 13, 2003
Refer to: RRES-WQH: 03-196

Mr. Wayne Price
Petroleum Engineering Specialist
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

**SUBJECT: FINAL CLOSURE REPORT, 1-MG SERVICE POND AND EE-2A WELLHEAD, FENTON HILL GEOTHERMAL FACILITY**

Dear Mr. Price:

As you are aware, since October 2002, Los Alamos National Laboratory has been in the process of closing the Fenton Hill Hot Dry Rock Geothermal Facility's 1-million gallon (MG) service pond and the EE-2A wellhead. On February 7, 2003, the Laboratory submitted a progress report and proposed backfill plan (RRES-WQH: 03-031) that documented completion of the following closure activities:

1. Disposal of geothermal fluids and sludge from the 1-MG service pond;
2. Disposal of the 1-MG service pond's liner, geofiber matting, and leak collection piping;
3. Characterization of the soil beneath the pond's liners;
4. Development of a proposed backfill plan; and
5. Approval by the US Forest Service of the proposed backfill plan.

On February 14, 2003, your agency approved the Laboratory's proposed backfill plan for the 1-MG service pond. Closure activities were completed on July 29, 2003. This letter is Los Alamos National Laboratory's final report for the closure of the 1-MG service pond and the EE-2A wellhead. In addition, this letter presents the Laboratory's request for termination of Discharge Plan GW-031. Information on final closure is contained within Section I while the Laboratory's request for termination of Discharge Plan GW-031 is presented in Section II.

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## Section I-Final Closure Report

Following your agency's approval of the Laboratory's backfill plan for the 1-MG service pond, four outstanding activities remained before closure of the Fenton Hill Hot Dry Rock Geothermal Site could be completed. These four activities were:

1. Backfill and compaction of the 1-MG service pond;
2. Removal of the EE-2A wellhead;
3. Final grading and contouring of the site; and
4. Re-seeding and mulching the disturbed areas of the site.

A brief discussion of each of these activities is presented below.

1. Backfill and compaction of the 1-MG service pond. In accordance with the Laboratory's backfill plan, the crusher fines were consolidated into the bottom of the 1-MG service pond. Following this, the earthen berm that formed the southern boundary of the pond was backfilled over them. However, since the southern berm did not provide enough fill material to complete backfill, additional clean-fill was obtained from the following sources: (1) the NM Highway Department, and (2) the Fenton Hill site. All fill material used to backfill the 1-MG service pond was approved by the US Forest Service.

2. Removal of the EE-2A wellhead. Removal of the EE-2A wellhead was completed on April 4, 2003. The wellhead was cut-off at a depth of approximately 8 feet below finished grade. The Laboratory's subcontractor, L&R Oilfield Services, Farmington, NM, recycled the wellhead. A steel plate was welded to the top of the 7" casing that lists the following information: operator name, well number, section, township, and range. In addition, survey coordinates were collected for the EE-2A well at the same time the geodetic survey was conducted at the 1-MG service pond.

3. Final grading and contouring of the site. The final grade and site contour was approved by the US Forest Service following a March 12, 2003, tour of the site.

4. Re-seeding and mulching the disturbed areas of the site. On July 29, 2003, all disturbed areas surrounding the 1-MG service pond and EE-2A wellhead were re-seeded and mulched in accordance with the Closure Plan's seeding specifications (Appendix G). Following soil preparation with a disk harrow, a native seed mix approved by the US Forest Service was applied with a seed drill. A tackifier/fertilizer was hydraulically applied over the seed and then covered with a straw mulch. Attachment 1.0 contains photos of the re-seeded site.

**Section II-Request for Termination of Discharge Plan GW-031**

Closure of the 1-MG service pond and the removal of the EE-2A wellhead officially mark the end of nearly 30 years of hot dry rock geothermal research at the Fenton Hill site. The entire infrastructure supporting geothermal research at Fenton Hill has been removed or decommissioned. As a result, the Laboratory requests that your agency terminate Discharge Permit GW-031, issued by the NM OCD on June 5, 2000 (expiration date: June 5, 2005). The Fenton Hill site is available for a final inspection upon your request.

The Laboratory will continue to use the Fenton Hill site for astrophysical research (Milagro Project) and as an astronomical observatory for research and education. As you are aware, the Milagro Project uses a 5-MG pond filled with purified drinking water and light-sensitive detectors to record signals from cosmic events. In the past, the Milagro Project discharged, with your agency's approval, wastewater from its water treatment units to the 1-MG service pond. With the closure of the 1-MG service pond the Milagro Project is evaluating its wastewater disposal options. Off-site disposal is one option being considered since the quantities of wastewater generated by the Milagro Project are small and intermittent.

Please contact me at (505) 667-7969 should you have any questions regarding this final closure report and request for termination of Discharge Plan GW-031.

Sincerely,

Bob Beers

Bob Beers
Water Quality & Hydrology Group

BB/tml

Attachment: a/s

Cy: J. Peterson, Forest Service, Jemez Ranger District, Jemez Springs, NM, w/att.
A. Ferrell, Forest Service, Jemez Ranger District, Jemez Springs, NM, w/att.
C. Linn, Forest Service, Santa Fe National Forest, Santa Fe, NM, w/att.
J. Vozella, DOE/OLASO, w/att., MS A316
G. Turner, DOE/OLASO, w/att., MS A316
J. Holt, ADO, w/att., MS A104
C. Webster, ADSR, w/att., MS A127
T. Wallace, EES-DO, w/att., MS D446
D. Pearson, EES-DO, w/att., MS D446
J. Hansen, EES-DO, w/att., MS D446
J. Thomson, EES-11, w/att., MS D443
G. Sinnis, P-23, w/att., MS H803

Cy (continued):
B. Ramsey, RRES-DO w/att., MS J591
K. Hargis, RRES-DO, w/att., MS J591
T. George, RRES-DO, w/att., MS J591
D. Stavert, RRES-EP, w/att., MS J591
D. McInroy, RRES-R, w/att., MS M992
T. Grieggs, RRES-SWRC, w/att., MS K490
S. Rae, RRES-WQH, w/att., MS K497
D. Rogers, RRES-WQH, w/att., MS K497
E. Louderbough, LC-ESH, w/att., MS A187
P. Wardwell, LC-ESH, w/att., MS A187
RRES-WQH File, w/att., MS K497
IM-5, w/att., MS A150

Attachment 1.0

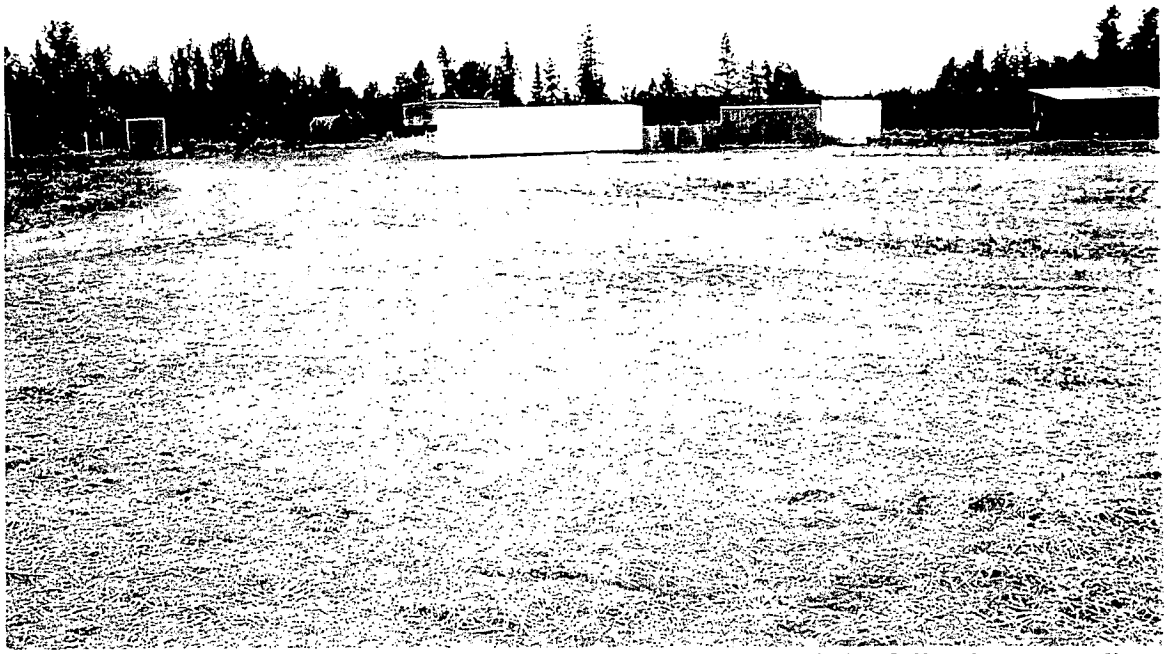

Figure 1.0. July 2003 photograph of the Fenton Hill geothermal site following re-seeding and mulching (looking east).

Figure 2.0. July 2003 photograph of the Fenton Hill geothermal site following re-seeding and mulching (looking north).

1

101265

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**
Governor
**Joanna Prukop**
Cabinet Secretary

**Lori Wrotenbery**
Director
**Oil Conservation Division**

August 29, 2003

Mr. Bob Beers
Los Alamos National Laboratory
RRES-WQH 03-196
P.O. Box 1663, MS K497
Los Alamos, New Mexico 87545

Subject: Termination Of Discharge Plan Gw-031
Fenton Hill Geothermal Facility

Dear Mr. Beers:

The New Mexico Oil Conservation Division (OCD) is in receipt of your Final Closure Report dated August 13, 2003, "1-MG Service Pond and EE-2A Wellhead, Fenton Hill Geothermal Facility" and request to terminate discharge plan GW-031.

OCD hereby approves of your request and hereby terminates discharge plan GW-031. If you have any questions, please contact Wayne Price of my staff at (505-476-3487) or E-mail WPRICE@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan tenure.

Sincerely,

Will Olson

for Roger C. Anderson
Environmental Bureau Chief

RCA/lwp

xc: OCD Aztec Office

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# Los Alamos
NATIONAL LABORATORY

*Los Alamos National Laboratory*
*Los Alamos, New Mexico 87545*

Date: January 16, 1997
In Reply Refer To: ESH-18/WQ&H:97-0636
Mail Stop: K497
Telephone: (505) 667-7969

Mark Ashley
Oil Conservation Division
State of New Mexico Energy, Minerals, and
Natural Resources Department
2040 South Pacheco Street
Santa Fe, New Mexico 87505

**SUBJECT: MILAGRO PROJECT LAND APPLICATION NOI: POST-APPLICATION SOIL MONITORING FOR 1996**

Dear Mr. Ashley:

In accordance with the conditions of your Division's approval of Los Alamos National Laboratory's (LANL) Notice of Intent to Discharge (NOI) for the Milagro Project at Fenton Hill, I have enclosed the annual sampling results for 1996. Also enclosed, for your information, is a map of the application site and sampling locations.

The enclosed Table 1 summarizes the analytical results for total arsenic (As) for all three rounds of sampling conducted for the Milagro Project NOI: pre-application; post-application, 1995; and post-application, 1996. The 1996 sampling results show that the elevated arsenic concentrations evident within the application site in 1995 (SS-4 and SS-5: 24 ppm and 18 ppm, respectively) have naturally attenuated to concentrations equivalent to pre-application conditions.

Additionally, all of the down-gradient sampling locations, SS-1, SS-2, and SS-3, continued to show stable arsenic concentrations equal to pre-application conditions. These stable arsenic concentrations strongly indicate that the arsenic is remaining within the application site and is not migrating down-gradient into the water course.

As required by your Division, LANL will continue to collect annual soil samples from the application site and down-gradient locations during 1997. If the analytical results for 1997 show similar arsenic levels to 1996 then LANL will request a waiver from the remaining 3 years of annual sampling. The silt fences which were installed prior to land application will be maintained throughout 1997.

I appreciate the time and effort which you have provided LANL on Milagro Project activities. If you have any questions regarding the enclosed analytical results or LANL's waiver request please feel free to contact me at 667-7969.

Sincerely,

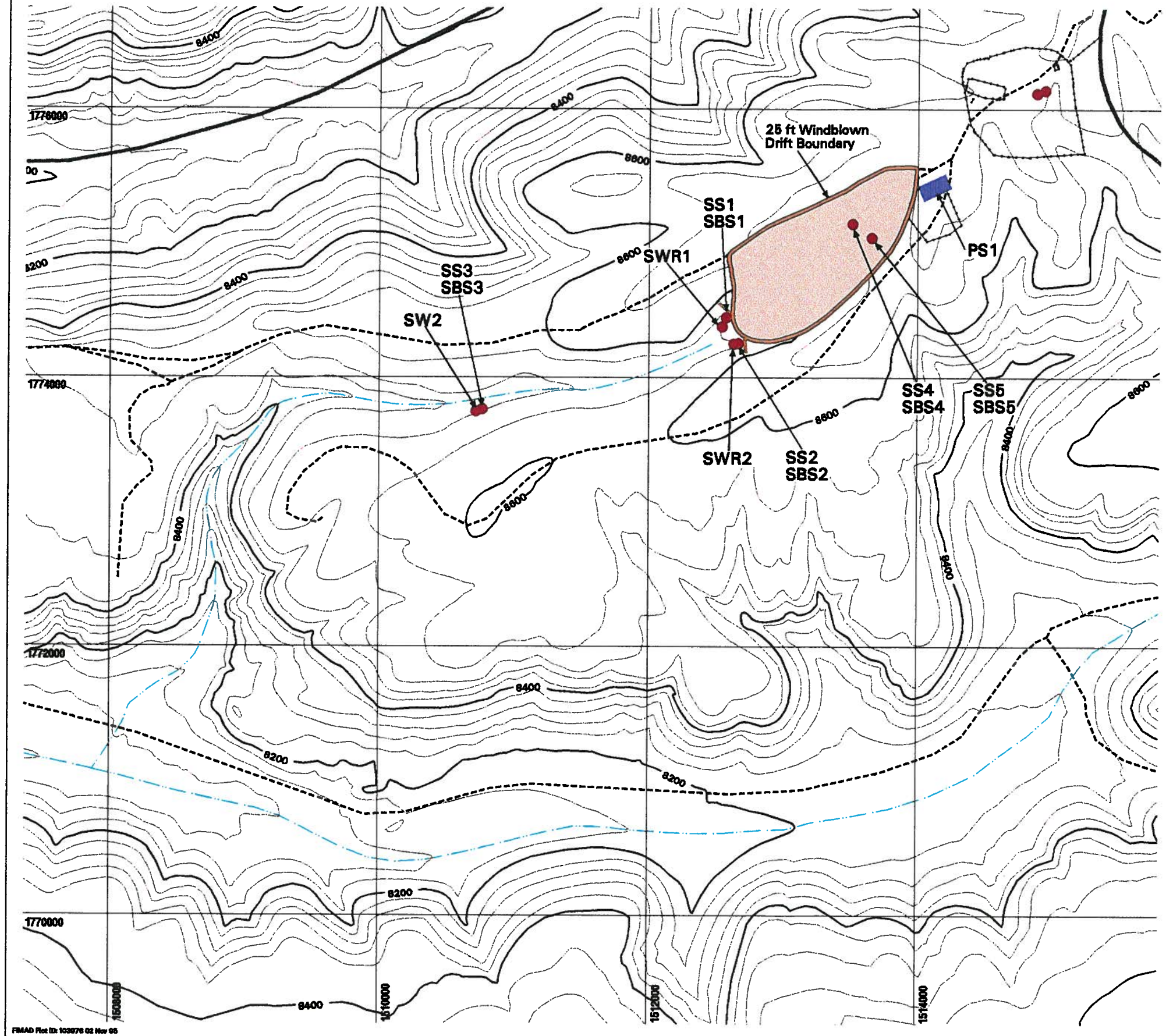
Bob Beers
Water Quality and Hydrology Group

BB/tp

Enclosures: Map and Data Table
Analytical Report

Cy: S. Boyce, Forest Service, Jemez Springs, w/enc.
S. Rae, ESH-18, w/o enc., MS K497
N. Williams, ESH-18, w/enc., MS K497
M. Saladen, ESH-18, w/o enc., MS K497
B. Koch, DOE/LAAAO, w/enc., MS A316
G. Sinnis, P-23, w/enc., MS H803
D. Krier, EES-1, w/enc., MS D462
J. Thomson, EES-4, w/o enc., MS D443
P. Shanley, ESH-19, w/enc., MS K498
T. Glatzmaier, EES-5, w/enc., MS M992
P. Longmire, CST-7, w/enc., MS J534
J. Nyhan, EES-15, w/enc., MS J495
WQ&H File, w/o enc., MS K497
CRM-4, w/o enc., MS A150

# Fenton Hill (TA-57) Milagro Project Sampling Plan




## Fenton Hill (TA-57) Milagro Project Sampling Plan

- Drainage
- Fence, Industrial
- Road, Dirt
- Road, Paved
- Silt Fence
- Application Area (22.327 acres)
- Application Area Buffer (25 ft)
- Sample Location

**MILAGRO PROJECT SAMPLING PLAN**

**ANALYTES: Metals**

| OBJECTIVE | TYPE | LOCATION |
|---|---|---|
| **Background Sampling** | | |
| pond sludge quality | sludge | PS1 |
| soil-application area | soil: surface | SS4, SS5 |
| soil-application area | soil: sub-surface | SBS4, SBS5 |
| soil-adjacent down gradient | soil: surface | SS2, SS1 |
| soil-adjacent down gradient | soil: sub-surface | SBS2, SBS1 |
| soil-distant down gradient | soil: surface | SS3 |
| soil-distant down gradient | soil: sub-surface | SBS3 |
| surface water-distant down gradient | surface water | SW2 |
| surface water-Lake Fork Canyon and Rio Cebolla (not on map) | surface water | SW3 |
| **Sampling During Application** | | |
| stormwater runoff-down gradient | stormwater runoff | SWR1, SWR2 |
| **Post-Application Sampling** | | |
| soil-application area | soil: surface | SS4, SS5 |
| soil-application area | soil: sub-surface | SBS4, SBS5 |
| soil-adjacent down gradient | soil: surface | SS2, SS1 |
| soil-adjacent down gradient | soil: sub-surface | SBS2, SBS1 |
| soil-distant down gradient | soil: surface | SS3 |
| soil-distant down gradient | soil: sub-surface | SBS3 |
| surface water-distant down gradient | surface water | SW2 |

N

State Plane Coordinate System, New Mexico Central Zone, 1983 North American Datum.

Grid provides NM State Plane coordinates in feet. Grid interval, in feet: 2000

Contour Interval: 40 ft

NOTES: Sampling locations are approximate. Sampling locations are designated on site by a surveyor. Contours are based on Stereo Photogrammetric Mapping, November 1991.

University of California
Los Alamos National Laboratory
Earth and Environmental Sciences Division
FIMAD Facility for Information Management, Analysis, and Display. FIMAD is the electronic data repository for the Environmental Restoration Project at Los Alamos National Laboratory.

Produced by: Marcia Jones

Date: November 02, 1995 FIMAD Plot ID: 103978

Pre- and Post-Land Application Monitoring
Arsenic Concentrations in Soil (ppm)

TABLE 1.

| Sample Location | Pre-Application-5/17/95 | Post-Application-10/24/95 | Post-Application-10/18/96 |
|---|---|---|---|
| SS-1: soil, surface | 3. | 3. | <3. |
| SBS-1: soil, sub-surface | 1. | 2. | <3. |
| SS-2: soil, surface | 3. | 3. | <3. |
| SBS-2: soil, sub-surface | 2. | 3. | <3. |
| SS-3: soil, surface | 2. | 3. | <3. |
| SBS-3: soil, sub-surface | 2. | 4. | <3. |
| SS-4: soil, surface | 3. | 24. | 3.9 |
| SBS-4: soil, sub-surface | 4. | 4. | <3. |
| SS-5: soil, surface | 2. | 18. | <3. |
| SBS-5: soil, sub-surface | 2. | 3. | <3. |

ASSAIGAI
ANALYTICAL
LABORATORIES, INC.
7300 Jefferson N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

LOS ALAMOS NATIONAL LABS
MAIL STOP K498/ESH-19
LOS ALAMOS, NM 87545

Attn: GUS SINNIS
Invoice Number:

Order #: 96-10-174
Date: 11/04/96 16:04
Work ID: MILAGRO PROJECT BASELINE
Date Received: 10/18/96
Date Completed: 11/04/96
Client Code: LOS14

SAMPLE IDENTIFICATION

| Sample Number | Sample Description |
|---|---|
| 01 | TA57-SS5 |
| 02 | TA57-SBS5 |
| 03 | TA57-SS4 |
| 04 | TA57-SS4-DUP |
| 05 | TA57-SBS4 |
| 06 | TA57-SS1 |
| 07 | TA57-SBS1 |
| 08 | TA57-SS2 |
| 09 | TA57-SBS2 |
| 10 | TA57-SS3 |
| 11 | TA57-SBS3 |

ND = None Detected D_F = Dilution Factor NT = Not Tested
B = Analyte was present in the blank
E = Estimated Value or Result exceeds calibration range
MULTIPLY THE LIMIT(= AAL'S DETECTION LIMIT) BY DILUTION FACTOR

Certified By
FRED L. SHORE, Ph.D.

Member: American Council of Independent Laboratories, Inc.

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PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results By Test

| TEST CODE default units | Sample 01 (entered units) | Sample 02 (entered units) | Sample 03 (entered units) | Sample 04 (entered units) | Sample 05 (entered units) |
|---|---|---|---|---|---|
| S6010X N/A | 10/28/96 | 10/28/96 | 10/28/96 | 10/28/96 | 10/28/96 |
| SCVHGX N/A | 10/23/96 | 10/23/96 | 10/23/96 | 10/23/96 | 10/23/96 |

| TEST CODE default units | Sample 06 (entered units) | Sample 07 (entered units) | Sample 08 (entered units) | Sample 09 (entered units) | Sample 10 (entered units) |
|---|---|---|---|---|---|
| S6010X N/A | 10/28/96 | 10/28/96 | 10/28/96 | 10/28/96 | 10/28/96 |
| SCVHGX N/A | 10/23/96 | 10/23/96 | 10/23/96 | 10/23/96 | 10/23/96 |

| TEST CODE default units | Sample 11 (entered units) |
|---|---|
| S6010X N/A | 10/28/96 |
| SCVHGX N/A | 10/23/96 |

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS5

FRACTION 01A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 09:05:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 84.8 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | ND | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 3.3 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 3.7 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 10.6 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS5 FRACTION 01A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 09:05:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS5 FRACTION 01A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 09:05:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS5 FRACTION 01A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 09:05:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-004

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SBS5 FRACTION 02A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 09:11:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 24.7 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | ND | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 4.6 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 3.3 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 7.4 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SBS5 FRACTION 02A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 09:11:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SBS5 FRACTION 02A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 09:11:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SBS5 FRACTION 02A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 09:11:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-009

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS4

FRACTION 03A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 09:20:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 121 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | 0.65 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 5.2 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 5.8 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 11.0 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SS4 FRACTION 03A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 09:20:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SS4 FRACTION 03A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 09:20:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SS4 FRACTION 03A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 09:20:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-010

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS4-DUP FRACTION 04A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 09:25:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | 3.9 | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 127 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | 0.63 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 5.6 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 5.9 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 12.8 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS4-DUP FRACTION 04A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 09:25:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SS4-DUP FRACTION 04A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 09:25:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS4-DUP FRACTION 04A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 09:25:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-011

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SBS4 FRACTION 05A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 09:30:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 47.0 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | 0.54 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 4.2 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 3.3 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 9.6 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SBS4 FRACTION 05A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 09:30:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SBS4 FRACTION 05A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 09:30:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SBS4 FRACTION 05A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 09:30:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-012

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS1 FRACTION 06A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 09:50:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | NT | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 191 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | ND | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 3.9 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 4.5 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 18.3 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS1 FRACTION 06A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 09:50:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | 0.6 | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS1 FRACTION 06A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 09:50:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS1 FRACTION 06A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 09:50:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-013

COMMENTS

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SBS1 FRACTION 07A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 10:15:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 43.2 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | 0.65 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 4.2 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 3.5 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 9.4 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SBS1 FRACTION 07A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 10:15:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID M9650

COMMENTS

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SBS1 FRACTION 07A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 10:15:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SBS1 FRACTION 07A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 10:15:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-014

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS2 FRACTION 08A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 10:32:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 157 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | 0.54 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 4.0 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 4.7 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 11.2 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS2 FRACTION 08A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 10:32:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS2 FRACTION 08A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 10:32:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS2

FRACTION 08A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 10:32:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-015

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SBS2 FRACTION 09A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 10:51:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 39.1 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | 0.82 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 2.9 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 2.9 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 9.8 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SBS2 FRACTION 09A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 10:51:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SBS2 FRACTION 09A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 10:51:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SBS2 FRACTION 09A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 10:51:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-016

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS3 FRACTION 10A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 11:27:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 111 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | ND | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 3.1 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 3.4 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 11.1 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | NT | 2.5 | | | |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS3 FRACTION 10A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 11:2[illegible] 00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SS3 FRACTION 10A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 11:27:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SS3

FRACTION 10A TEST CODE SMSCMT NAME MISC TEST SOIL-MET

Date & Time Collected 10/18/96 11:27:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-017

COMMENTS

Received: 10/18/96 Results by Sample

SAMPLE ID TA57-SBS3 FRACTION 11A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 11:33:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 78.5 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | 0.68 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 4.2 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 3.7 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 8.9 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

REPORT

Work Order # 96-10-174

Received: 10/18/96

Results by Sample

SAMPLE ID TA57-SBS3 FRACTION 11A TEST CODE SCNT NAME CYANIDE, TOTAL/SW846 9010A

Date & Time Collected 10/18/96 11:33:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_ANAL |
|---|---|---|---|---|
| Cyanide, Total | ND | 0.50 | 1.0 | 10/31/96 |

Notes and Definitions for this Report:

EXTRACTED

ANALYST DG

UNITS mg/Kg

BATCH_ID W9650

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SBS3 FRACTION 11A TEST CODE SCVHG NAME MERCURY (CVAA)/SW846 7471

Date & Time Collected 10/18/96 11:33:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Mercury | ND | 0.15 | 1.0 | 10/23/96 | 10/24/96 |

Notes and Definitions for this Report:

ANALYST CD

UNITS mg/Kg

BATCH_ID M9664

PRCNT_MOIST

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SBS3 FRACTION 11A TEST CODE SMSCMT NAME MISC TEST SOIL-METALS

Date & Time Collected 10/18/96 11:33:00 Category SOIL

| ANALYTES | RESULT | LIM |
|---|---|---|
| THALLIUM | ND | 20.0 |

Notes and Definitions for this Report:

DATE_EXT 10/28/96

DATE_ANAL 10/31/96

ANALYST KH

D_F 1.0

UNITS mg/L

BATCH_ID M9678-018

COMMENTS

Received: 10/18/96

REPORT

Results by Sample

Work Order # 96-10-174

SAMPLE ID TA57-SBS2 FRACTION 09A TEST CODE S6010 NAME METALS-ICP/SW846 6010

Date & Time Collected 10/18/96 10:51:00 Category SOIL

| PARAMETER | RESULT | LIMIT | D_F | DATE_EXT | DATE_ANAL |
|---|---|---|---|---|---|
| Silver, Ag | ND | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Aluminum, Al | NT | 25 | | | |
| Arsenic, As | ND | 3.0 | 1.0 | 10/28/96 | 10/31/96 |
| Barium, Ba | 39.1 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Beryllium, Be | 0.82 | 0.50 | 1.0 | 10/28/96 | 10/31/96 |
| Calcium, Ca | NT | 15 | | | |
| Cadmium, Cd | ND | 0.20 | 1.0 | 10/28/96 | 10/31/96 |
| Cobalt, Co | NT | 0.50 | | | |
| Chromium, Cr | 9 | 1.0 | 1.0 | 10/28/96 | 10/31/96 |
| Copper, Cu | NT | 0.50 | | | |
| Iron, Fe | NT | 15 | | | |
| Potassium, K | NT | 10 | | | |
| Magnesium, Mg | NT | 10 | | | |
| Manganese, Mn | NT | 0.25 | | | |
| Sodium, Na | NT | 15 | | | |
| Nickel, Ni | 2.9 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Lead, Pb | 9.8 | 2.0 | 1.0 | 10/28/96 | 10/31/96 |
| Antimony, Sb | ND | 1.5 | 1.0 | 10/28/96 | 10/31/96 |
| Selenium, Se | ND | 2.5 | 1.0 | 10/28/96 | 10/31/96 |
| Vanadium, V | NT | 0.15 | | | |
| Zinc, Zn | NT | 5.0 | | | |

Notes and Definitions for this Report:

ANALYST KH

UNITS mg/Kg

BATCH_ID M9678

Los Alamos
NATIONAL LABORATORY

*Los Alamos National Laboratory*
*Los Alamos, New Mexico 87545*

Date: October 31, 2000
In Reply Refer To: ESH-18/WQ&H:00-0371
Mail Stop: K497
Telephone: (505) 665-1859

Mr. Roger C. Anderson
Environmental Bureau Chief
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
2042 South Pacheco Street
Santa Fe, New Mexico 87505

**SUBJECT: DISCHARGE PLAN GW-031 RENEWAL, FENTON HILL GEOTHERMAL FACILITY, SANDOVAL COUNTY, NEW MEXICO**

Dear Mr. Anderson:

The Laboratory is in receipt of your October 13, 2000, letter conditionally approving the ground water discharge plan renewal application for the Fenton Hill Geothermal Facility GW-031. Enclosed, please find a signed copy of your approval letter and, as required by regulation, a check in the amount of $690.00 for the renewal of discharge plan GW-031.

In addition, please find the enclosed Storm Water Pollution Prevention Plan (SWPPP) for the Fenton Hill Geothermal Facility. The SWPPP has been prepared by the Laboratory in order to satisfy condition number 26 of the discharge plan approval conditions issued by your agency. The SWPPP addresses the run-off of storm water from the facility.

Under condition number 22 of the discharge plan approval conditions, the Laboratory is required to submit a closure or operating plan for each of the two land application units at the facility. As discussed during the October 13, 2000, meeting at your Santa Fe office with Bob Beers of the Laboratory's Water Quality and Hydrology Group, the Laboratory does not anticipate using either of these land application units during the next renewal period (June, 2000 to June, 2005). Therefore, the Laboratory requests closure of both land application units at this time.

In 1995, your division conditionally approved the land application of approximately 3.7 million gallons of water to approximately 22 acres of U.S. Forest Service land located southwest of the facility. The Laboratory discharged to this land application unit from May to October, 1995. No discharges have been made to this land application unit since 1995. In accordance with the conditions set forth in your approval letter (William J. LeMay, OCD, to Steven R. Rae, LANL, April 10, 1995), the Laboratory collected soil samples from this land application site and down gradient locations for five years (1995-1999) following land application activities. In October, 1999, the Laboratory reported to your division the analytical results from the five-year monitoring project (ESH-18/WQ&H:99-0395). Monitoring results show that concentrations of arsenic, the

principal contaminant-of-concern, at the land application site and at down-gradient locations were consistent with pre-application and background levels. In conclusion, monitoring of this land application unit has been completed and the Laboratory does not anticipate discharging to this unit during the next renewal period; and therefore, we request closure of the southwest land application unit.

The second land application unit at the facility was conditionally approved by your division by letter in April, 1998 (Roger C. Anderson, OCD, to Steven R. Rae, LANL, April 23, 1998). Approximately 2.5 million gallons of water from the Milagro Project's 5-million gallon pond was land applied from April to June, 1998, to approximately 7 acres of U. S. Forest Service land located on the northern boundary of the facility. No land application activities have been conducted at this land application unit since June, 1998. All water applied to this land application unit came from the Milagro Project's astrophysical observatory pond. Milagro Project water originates from the Fenton Hill domestic water supply well and is then purified through filtration and ion exchange processes. Due to the high quality of the land-applied water, no contaminants of concern were identified and no post-application monitoring was required by your division. In conclusion, the Laboratory does not anticipate discharging to this unit during the next renewal period; and therefore, we request closure of the north land application unit.

Please contact me at 505-665-1859 or Bob Beers at 505-667-7969, if you have any questions or concerns regarding this submittal. On behalf of the Laboratory, I would like to thank you and your staff for your assistance during the discharge plan renewal process.

Sincerely,

Steven R. Rae
Group Leader
Water Quality and Hydrology Group

SR/rm

Enclosures: a/s

Cy: J. Peterson, District Ranger, Jemez Ranger District, Jemez Springs, New Mexico, w/enc.
D. Duffy, Pueblo of Jemez Springs, Jemez Springs, New Mexico, w/enc.
J. Parker, NMED DOE/OB, Santa Fe, New Mexico, w/enc.
D. Gurule, DOE/LAAO, w/enc., MS A316
J. Vozella, DOE/LAAO, w/enc., MS A316
M. Johansen, DOE/LAAO, w/enc., MS A316
T. Gunderson, DLDOPS, w/enc., MS A100
D. Erickson, ESH-DO, w/enc., MS K491
L. McAtee, ESH-DO, w/enc., MS K491

Cy (continued):
B. Beers, ESH-18, w/enc., MS K497
M. Saladen, ESH-18, w/enc., MS K497
M. Alexander, ESH-18, w/enc., MS K497
B. Grimes, CRO-1, w/enc., MS A117
D. Thomas, P-FM, w/enc., MS D459
J. Albright, EES-4, w/enc., MS D443
J. Thomson, EES-4, w/enc., MS D443
G. Sinnis, P-23, w/enc., MS H803
WQ&H File, w/enc., MS K497
CIC-10, w/enc., MS A150

# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**
Governor
**Jennifer A. Salisbury**
Cabinet Secretary

October 13, 2000

**Lori Wrotenbery**
Director
**Oil Conservation Division**

**CERTIFIED MAIL**
**RETURN RECEIPT Hand Delivered:**

Mr. Steven R. Rae
Los Alamos National Laboratory
MS K497
Los Alamos, New Mexico 87545

Re: Discharge Plan GW-031 Renewal
Fenton Hill Geothermal Facility
Sandoval County, New Mexico

Dear Mr. Rae:

The groundwater discharge plan renewal application for the Los Alamos National Laboratory Fenton Hill Geothermal Facility GW-031 operated by Los Alamos National Laboratory located in NE/4 of Section 13, Township 19 North, Range 2 East, NMPM, Sandoval County, New Mexico **is hereby approved** under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within ten working days of receipt of this letter.**

The original discharge plan was approved on June 5, 1985 and subsequently renewed on July 19, 1990, June 15, 1995 and modification approved on May 10, 1999. The discharge plan renewal application, including attachments, dated February 02, 2000 submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals. The discharge plan renewal application was submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations. The discharge plan is renewed pursuant to Section 5101.A. and 3109.C. Please note Section 3109.G., which provides for possible future amendment of the plan. Please be advised that approval of this plan does not relieve Los Alamos National Laboratory of liability should operations result in pollution of surface or ground waters, or the environment.

Please note that Section 3104. of the regulations requires that "when a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C., Los Alamos National Laboratory is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4., this approval is for a period of five years. **This approval will expire June 05, 2005** and an application for renewal should be submitted in ample time before that date. Pursuant to Section 5101.F. of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved. It should be noted that all discharge plan facilities will be required to submit plans for, or the results of, an underground drainage testing program as a requirement for discharge plan renewal.

The discharge plan application for the Los Alamos National Laboratory Fenton Hill Geothermal Facility is subject to the WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of $50 plus a renewal fee of $690.00 for geothermal facilities. The OCD has not received the $690.00 flat fee. The flat fee of $690.00 may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval and subsequent installments due on this date of each calendar year.

**Please make all checks payable to:** **Water Quality Management Fund**
**C/o: Oil Conservation Division**
**2040 South Pacheco**
**Santa Fe, New Mexico 87505.**

If you have any questions, please contact Wayne Price of my staff at (505-827-7155). On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief
RCA/lwp

Attachment-1
xc: OCD Aztec Office
OCD District IV -Roy Johnson

**ATTACHMENT TO THE DISCHARGE PLAN GW-031 APPROVAL**
**Los Alamos National Laboratory Fenton Hill Geothermal Facility (GW-031)**
**DISCHARGE PLAN APPROVAL CONDITIONS**
**October 13, 2000**

1. Payment of Discharge Plan Fees: The $50.00 filing fee has been received by OCD. The $690.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.

2. Commitments: Los Alamos National Laboratory will abide by all commitments submitted in the discharge plan renewal application dated February 02, 2000 and these conditions for approval.

3. 1-Millon and 5-Millon Gallon Ponds: A minimum freeboard will be maintained in the pond so that no over topping occurs. Any repairs or modifications to the pond liners must receive prior OCD approval. If the pond liners are replaced or a new pond is constructed, a double synthetic liner with leak detection will be incorporated into the design. Leaks and releases shall be reported pursuant to item 19. (Spill Reporting) of these conditions.

   Leak Detection Monitor Well: The leak detection monitor well for the 1-Millon Gallon storage pond must be inspected for fluids monthly. Records will be maintained to include fluid level in the detection well, quantity of fluid pumped from the well when the level has risen due to precipitation, date of inspection, and name of inspector. Any fluids found which cannot be attributed to the infiltration of precipitation must be reported to the NMOCD Santa Fe office and the appropriate District office within 48 hours of discovery.

   The 5-Millon Gallon Pond leak detection system does not require monitoring due to the quality of the water in the pond. Los Alamos National Laboratory shall notify the OCD within 48 hours if the water quality changes significantly that would pose a threat to any fresh water if a release should occur.

4. Injection Notification: Any injection of fluids into the well bore shall be pre-approved by OCD on a case-by-case basis.

5. Maximum Injection Pressure: The maximum operating injection and/or test pressure at the well head will be such that the fracture pressure of the injection formation will not be exceeded.

6. Mechanical Integrity Testing: Los Alamos National Laboratory will conduct a monthly survey on the well head pressure. Any deviation of more than 50 psig shall be reported to OCD within 48 hours. Records shall be maintained on file. The results of the survey shall be reported to the OCD in the annual report due **on January 31, of each year**.

7. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.

8. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

11. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.

12. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

13. Labeling: All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.

14. Below Grade Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must be tested to demonstrate their mechanical integrity no later than **June 01, 2000** and every year from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD in the annual report.

15. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity no later than **June 01, 2000** and

every 5 years, from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD in the annual report.

16. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be approved for construction and/or operation unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.

17. Well Work Over Operations: OCD approval will be obtained from the Director prior to performing remedial work, pressure test or any other Work over. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Santa Fe District Office.

18. Housekeeping: All systems designed for spill collection/prevention, and leak detection will be inspected to ensure proper operation and to prevent overtopping or system failure.

19. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Santa Fe District Office.

20. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge plan will be approved by OCD on a case-by-case basis.

21. Annual Report: An Annual report shall be submitted on January 31 of each year. The annual report shall include information required by these conditions of approval and any other relevant information.

22. Land Application Units: Los Alamos National Laboratory shall submit closure plans or operating plans for the two land application units, one located southwest of the site, the other located north of the site. Please submit these plans November 15, 2000 for OCD approval.

23. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.

24. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.

25. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.

26. Storm Water Plan: The facility will have an approved storm water run-off plan by November 15, 2000.

27. Certification: **Los Alamos National Laboratory** by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. **Los Alamos National Laboratory** further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Conditions accepted by: **Los Alamos National Laboratory**

David Gurule'
Company Representative-print name

Mat Johansen for D.G.
Company Representative-Sign

10/26/00
Date

Manager, Los Alamos Area Office
U.S. Dept. of Energy
Title

Dennis J. Erickson
Company Representative- print name

Company Representative- Sign

Date October 25,2000

Title Division Director - Environment, Safety, and Health

Dan K. Thomas
Company Representative-print name

Company Representative-Sign

Date 10/27/00

Facility Manager, FMU 77
Title

# STORM WATER MANAGEMENT PLAN

Prepared for

## TECHNICAL AREA 57
## FENTON HILL PROJECT SITE

**Los Alamos National Laboratory**
**Los Alamos, NM**

**a requirement of the**

**APPLICATION FOR RENEWAL – DISCHARGE PLAN (GW-031)**

PREPARED BY
Merrick & Company
600 Sixth St, Suite 103
Los Alamos, NM 87544
(505) 662-0606

**OCTOBER 2000**

# TABLE OF CONTENTS

**PREFACE** ..... iii

**1.0 SITE DESCRIPTION** ..... 1-1
- 1.1 Site History ..... 1-1
- 1.2 Current Status ..... 1-1

**2.0 STORM WATER CHARACTERISTICS** ..... 2-1
- 2.1 General Climatology ..... 2-1
- 2.2 Runoff Patterns ..... 2-1
- 2.3 Non-Storm Water Discharges ..... 2-1

**3.0 POTENTIAL POLLUTANTS** ..... 3-1
- 3.1 Equipment, Materials & Soil ..... 3-1
- 3.2 Potential Release Sites ..... 3-1
  - 3.2.1 PRS Descriptions ..... 3-1
  - 3.2.2 ER Recommendations ..... 3-2

**4.0 STORM WATER MANAGEMENT** ..... 4-1
- 4.1 Structural Controls ..... 4-1
- 4.2 Administrative Controls ..... 4-1

**APPENDIX A Site Map**
**APPENDIX B Site Photographs**

# STORM WATER MANAGEMENT PLAN

for
TECHNICAL AREA 57
FENTON HILL PROJECT SITE

LOS ALAMOS NATIONAL LABORATORY

## PREFACE

This Storm Water Management Plan was developed to comply with a condition for approval for renewal of Discharge Plan GW-031, as set forth by the State of New Mexico Energy, Minerals, and Natural Resources Department, Oil Conservation Division. The plan addresses facility and site characteristics, storm water characteristics, potential pollutants, and current storm water management.

# 1.0 SITE DESCRIPTION

The Fenton Hill Project Site is located in the Jemez Mountains of North Central New Mexico, approximately 35 miles west of Los Alamos and 10 miles north of Jemez Springs. This site is associated with the Department of Energy's Los Alamos National Laboratory (LANL), and has been given the LANL designation of Technical Area (TA) 57. TA-57 has an approximate size of 16 acres. The following sections provide brief descriptions of the history of the site and current operations.

## 1.1 Site History

The Fenton Hill Project Site was established in 1972 to support the Los Alamos Hot Dry Rock (HDR) Geothermal Energy Development Project. HDR is a research program to develop the technology necessary to economically extract the energy contained at accessible depths within the earth's crust. The project called for injecting water via a borehole to a depth where it would be naturally heated by the hot rocks at that depth, and then pump the water back to the surface for recovery of the energy contained in the heated water. Experimental operations were conducted from 1972 to approximately 1996.

During the period from 1995 to 2000, the HDR project experienced substantial funding reductions, which resulted in the termination of project activities and partial decommissioning of the facility. In 1995, a new astrophysical observatory was constructed in and around the existing 5.7 million gallon reservoir at the Site. Discharges from the venting of the remaining geothermal well is now directed to the existing one million gallon service pond. In 1998, an enhanced evaporation system for this service pond was installed and the discontinuation of the NPDES permitted outfall NM0028576 was approved by the U.S. Environmental Protection Agency.

## 1.2 Current Status

In 1996, all HDR Project geothermal wells, with the exception of well EE-2A, were plugged and abandoned. With this action the HDR Project no longer has the capability to perform geothermal research and experimentation. Current Site activities are primarily limited to site maintenance, further decommissioning and salvage of equipment and materials, and work associated with the astrophysical observatory. Future HDR activities will be limited to the testing of down-hole logging tools in well EE-2A and experimental drilling using micro-borehole equipment. Micro-borehole depths will be limited to 350 feet to ensure that the aquifer is not penetrated and all drilling fluids will be contained on-site in the one million gallon service pond.

There is no use of geothermal water at the Site by either the HDR Project or the astrophysical observatory. Vented geothermal water from well EE-2A is impounded until evaporation in the one million gallon service pond (see Photo 1, Appendix B). Water used at the site is provided by the facility's domestic water supply well. No commingling of geothermal and potable water occurs and no chemical additives are used.

# 2.0 STORM WATER CHARACTERISTICS

The following sections address environmental and physical elements that effect the accumulation and transport of storm water at the Fenton Hill Project Site. These include general climatology, runoff patterns, receiving waters, and non-storm water discharges.

## 2.1 General Climatology

The Site is located in a semiarid, temperate, mountain climate. Summers are generally sunny with moderate, warm days and cool nights. Winter conditions can be experienced from October through March and large snowfall accumulations are not uncommon. Summer temperatures range from 50°F at night to 90°F during the day. Winter temperatures range from 0°F at night to above 32°F during the day. The average annual precipitation is approximately 17 inches. Of this amount, approximately 40% (6.8 inches) is received through brief, intense thunderstorms occurring during the summer monsoon season (July – September).

## 2.2 Runoff Patterns

The Fenton Hill Project Site slopes gently to the south. This topography produces sheet flow runoff across the majority of the Site with minor concentrated flow at three Site discharge locations. (See Site Map, Appendix A for discharge locations.)

Runoff patterns within the Site can be primarily be categorized with relation to the one million gallon service pond. The area to the north and east of the pond drains to the south where it discharges to a wide, well vegetated, natural conveyance located on the south side of the main Site roadway (see Photo 2, Appendix B). This natural conveyance is lower in elevation than the roadway and runoff is conveyed to the area through a 12 inch corrugated metal pipe. Runoff on the north side of the pond flows either east to the natural conveyance or west and south along the west side of the pond to a low area located on the south side of the pond. A corrugated metal pipe is located in this low area to transfer significant accumulations of runoff off-site to the west (see Photo 3, Appendix B). The areas south and directly east of the service pond drain south to a well vegetated, natural conveyance known as Burns Swale (see Photo 4, Appendix B). Runoff from these areas sheetflow to the top of a gentle slope just south of the fuel storage shed, TA-57-56, and then is concentrated as it is conveyed down the slope in an earthen channel. At the toe of the slope the channel discharges the flow onto a flat, well vegetated area where the runoff resumes sheetflow characteristics as it moves through Burns Swale.

Receiving waters for the Site are tributaries of the Jemez River, which is the major surface water drainage for the area. Surface runoff from the Site discharges into Lake Fork Creek located to the south. Lake Fork Creek is a tributary of the Rio Cebolla, which in turn is a tributary of the Rio Guadalupe. The Rio Guadalupe flows into the Jemez River below the town of Jemez Springs.

## 2.3 Non-Storm Water Discharges

With the termination of geothermal activities and partial decommissioning of the facility, there are very few non-storm water discharges at the site. Those that do occur are of such minor magnitude that they do not significantly impact runoff accumulations or patterns. Non-storm water is typically discharged through a standard "garden" hose. Potential non-storm water discharges may include vehicle/equipment washing, dust suppression or soil moistening associated with maintenance activities, and watering of vegetation.

# 3.0 POTENTIAL POLLUTANTS

Potential Pollutants that have been identified at the Fenton Hill Project Site include equipment, materials, and exposed soil. These items area are discussed in the following section. Controls associated with these potential pollutants are addressed in Section 4. Potential Release Sites (PRSs), which resulted from previous site activity and were identified by the LANL Environmental Restoration (ER) Project, are also discussed for informational purposes.

## 3.1 Equipment, Materials & Soil

Equipment that includes a forklift, a bulldozer, transport vehicles, piping systems, pumps, and generators are stored in multiple locations throughout the Site. The vehicles and heavy equipment are used primarily for site maintenance activities while the majority of the remaining items are awaiting salvage. Potential pollutants associated with the equipment include fuel and fluid leaks from operational equipment, and potential leaching of materials from salvage items subjected to long-term exposure.

Materials at the Site include metal and plastic storage tanks; assorted piping; 55-gallon drums of salt; metal cuttings and slag from cutting, grinding, and welding; fuel and fluids from equipment and vehicles; fuel stored in two metal tanks; and residual waste oil stored in one fiberglass tank. Storage tanks and piping materials are awaiting salvage while the remaining items are used in associated with maintenance operations.

The majority of the interior area of the Site, which includes the roadways, is exposed soil. However, this area is relatively flat, and with sheetflow runoff patterns, there is no evidence of erosion or significant sediment transport. The perimeter of the Site is well vegetated. There are no identified erosional problems within the Fenton Hill Project Site or locations with significant offsite sediment transport.

## 3.2 Potential Release Sites

Geothermal experiments at the Fenton Hill Project Site facilitated the creation of circulation ponds, an outfall, a sludge disposal pit, and discharge areas for an on-site analytical trailer and other materials associated with the experiments. Ten such locations were identified and labeled PRSs by the LANL ER Project in 1994.

The drilling fluids, produced waters, and other wastes associated with exploration, development, or production of geothermal energy are not hazardous wastes as defined in the Resource Conservation and Recovery Act (RCRA), and are exempt from RCRA hazardous waste consideration. For this reason the PRSs at the Fenton Hill Project Site are not listed in LANL's Hazardous and Solid Waste Amendments (HSWA) permit. However, LANL agreed to follow the requirements of HSWA (Module VII of the RCRA permit) to ensure that all environmental problems are investigated in a consistent manner.

### 3.2.1 PRS DESCRIPTIONS

Of the ten identified PRSs, two were recommended for no further action (NFA) and two for deferred action. The remaining six were evaluated in a Phase I investigation conducted in 1996. Following is a brief description of these six PRSs.

- 57-001(b): This PRS comprises two settling ponds designated GTP-3E (east) and GTP-3W (west) that were used during the drilling and operation of well GT-2. Pond GTP-3W was created by building a 10 foot high berm across the head of Burns Swale and excavating into the tuff. The ponds contained a homogeneous mix of cuttings, drilling mud, additives, and dissolved materials that were returned to the surface in the heated waters. Following

decommissioning of the site, the pond was backfilled with boulders and clean soil and leveled with the surrounding terrain.

- 57-001(c): This PRS is a settling pond used during geothermal energy recovery experiments. It contained a homogeneous mix of cuttings, drilling mud, additives, and dissolved materials that were returned to the surface in the heated waters. The pond was decommissioned, cleaned, and filled with clean soil to the level of the surrounding terrain.
- 57-002: This PRS was a sludge pit used between 1974 and 1990. The pit received solids removed from the bottom of the settling ponds and mud removed from the drilling mud pits. Solids included cuttings, drilling muds, and the precipitate from recovered circulation water.
- 57-004(a): This PRS is settling pond GTP-1E. The pond was originally excavated for use as the disposal pit for the drilling of well EE-1 and was later enlarged to serve as a settling pond for discharged drilling materials and for recycling of fluids from the circulation loop. The pond was decommissioned, cleaned of sludge, and backfilled with clean soil to the level of the surrounding terrain.
- 57-006: This PRS was a 55-gallon drum buried beneath a trailer that was used as an analytical chemistry laboratory. The drum contained chemicals that were considered too dangerous to be disposed of via the sink drain. A special drain in the trailer connected to the drum. The drum and its residual contents were removed as a voluntary corrective action on September 15, 1994.
- 57-007: This PRS was a chemical waste leach field associated with the analytical chemistry laboratory. Wastewater from the trailer was poured into a sink that drained to the subsurface leach field.

### 3.2.2 ER Recommendations

Following are the remediation recommendations provided by the LANL ER Project at the conclusion of the Phase I investigation.

- 57-001(b) – Pond GTP-3W: Elevated concentrations of arsenic and barium were detected in pond GTP-3W at a level 11-12 feet below the ground surface. At this depth the potential for human contact with the contaminants is negligible. For this reason, this portion of the PRS was recommended for NFA.
- 57-001(b) – Burns Swale: Samples in this portion of the PRS revealed arsenic and manganese concentrations that exceeded upper tolerance levels (UTL). For this reason Burns Swale is scheduled for Phase II (accelerated, focused) field investigation to determine the extent of the contamination.
- 57-001(c): Multiple analytes were detected but their concentrations were below their respective background UTLs. On this basis this PRS was recommended for NFA.
- 57-002: Arsenic was detected at concentrations greater than its UTL and barium in concentrations exceeding its screening action level (SAL). For this reason, voluntary corrective action is recommended.
- 57-004(a): Analysis of samples from this pond showed that there were no chemicals found in concentrations exceeding the SALs. On this basis, NFA was recommended.
- 57-006: Sampling of the soil beneath the drum showed that there were no chemicals found in concentrations exceeding the SALs. On this basis, NFA was recommended.
- 57-007: Analytical results and the screening assessment indicated negligible risk. For this reason the PRS was recommended for NFA.

# 4.0 STORM WATER MANAGEMENT

In general, no attempt is made to eliminate or minimize the natural flow of storm water from the Site. Instead, emphasis is placed on preventing contamination of the runoff by retaining sediment on-site; minimizing contact with potential pollutants, and by diverting it from the locations in which erosion or pollutant contamination may take place. This control is achieved through the use of both applicable structural controls and administrative work procedures.

## 4.1 Structural Controls

Structural controls associated with storm water management include culverts, a drainage channel, rock check dams, covering, and secondary containment units. Three culverts are in place at the Site to facilitate the management of runoff. Corrugated metal pipes on the west and southeast sides of the Site have been installed at locations where storm water runoff accumulates and leaves the Site. A third culvert located under a concrete walkway adjacent to the CMP on the southeast side of the Site conveys runoff to the discharge location. By conveying concentrated flows through culverts, erosion and sediment transport is minimized.

At the head of Burns Swale is a small gentle south-facing slope. Sheetflow runoff that reaches the top of the slope is collected and conveyed down the west side of the slope in a constructed earthen drainage channel. At the toe of the slope the channel directs the flow east to the middle of the area where the terrain is flat and well vegetated. Use of the channel minimizes the potential for erosion down the face of the slope and conveys runoff to a location where it is most likely to resume sheetflow characteristics. Within the drainage channel are three rock check dams (see Photo 5, Appendix B). The check dams dissipate energy and velocity in the flow, allowing transported sediment to settle out within the channel.

Two fuel storage areas are located within the Site. One area, located on the north side of the facility, contains a fiberglass waste oil tank that is currently empty. The second area, located south of building 57-17, houses two small metal tanks containing gasoline and diesel fuel (see Photo 6, Appendix B). Both areas are covered and all the tanks reside in concrete secondary containment.

## 4.2 Administrative Controls

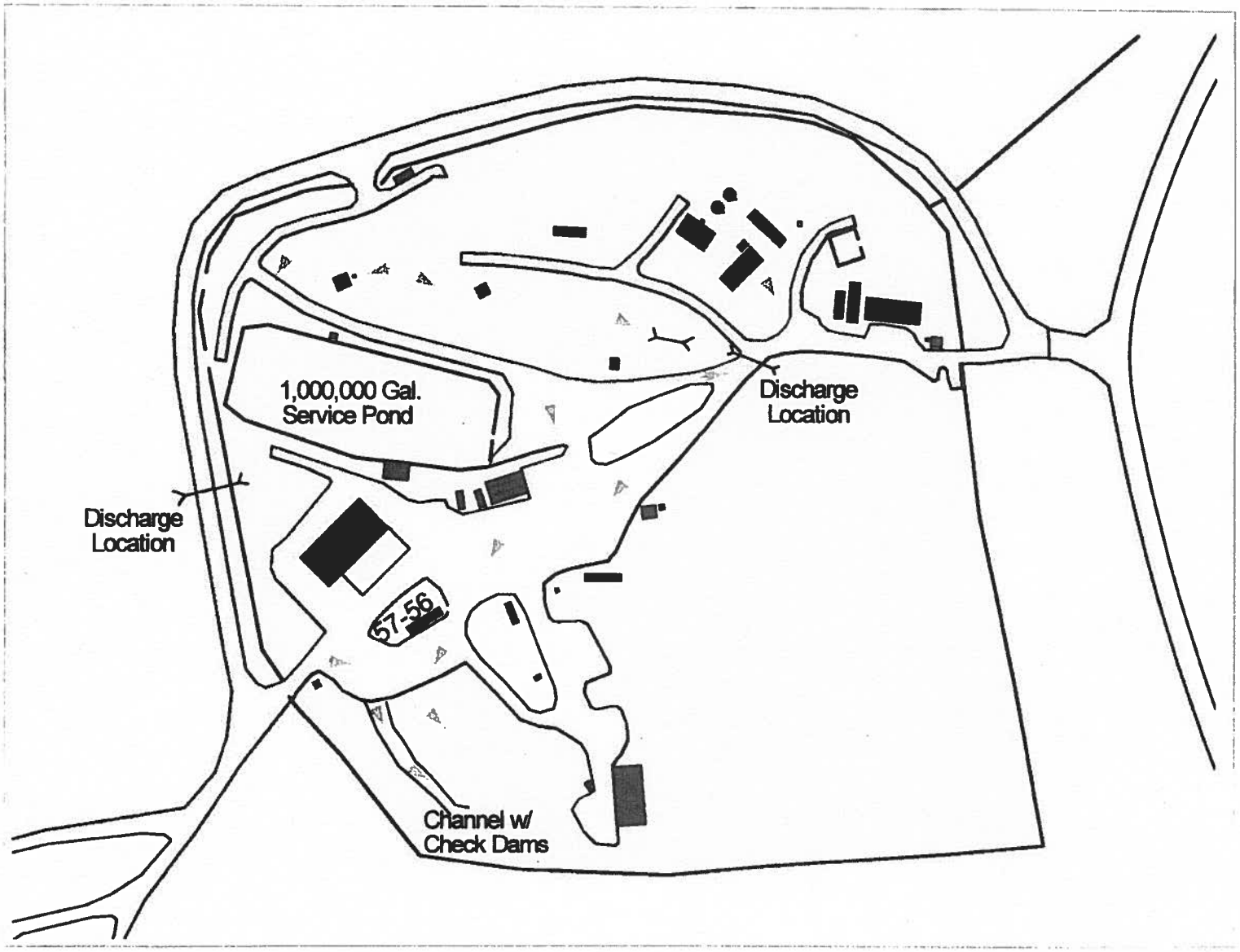
Administrative controls associated with storm water management include appropriate work procedures, Site inspections, and spill response and reporting. Appropriate work procedures minimize the risk of contact between storm water and potential pollutants. To achieve this, equipment and materials are properly stored and maintained, and fueling operations and the loading/unloading of identified potential pollutants are not conducted during precipitation events.

Site inspections are conducted monthly. Items that are evaluated include general site conditions, equipment and material storage areas, fuel storage area secondary containment units, storm water structural controls, new areas of erosion or significant sediment transport, and the general condition of the one million gallon service pond with its associated secondary containment unit and sump pump. If deficient items are identified, appropriate maintenance activities are initiated.

Spill control equipment is available on site to address minor spills and leaks. In addition, spills or releases of oil or hazardous substances will be reported to the Emergency Management & Response (EM&R) Office at **667-6211** or, after hours, at **667-7080**. In accordance with LANL requirements, internal spill reporting will be completed in the event of any release and copies of the reports will be maintained by both the responsible organization and ESH-18. ESH-18 and the EM&R Office, in accordance with Laboratory and DOE policies, and federal and state regulatory reporting requirements, will make the determination for federal notification.

# APPENDIX A:

## Site Map




N

# Fenton Hill

**Legend**

Drainage Flow
Storm drain

30 0 30 60 Feet

MERRICK
600 Sixth Street, Suite 103
Los Alamos, NM 87544
(505)662-0606

Oct 31, 2000

# APPENDIX B:

## Site Photographs

**Photo 4 – Burns Swale**

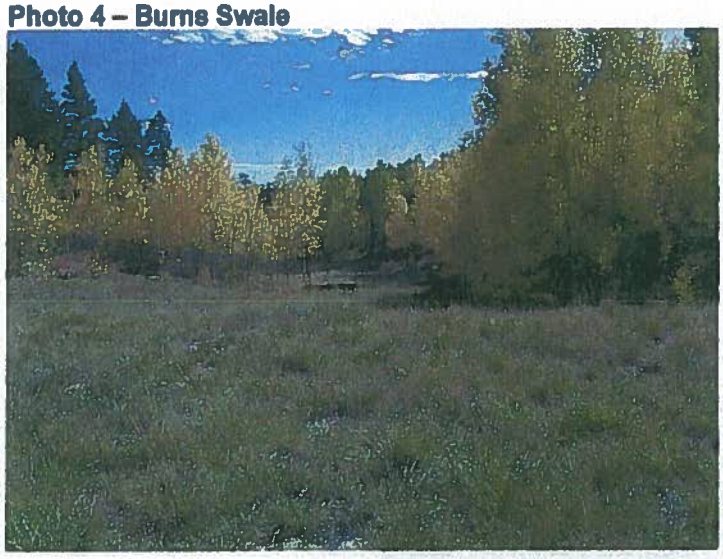


**Photo 5 – Drainage Channel & Rock Check Dam**

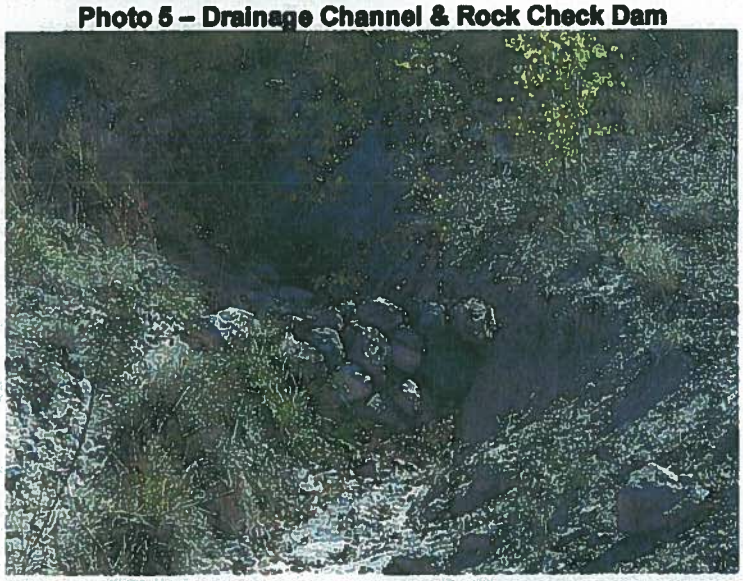


**Photo 6 – Fuel Storage Area (TA-57-56)**

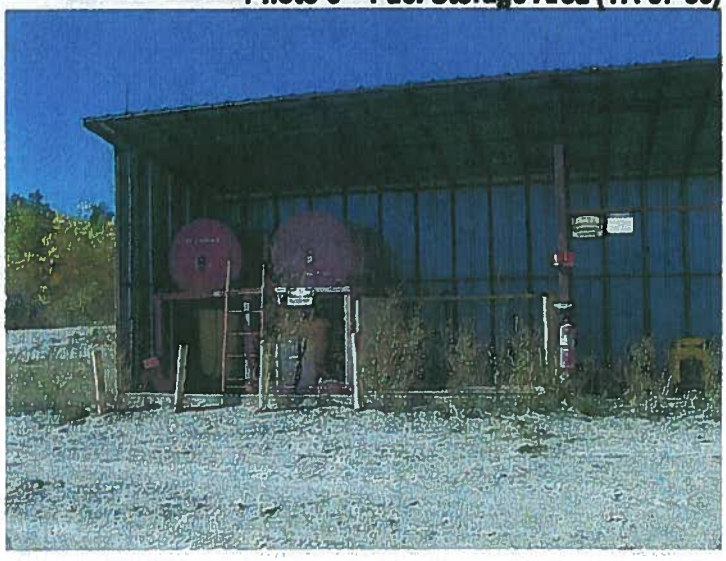


**Photo 1 – One Million Gallon Service Pond**

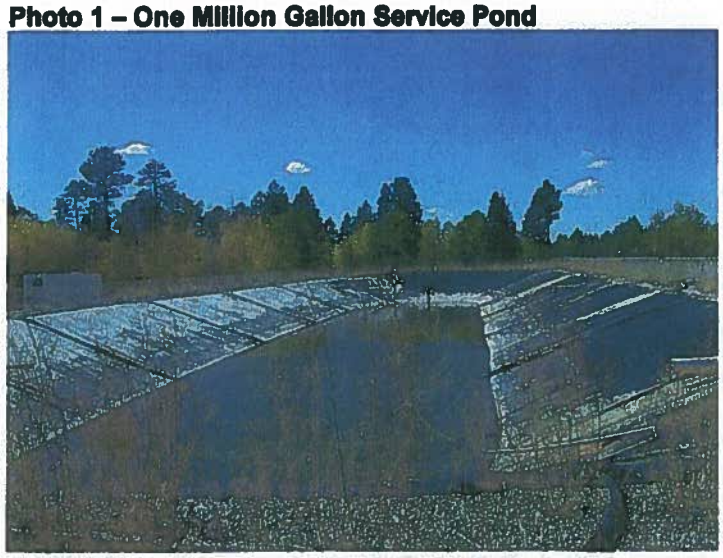


**Photo 2 – Southeast Discharge Location**

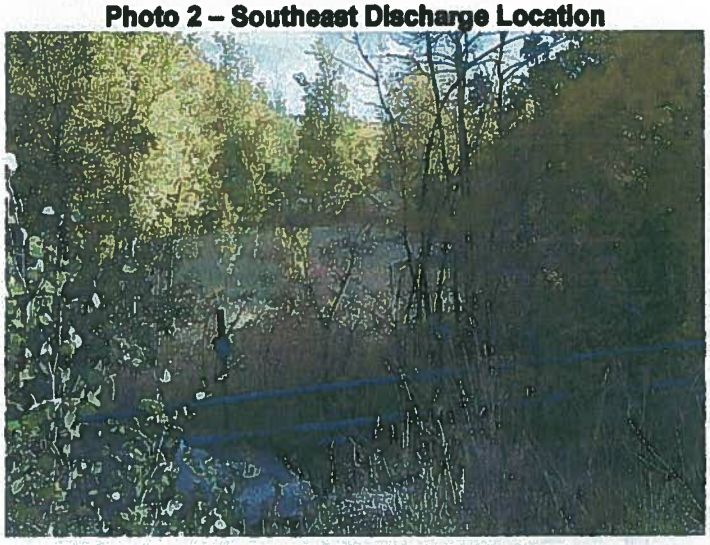


**Photo 3 – West Side Discharge Location**

(48)

801

# RFI Report for Potential Release Sites at TA-57

57-001(b)
57-001(c)
57-002
57-004(a)
57-006
57-007

(located in former Operable Unit 1154)

Field Unit 5

Environmental Restoration Project

April 1996

A Department of Energy
Environmental Cleanup Program

Los Alamos Environmental Restoration Records Processing Facility

ER Record I.D.# 53801

Received by ER-RPF
MAY 0 7 1996

Los Alamos
NATIONAL LABORATORY

LA-UR-96-1062

## EXECUTIVE SUMMARY

This report describes the results of surface and shallow subsurface soil sampling at potential release sites (PRSs) 57-001(b), 57-001(c), 57-002, 57-004(a), 57-006, and 57-007 at Technical Area (TA) 57 (former Operable Unit [OU] 1154), known as the Fenton Hill facility. From the early 1970s until the early 1990s, the Laboratory carried out geothermal recovery experiments at this facility; these PRSs, which include circulation ponds, an outfall, a sludge disposal pit, and discharge areas for an on-site analytical chemistry trailer, received fluids and other materials associated with the geothermal experiments. The objective of this Phase I investigation was to confirm the presence or infer the absence of Resource Conservation and Recovery Act (RCRA) hazardous constituents at these PRSs.

During the summer of 1994, surface and shallow subsurface soil samples were collected from nine locations. All the samples were analyzed for metals. In addition, those samples collected from PRSs at which drilling materials and geothermal circulation fluids had been used were analyzed for semivolatile organic compounds; and those samples collected from the discharge areas for the analytical chemistry trailer were analyzed for volatile organic compounds.

Because no RCRA hazardous constituents were found at levels above screening action levels (SALS) in samples collected from PRSs 57-001(b) (pond portion only), 57-001(c), 57-004(a), 57-006, or 57-007, we are recommending NFA for the pond portion of PRS 57-001(b) and the other four PRSs.

For the outfall portion of PRS 57-001(b) (Burns Swale), arsenic and manganese were found in surface soils in concentrations exceeding background Upper Tolerance Limits (UTLs). For this reason, Burns Swale is scheduled for a Phase II (accelerated, focused) field investigation to determine the extent of the arsenic and manganese contamination. The Phase II data will, in addition, be used to perform a human health risk assessment for the Burns Swale area. A sampling and analysis plan for this Phase II investigation is included in this report.

Finally, for PRS 57-002, a voluntary corrective action (VCA) is recommended, because of the presence of arsenic in soils at concentrations greater than its UTL and of barium in concentrations exceeding its SAL. The VCA plan will be presented as a separate document.

Drilling fluids, produced waters, and other wastes associated with exploration, development, or production of geothermal energy are not hazardous wastes as defined in RCRA, and are exempt from RCRA hazardous waste consideration. For this reason, the PRSs reported on in this document are not listed in the Laboratory Hazardous and Solid Waste Amendments (HSWA) permit. However, as set forth in the RFI Work Plan for OU 1154, the Laboratory agreed to follow the requirements of HSWA (Module VIII of the RCRA permit) to ensure that all environmental problems are investigated in a consistent manner.

Table ES-1 lists proposed actions for each PRS.

**TABLE ES-1**

**PROPOSED ACTIONS FOR PRSs 57-001(b), 57-001(c), 57-002, 57-004(a), 57-006, and 57-007**

| PRS | HSWA Permit | Proposed Action | NFA Criterion | Rationale | Section No. |
|---|---|---|---|---|---|
| **57-001(b)** | | | | | 5.1 |
| Burns Swale | No | Phase II sampling | | Arsenic and manganese concentrations exceed UTLs | |
| Pond GTP-3W | No | NFA | 4 | No plausible route for human exposure to COPCs | |
| **57-001(c)** | No | NFA | 4 | All COPCs eliminated | 5.2 |
| **57-002** | No | VCA | | Arsenic concentration exceeds UTL; barium concentration exceeds SAL | 5.3 |
| **57-004(a)** | No | NFA | 4 | All COPCs eliminated | 5.4 |
| **57-006** | No | NFA | 4 | All COPCs eliminated | 5.5 |
| **57-007** | No | NFA | 4 | All COPCs eliminated | 5.6 |

# TABLE OF CONTENTS

EXECUTIVE SUMMARY ..... ES-1

TABLE OF CONTENTS ..... i

ACRONYMS AND ABBREVIATIONS ..... v

LIST OF FIGURES ..... vi

LIST OF TABLES ..... vii

1.0 INTRODUCTION ..... 1

1.1 GENERAL SITE HISTORY ..... 1
1.2 RFI OVERVIEW ..... 3
1.2.1 PRSs 57-001(b), 57-001(c), and 57-004(a): Settling Ponds ..... 4
1.2.1.1 PRS 57-001(b): Settling Pond GTP-3W and Burns Swale PRS 57-001(b) ..... 4
1.2.1.2 PRS 57-001(c): Settling Pond GTP-2 ..... 4
1.2.1.3 PRS 57-004(a): Settling Pond GTP-1E ..... 4
1.2.2 PRS 57-002: Sludge Pit ..... 4
1.2.3 PRSs 57-006 and 57-007: Disposal Areas for Chemical Wastes ..... 7
1.2.3.1 PRS 57-006: Chemical Waste Drum ..... 7
1.2.3.2 PRS 57-007: Chemical Waste Leach Field ..... 7
1.3 FIELD ACTIVITIES ..... 7
1.3.1 Field Screening and Surveying ..... 7
1.3.1.1 Land Surveys ..... 7
1.3.1.2 Radiological and Chemical Screening ..... 8
1.3.2 Surface Sampling ..... 8
1.3.3 Subsurface Sampling ..... 8

2.0 ENVIRONMENTAL SETTING ..... 9

2.1 CLIMATE ..... 9
2.2 GEOLOGY ..... 9
2.2.1 Geologic Setting ..... 9
2.2.2 Soils ..... 9
2.3 HYDROLOGY ..... 9
2.3.1 Surface water ..... 11
2.3.2 Groundwater ..... 11
2.4 BIOLOGICAL SURVEYS ..... 11
2.5 CULTURAL SURVEYS ..... 13

3.0 APPROACH TO DATA ASSESSMENT AND ANALYSES ..... 14

3.1 SAMPLE ANALYSES ..... 14
3.1.1 Analytical Methods ..... 14
3.1.2 Data Verification and Validation ..... 14
3.2 BACKGROUND COMPARISONS ..... 15
3.3 EVALUATION OF ORGANIC CONSTITUENTS ..... 16
3.4 HUMAN HEALTH ASSESSMENT ..... 16
3.4.1 Screening Assessment ..... 16
3.4.1.1 Comparison with SALs ..... 16
3.4.1.2 Multiple Chemical Evaluation ..... 17
3.4.2 Risk Assessment ..... 17
3.5 ECOLOGICAL ASSESSMENT ..... 17

4.0 RESULTS OF QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES ..... 18

4.1 INORGANIC ANALYSES ..... 18
4.1.1 PRS 57-001(b) ..... 18
4.1.2 PRS 57-001(c) ..... 18
4.1.3 PRS 57-002 ..... 19
4.1.4 PRS 57-004(a) ..... 19
4.1.5 PRS 57-006 ..... 19
4.1.6 PRS 57-007 ..... 20
4.2 ORGANIC ANALYSES ..... 20
4.2.1 PRS 57-001(b) ..... 20
4.2.2 PRS 57-001(c) ..... 20
4.2.3 PRS 57-002 ..... 21
4.2.4 PRS 57-004(a) ..... 21
4.2.5 PRS 57-006 ..... 21
4.2.6 PRS 57-007 ..... 21
4.3 TOTAL URANIUM ANALYSES ..... 21
4.3.1 PRS 57-001(b) ..... 21
4.3.2 PRS 57-001(c) ..... 21
4.3.3 PRS 57-002 ..... 22
4.3.4 PRS 57-004(a) ..... 22
4.3.5 PRS 57-006 ..... 22
4.3.6 PRS 57-007 ..... 22

5.0 SPECIFIC RESULTS, CONCLUSIONS, AND RECOMMENDATIONS ..... 23

5.1 PRS 57-001(b): SETTLING PONDS AND OUTFALL ..... 23
5.1.1 History ..... 25
5.1.2 Description ..... 25
5.1.3 Previous Investigations ..... 25
5.1.3.1 Water Quality ..... 25
5.1.3.2 Infiltration From Ponds ..... 25
5.1.3.3 Surface Releases ..... 26
5.1.3.4 Accumulation In Plants ..... 26
5.1.4 Field Investigation ..... 26
5.1.4.1 Pond GTP-3W ..... 26
5.1.4.2 Burns Swale ..... 27
5.1.5 Background Comparisons ..... 29
5.1.6 Evaluation of Organic Constituents ..... 31
5.1.7 Human Health Assessment ..... 31
5.1.7.1 Screening Assessment for PRS 57-001(b) ..... 31
5.1.7.1.1 Pond GTP-3W ..... 31
5.1.7.1.2 Burns Swale ..... 32
5.1.7.2 Risk Assessment for PRS 57-001(b) ..... 34
5.1.8 Ecological Assessment ..... 34
5.1.9 Extent of Suspected Contamination ..... 34
5.1.10 Conclusions and Recommendations ..... 34
5.1.11 Sampling and Analysis Plan for Burns Swale Portion of PRS 57-001(b) ..... 35
5.1.11.1 Problem Definition ..... 35
5.1.11.2 Site Description ..... 35
5.1.11.2 Historical Data ..... 35
5.1.11.3 Regulatory Drivers ..... 35
5.1.12 Design of Sampling and Analysis Plan ..... 35
5.1.12.1 Overview of Information to be Collected ..... 35
5.1.12.3 Assumptions Underlying the Design ..... 36

5.1.12.4 Requirements for Data Quality Implied by Intended Data Use ..... 36
5.1.12.5 Measurements to Verify Assumptions and Requirements ..... 36
5.1.13 Implementation of Sampling and Analysis Plan ..... 38
5.1.13.1 Field Methods ..... 38
5.1.13.2 Measurement Methods ..... 38
5.1.13.3 Field Decisions ..... 39
5.1.13.4 Sample Handling ..... 39
5.1.13.5 Data Tracking ..... 39
5.1.13.6 Schedule ..... 39
5.1.14 Data Assessment ..... 39
5.1.14.1 Verification and Routine Data Validation ..... 39
5.1.14.2 Data Quality Assessment ..... 39
5.1.15 Administration ..... 39
5.1.15.1 Project Task Organization ..... 39
5.1.15.2 Training ..... 40
5.1.15.3 Records ..... 40
5.1.15.4 Oversight ..... 40
5.1.15.5 Inspection/Acceptance Policies ..... 40
5.1.15.6 Reports to Management ..... 40
5.2 PRS 57-001(c)—SETTLING POND GTP-2 ..... 40
5.2.1 History ..... 40
5.2.2 Description ..... 41
5.2.3 Previous Investigations ..... 41
5.2.4 Field Investigation ..... 41
5.2.5 Background Comparisons ..... 42
5.2.6 Evaluation of Organic Constituents ..... 42
5.2.7 Human Health Assessment ..... 42
5.2.7.1 Screening Assessment for PRS 57-001(c) ..... 42
5.2.7.2 Risk Assessment for PRS 57-001(c) ..... 42
5.2.8 Ecological Assessment ..... 42
5.2.9 Extent of Contamination ..... 43
5.2.10 Conclusions and Recommendations ..... 43
5.3 PRS 57-002—SLUDGE PIT ..... 43
5.3.1 History ..... 43
5.3.2 Description ..... 43
5.3.3 Previous Investigations ..... 43
5.3.4 Field Investigation ..... 43
5.3.5 Background Comparisons ..... 44
5.3.6 Evaluation of Organic Constituents ..... 45
5.3.7 Human Health Assessment ..... 47
5.3.7.1 Screening Assessment for PRS 57-002 ..... 47
5.3.7.2 Risk Assessment for PRS 57-002 ..... 48
5.3.8 Ecological Assessment ..... 48
5.3.9 Extent of Contamination ..... 48
5.3.10 Conclusions and Recommendations ..... 48
5.4 PRS 57-004(a)—SETTLING PONDS ..... 48
5.4.1 History ..... 49
5.4.2 Description ..... 49
5.4.3 Previous Investigations ..... 49
5.4.4 Field Investigation ..... 49
5.4.5 Background Comparisons ..... 50
5.4.6 Evaluation of Organic Constituents ..... 51
5.4.7 Human Health Assessment ..... 51
5.4.7.1 Screening Assessment for PRS 57-004(a) ..... 51

5.4.7.2 Risk Assessment for PRS 57-004(a) ..... 54
5.4.8 Ecological Assessment ..... 54
5.4.9 Extent of Contamination ..... 54
5.4.10 Conclusions and Recommendations ..... 54
5.5 PRS 57-006—CHEMICAL WASTE DRUM ..... 54
5.5.1 History ..... 55
5.5.2 Description ..... 55
5.5.3 Previous Investigations ..... 55
5.5.4 Field Investigation ..... 55
5.5.5 Background Comparisons ..... 56
5.5.6 Evaluation of Organic Constituents ..... 56
5.5.7 Human Health Assessment ..... 58
5.5.7.1 Screening Assessment for PRS 57-006 ..... 58
5.5.7.2 Risk Assessment for PRS 57-006 ..... 59
5.5.8 Ecological Assessment ..... 59
5.5.9 Extent of Contamination ..... 59
5.5.10 Conclusions and Recommendations ..... 59
5.6 PRS 57-007—CHEMICAL WASTE LEACH FIELD ..... 59
5.6.1 History ..... 59
5.6.2 Description ..... 59
5.6.3 Previous Investigations ..... 60
5.6.4 Field Investigation ..... 60
5.6.5 Background Comparisons ..... 60
5.6.6 Evaluation of Organic Constituents ..... 62
5.6.7 Human Health Assessment ..... 62
5.6.7.1 Screening Assessment for PRS 57-007 ..... 62
5.6.7.2 Risk Assessment for PRS 57-007 ..... 63
5.6.8 Ecological Assessment ..... 63
5.6.9 Extent of Contamination ..... 63
5.6.10 Conclusions and Recommendations ..... 63

REFERENCES ..... 64

APPENDIX A: ANALYTICAL DATA ..... 67

APPENDIX B: DATA QUALITY EVALUATION SUMMARY ..... 73

APPENDIX C: RISK ASSESSMENT CALCULATIONS ..... 74

APPENDIX D: LIST OF CONTRIBUTORS ..... 77

## ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| ALARA | As Low As Reasonably Achievable |
| AP | Administrative Procedures |
| AR | Administrative Requirements |
| CME | Central Mining Equipment |
| COPC | Chemical of Potential Concern |
| DL | Detection Limit |
| EP | Extraction Procedure |
| EPA | Environmental Protection Agency |
| EQL | Estimated Quantitation Limit |
| ER | Environmental Restoration |
| FIMAD | Facility for Information Management, Analysis, and Display |
| GIS | Geographic Information System |
| HP | Hewlett Packard |
| HSWA | Hazardous and Solid Waste Amendments |
| IWP | Installation Work Plan |
| J | Estimated |
| LANL | Los Alamos National Laboratory |
| MCE | Multiple Chemical Evaluation |
| NFA | No Further Action |
| NMED | New Mexico Environment Department |
| NPDES | National Pollution Discharge Elimination System |
| OU | Operable Unit |
| OVA | Organic Vapor Analyzer |
| PID | Photolonization Detector |
| ppm | Parts per Million |
| PRS | Potential Release Site |
| QA | Quality Assurance |
| QC | Quality Control |
| r | Correlation Coefficient |
| RCRA | Resource Conservation and Recovery Act |
| RDA | Recommended Daily Allowance |
| RFI | RCRA Facility Investigation |
| SAL | Screening Action Level |
| SMO | Sample Management Office |
| SNL | Sandia National Laboratories |
| SOP | Standard Operating Procedure |
| SVOC | Semivolatile Organic Compound |
| SW | Solid Waste |
| TA | Technical Area |
| TCLP | Toxicity Characteristic Leaching Procedure |
| UJ | Undetected Estimated |
| UTL | Upper Tolerance Limit |
| VCA | Voluntary Corrective Action |
| VOC | Volatile Organic Compound |
| XRF | X-Ray Fluorescence |

## LIST OF FIGURES


| | | |
|---|---|---|
| Figure 1-1 | Location of TA-57 (Fenton Hill Site) in New Mexico | 2 |
| Figure 1-2 | Locations of PRSs 57-001(b), 57-001(c), 57-004(a), 57-006, and 57-007 | 5 |
| Figure 1-3 | Location of PRS 57-002 | 6 |
| Figure 2-1 | Geologic column of Fenton Hill stratigraphy | 10 |
| Figure 2-2 | Major surface water drainages near Fenton Hill | 12 |
| Figure 5-1 | Sampling locations, Fenton Hill main compound | 24 |
| Figure 5-2 | PRS 57-001(b): Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs | 30 |
| Figure 5-3 | Sampling locations: Phase II investigations at PRS 57-001(b), Burns Swale portion | 37 |
| Figure 5-4 | PRS 57-002: Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs | 46 |
| Figure 5-5 | PRS 57-004(a): Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs | 52 |
| Figure 5-6 | PRS 57-006: Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs | 57 |
| Figure 5-7 | PRS 57-007: Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs | 61 |

## LIST OF TABLES


| | | |
|---|---|---|
| Table ES-1 | Proposed Actions for PRSs 57-001(b), 57-001(c), 57-002, 57-004(a), 57-004(b), 57-006, and 57-007 | ES-2 |
| Table 2-1 | TA-57. Endangered and/or Threatened Species | 13 |
| Table 5-1 | Summary of Sampling at TA-57 | 23 |
| Table 5-2 | PRS 57-001(b): Summary of Sampling | 26 |
| Table 5-3 | Sampling Location 57-2200: Barium Concentrations in Soils, Detected By Field XRF | 27 |
| Table 5-4 | Sampling Location 57-2300: Barium Concentrations in Soils, Detected By Field XRF | 28 |
| Table 5-5 | Sampling Location 57-2350: Barium Concentrations in Soils, Detected By Field XRF | 28 |
| Table 5-6 | PRS 57-001(b): Inorganic Analytes Found in Soils At Concentrations Greater Than Background UTLs | 29 |
| Table 5-7 | Pond GTP-3W: Concentrations of COPCs vs SALs | 31 |
| Table 5-8 | Pond GTP-3W: Multiple Chemical Evaluation | 32 |
| Table 5-9 | Burns Swale: Concentrations of COPCs vs SALs | 33 |
| Table 5-10 | Burns Swale: Multiple Chemical Evaluation | 33 |
| Table 5-11 | PRS 57-001(c): Summary of Sampling | 41 |
| Table 5-12 | Sampling Location 57-2100: Barium Concentrations in Soils, Detected By Field XRF | 42 |
| Table 5-13 | PRS 57-002: Summary of Sampling | 44 |
| Table 5-14 | PRS 57-002: Inorganic Analytes Found At Concentrations Greater Than Background UTLs | 45 |
| Table 5-15 | PRS 57-002: Concentrations of COPCs vs SALs | 47 |
| Table 5-16 | PRS 57-002: Multiple Chemical Evaluation | 48 |
| Table 5-17 | PRS 57-004(a): Summary of Sampling | 50 |
| Table 5-18 | Sampling Location 57-2000: Barium Concentrations in Soils Detected By Field XRF | 50 |
| Table 5-19 | PRS 57-004(a): Inorganic Analytes Found At Concentrations Greater Than Background UTLs | 51 |
| Table 5-20 | PRS 57-004(a): Concentrations of COPCs vs SALs | 53 |
| Table 5-21 | PRS 57-004(a): Multiple Chemical Evaluation | 54 |
| Table 5-22 | PRS 57-006: Summary of Sampling | 56 |
| Table 5-23 | PRS 57-006: Inorganic Analytes Found At Concentrations Greater Than Background UTLs | 56 |

| | | |
|---|---|---|
| Table 5-24 | PRS 57-006: Concentrations of COPCs vs SALs | 58 |
| Table 5-25 | PRS 57-006: Multiple Chemical Evaluation | 58 |
| Table 5-26 | PRS 57-007: Summary of Sampling | 60 |
| Table 5-27 | PRS 57-007: Inorganic Analytes Found At Concentrations Greater Than Background UTLs | 62 |
| Table 5-28 | PRS 57-007: Concentrations of COPCs vs SALs | 62 |
| Table 5-29 | PRS 57-007: Multiple Chemical Evaluation | 63 |

# 1.0 INTRODUCTION

In 1970, the Laboratory proposed an experiment to study the feasibility of extracting heat from hot dry rocks deep within the earth. The experiment called for injecting water via a borehole; the water would be naturally heated by the hot rocks found at these great depths, then pumped back to the surface for recovery of the energy from the heated water.

From 1972 until 1992, facilities were constructed and operations carried out at Technical Area (TA) 57, the Fenton Hill site, to support this research. The portion of TA-57 that contains these facilities was formerly designated Operable Unit (OU) 1154 (see Figure 1-1 for the location of TA-57). Today, operations are limited to equipment maintenance and infrequent geothermal recovery studies. The site is active, but no geothermal experiments are currently taking place.

The operations at Fenton Hill produced various liquid and solid wastes. The water that was circulated and recovered from the hot rocks contained dissolved metals and other naturally occurring chemicals; muds used during drilling of the boreholes contained metals; the solvents and lubricants used in drilling contained organic compounds; and the laboratory in which recovered water and sludges were analyzed for chemical constituents used small amounts of several reagents in the analytical procedures.

Drilling fluids, produced waters, and other wastes associated with exploration, development, or production of geothermal energy are not hazardous wastes as defined in the Resource Conservation and Recovery Act (RCRA) and are exempt from RCRA hazardous waste consideration. For this reason, the potential release sites (PRSs) reported on in this document are not listed in the Laboratory Hazardous and Solid Waste Amendments (HSWA) permit. However, as set forth in the RFI Work Plan for OU 1154, the Laboratory agreed to follow the requirements of HSWA (Module VIII of the RCRA permit) to ensure that all environmental problems are investigated in a consistent manner.

The OU 1154 RCRA facility investigation (RFI) Work Plan (LANL 1994, 1159) described operations at the facility and identified ten (PRSs) within TA-57. Of the ten, two were recommended for no further action (NFA) and two for deferred action. In this report, we present the results of the RFI Phase I sampling at the remaining six PRSs, 57-001(b), 57-001(c), 57-002, 57-004(a), 57-006, and 57-007.

## 1.1 General Site History

The concept of recovering heat from water circulated through hot dry rocks via deep wells was developed in 1970. An exploratory well (GT-1) was drilled in the Barley Canyon area in 1972, but this site was abandoned shortly thereafter because of poor winter access and rough terrain. In 1974, the Fenton Hill site was selected for a second well, GT-2, which was completed in 1975. Three additional wells (EE-1, EE-2, and EE-3) were drilled between 1975 and 1983. Massive hydraulic fracturing operations were begun at each well as drilling was completed. Tracer injection and water loss studies were conducted from 1984 until 1992.

As described in the RFI work plan, operations at TA-57 took place in two alternating modes: drilling and circulating.

The drilling mode encompassed all of the operations involved in drilling boreholes or wells. During drilling, fluids (water and drilling mud) were pumped down the drill stem; the mud, which consisted of many materials, such as barium sulfate, bentonite clay or gel, lignite (a low-

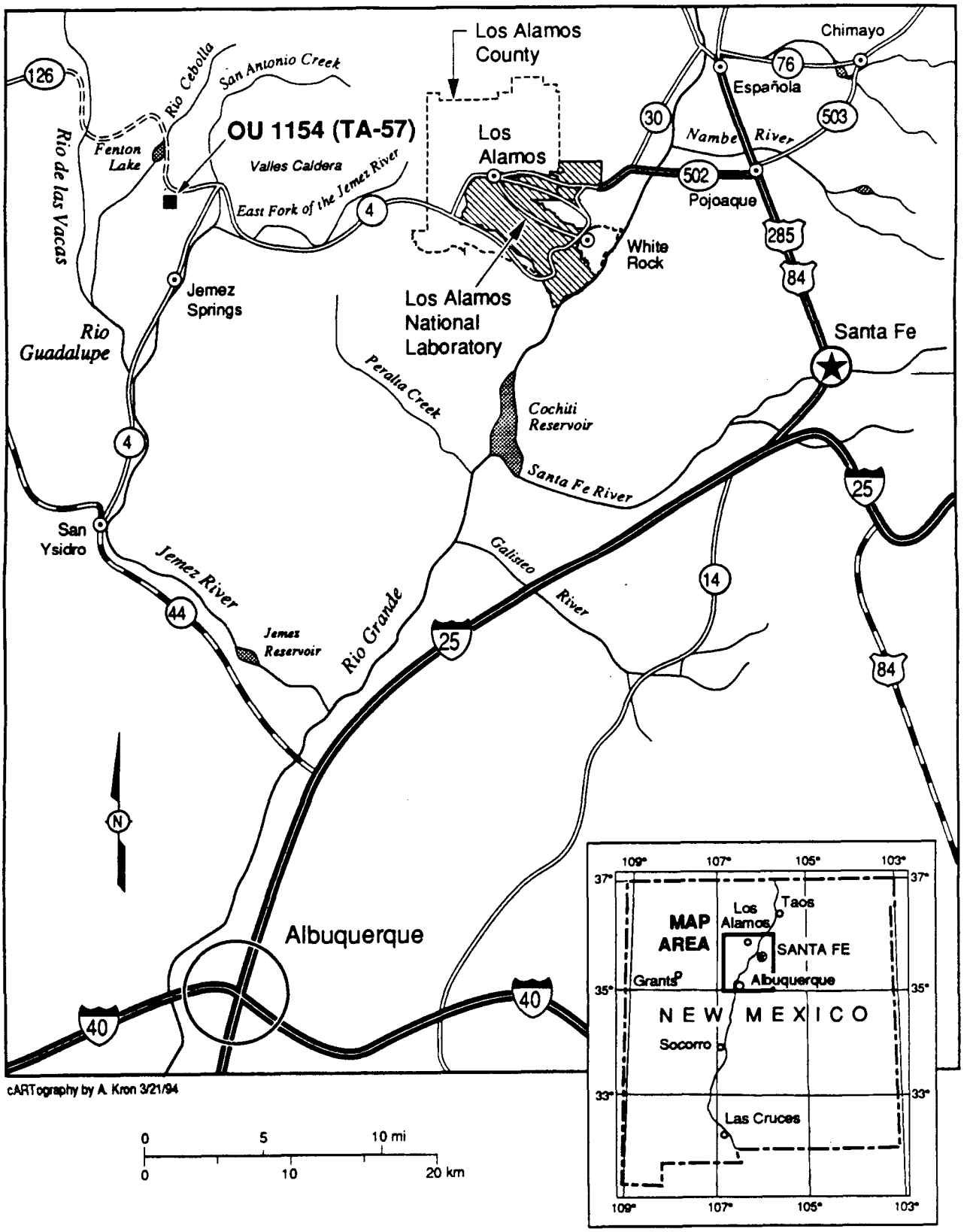



Figure 1-1. Location of TA-57 (Fenton Hill Site) in New Mexico.

grade coal), cottonseed hulls, walnut shells, dispersants and surfactants (drilling lubricants), and sawdust) provided structural integrity to the borehole, filling voids created around the auger and inhibiting cave-ins. In addition, the water and drilling mud solution acted as a lubricating fluid and a medium for conducting cuttings back to the surface. The drilling slurry (mud, water, and cuttings) thus created was discharged to settling ponds, where solid waste settled to the bottom; the supernatant liquid was filtered, then re-injected into the well (LANL 1994,1159).

The circulating mode consisted, first, of injecting water containing tracer compounds into the injection well; the water passed through fractures in the hot rock formations, where it dissolved naturally occurring minerals. It then passed to the recovery well to be pumped back to the surface. The final stages were to pump the heated water through heat exchangers for energy recovery and then to a settling pond. As the water cooled in the pond, some of the dissolved compounds precipitated out and, along with other particulate matter, settled to the bottom of the pond.

During both modes of operation, as the settling ponds filled and solids accumulated, the ponds were "mucked out" and the solids were transported to the sludge pit.

The six PRSs that are covered in this report can be grouped into three categories: settling ponds, sludge pit, and disposal areas for chemical wastes from the analytical laboratories. For the first two categories, three sources of potential contamination were identified: cuttings brought to the surface in drilling operations, chemicals leached into injected waters from the hot rocks, and chemicals introduced in the drilling additives.

## 1.2 RFI Overview

The OU 1154 RFI Work Plan (LANL 1994,1159) focuses on meeting site characterization requirements in a cost-effective manner. This approach incorporates a health-risk-based decision-making process, consistent with the Installation Work Plan (IWP) for Environmental Restoration (LANL 1995, 1164) and proposed Subpart S to 40 CFR 264, for recommending PRSs or PRS aggregates for NFA, expedited cleanup, voluntary corrective action, or further study. It also incorporates a phased site-characterization methodology that follows EPA and IWP guidelines. The technical approach is described in Chapter 4 of the RFI Work Plan (LANL 1994,1159)

The primary purpose of the RFI at TA-57 was to determine the current distribution of chemicals of potential concern (COPCs) on the surface at PRS 57-001(b) and in shallow subsurface soils at the other PRSs, and to compare these findings with risk-based screening action levels (SALs) for soils. The objectives of the sampling and analysis plan, then, were to

(1) determine the concentrations of chemicals in soils collected from the PRSs;

(2) identify COPCs through comparison of the analytical data with background levels and/or SALs (see Section 3.2 and 3.4 of this document); and

(3) determine whether NFA can be recommended, whether Phase II investigations are required, or whether an accelerated clean-up, voluntary corrective action (VCA), or corrective measures study should be undertaken (see Section 3.4 of this document).

### 1.2.1 PRSs 57-001(b), 57-001(c), and 57-004(a): Settling Ponds

These three settling ponds contained a homogeneous mix of cuttings, drilling mud, additives, and dissolved materials, returned to the surface in the heated waters. As the circulated waters cooled, some dissolved compounds precipitated out; these, along with particulate matter and other solid materials brought up from the borehole, settled as solids to the pond bottom. The black layer they formed, referred to as "service-type" material, was assumed during sampling to constitute the bottom-most layer of the ponds. (This was confirmed by the fact that analysis showed contamination in this black layer but not in the tuff bedrock layer just below.) Supernatant liquid from the ponds was sampled and analyzed during operations and, if it met NPDES water quality standards, was discharged to Burns Swale, south of the main compound (see Figure 1-2). Metals were analyzed for in the water as indicator constituents.

#### 1.2.1.1 PRS 57-001(b): Settling Pond GTP-3W and Burns Swale PRS 57-001(b)

This PRS comprises two settling ponds, designated GTP-3E (east) and GTP-3W (west), used during the drilling and operation of Well GT-2. Because GTP-3W was the larger and more used of the two, it was selected for sampling (its contents are assumed to be representative of both ponds). Pond GTP-3W was created by constructing a 10-ft-high berm across the head of Burns Swale and excavating into the tuff. A spillway was installed on the western end of the berm that was used to periodically discharge water into the swale. Following decommissioning and cleaning, the pond was backfilled with boulders and clean soil, level with the surrounding terrain; the depth from the current surface to the bottom of the original pond is estimated to be 16 ft.

#### 1.2.1.2 PRS 57-001(c): Settling Pond GTP-2

This PRS, used during experiments related to geothermal energy recovery, contained circulation fluids. After geothermal testing ceased, the pond was decommissioned, cleaned, and filled with clean soil to the level of the original ground surface. The current depth to the bottom of this filled-in pond is approximately 9.5 feet..

#### 1.2.1.3 PRS 57-004(a): Settling Pond GTP-1E

This pond was originally excavated for use as the disposal pit for the drilling of well EE-1. As it became full, the area was enlarged toward the west to serve as a settling pond for discharged drilling materials and for recycling of fluids from the circulation loop. The successive enlargements eventually joined Pond GTP-1E with the area now occupied by Pond GTP-1W (PRS 57-004(b), the existing 1-million-gal. pond). The entire area was decommissioned, cleaned of sludge, and backfilled with clean soil to original ground level (the current depth to the bottom of this pond is not known), after which Pond GTP-1W was excavated and lined with plastic. The Phase I RFI investigation involved only the eastern pond, GTP-1E; the sediments under the existing western pond, from which there is no sign of contaminant release, will be investigated after the decommissioning of the Fenton Hill site.

### 1.2.2 PRS 57-002: Sludge Pit

The sludge pit, used between 1974 and 1990, was a disposal pit that received all solids removed from the bottom of the settling ponds and mud removed from the drilling mud pits. The pit is located about 2 miles west of the main compound of TA-57 (see Figure 1-3). The pit was divided into two sections: the western section is reported to be 15 - 20 ft deep and the eastern section

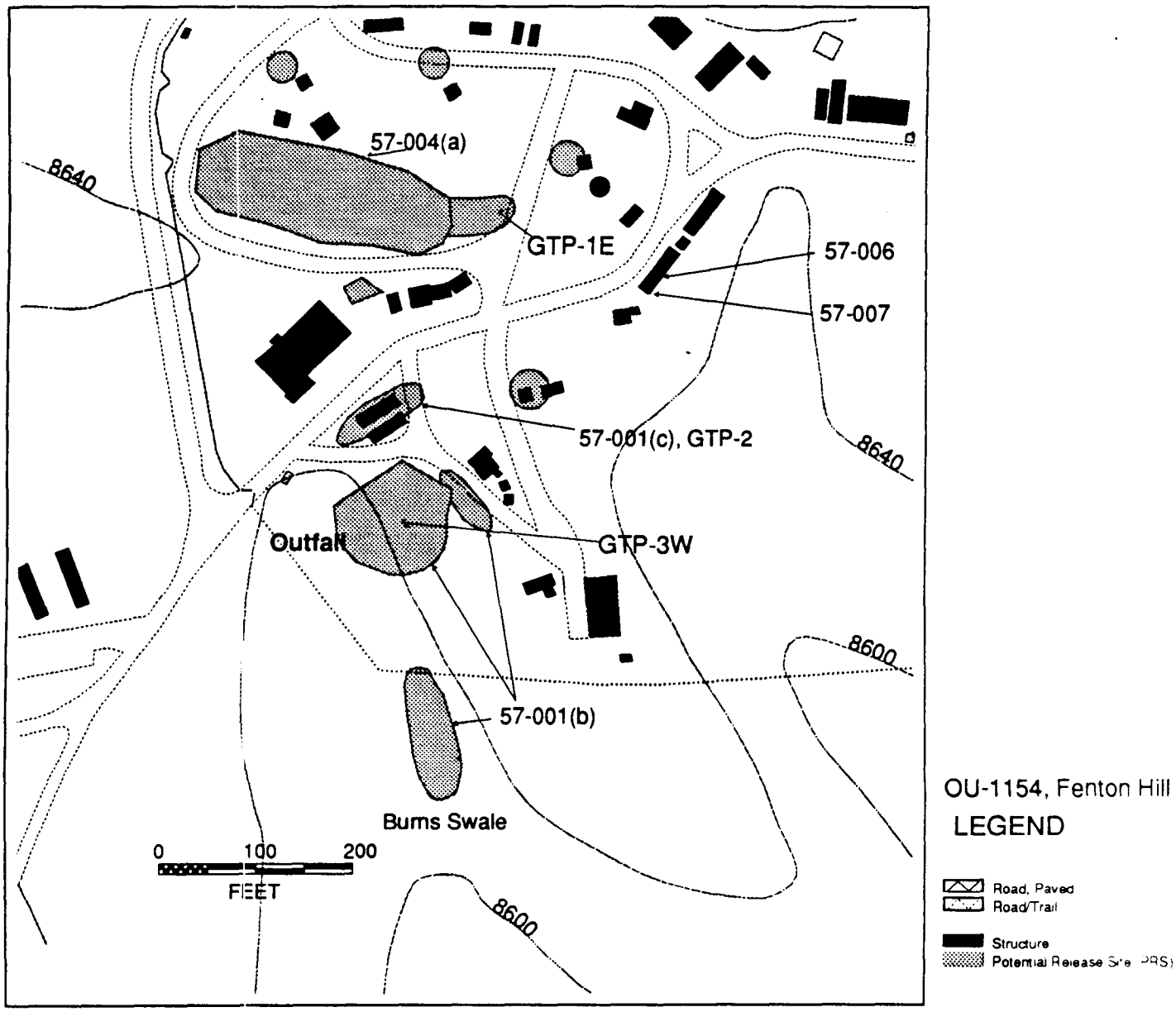



Figure 1-2. Locations of PRSs 57-001(b), 57-001(c), 57-004(a), 57-006, and 57-007

Source: FIMAD, 11/21/95, G103966
Modified by: by C. Rivera Lyons 1/20/96

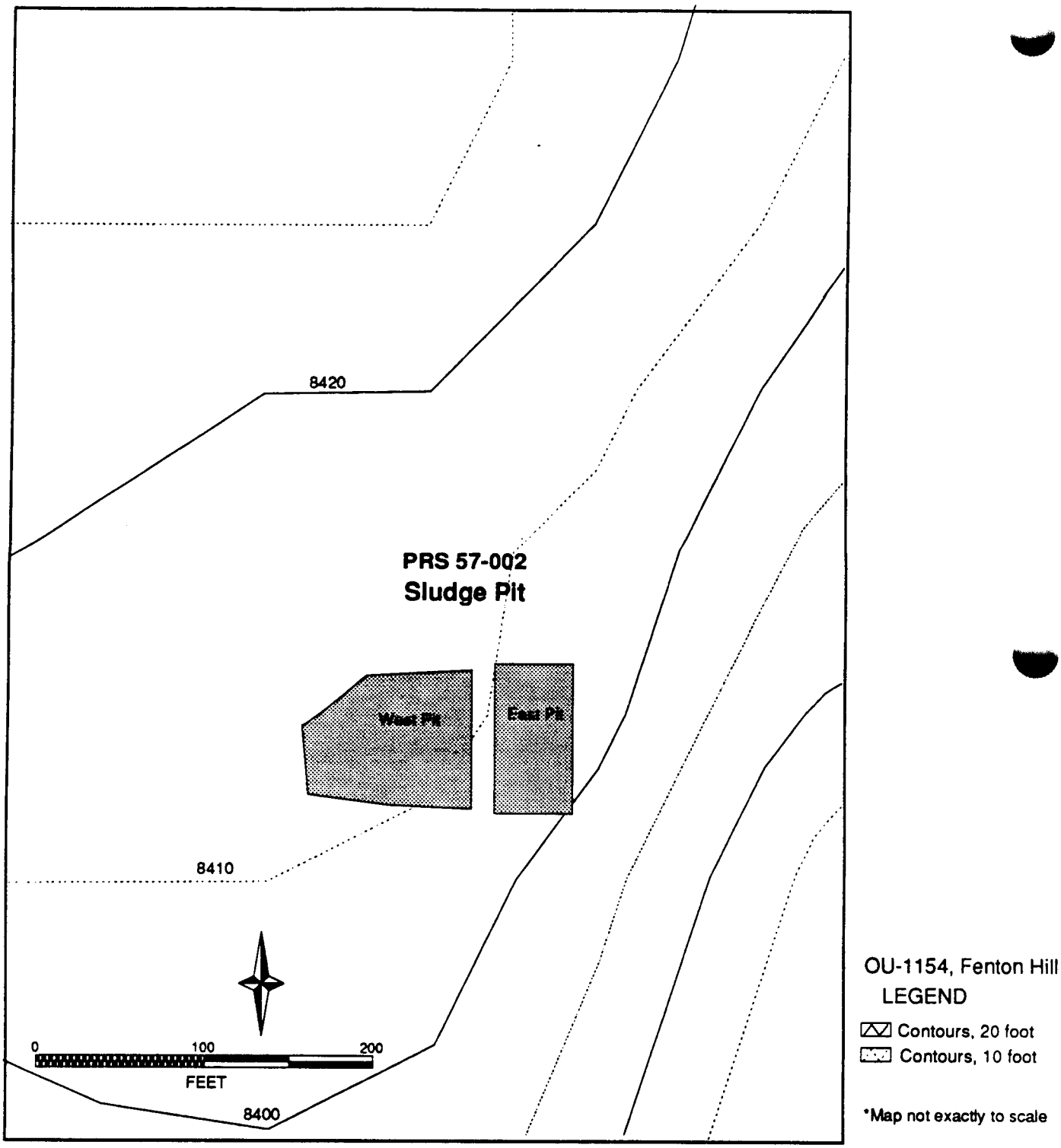



Figure 1-3 - Location of PRS 57-002

Source: FIMAD, 12/14/94, G102838
Modified by: by C. Rivera Lyons 1/20/96

6 - 8 ft deep. The solids in this pit include cuttings, drilling muds, and the precipitate from recovered circulation water. Because the pit was unlined, some of the water in the sludge may have percolated into underlying rock. But the nature of the sludge—finely divided material such as bentonite and barite—precluded major infiltration into bedrock. Indicator constituents analyzed for were metals and SVOCs.

### 1.2.3 PRSs 57-006 and 57-007: Disposal Areas for Chemical Wastes

#### 1.2.3.1 PRS 57-006: Chemical Waste Drum

A trailer at TA-57 was used as an analytical chemistry laboratory (see Figure 1-2) from about 1976 to 1989, to provide real-time analyses of the materials and water used during the geothermal operations Chemicals that were considered to be too dangerous to be disposed of via the drain that ran from the sink in the trailer were poured into a special drain connected to a plastic-lined 55-gal. drum buried in the ground beneath the trailer. When the drum was full, its contents were transported to the main Laboratory for disposal. The drum and its residual contents were removed as a voluntary corrective action on September 15, 1994. Samples taken of the soil beneath the former site of the drum were analyzed for metals, VOCs, and total uranium.

#### 1.2.3.2 PRS 57-007: Chemical Waste Leach Field

Waste water from the trailer's analytical chemistry laboratory was poured into a sink that drained to a subsurface leach field located about 20 ft southeast of the trailer. The RFI Work Plan for OU 1154 (LANL 1994, 1159) reports that some chemicals were mixed with water and poured into the sink drain. Indicator constituents analyzed for were metals and VOCs.

## 1.3 Field Activities

Field work at these PRSs began in mid June 1994, with selection of locations for surface and subsurface sampling. Information from numerous sources was used in selecting these locations: site maps, topographic surveys, surface runoff data, the FIMAD [Facility for Information Management, Analysis, and Display], GIS [Geographic Information Systems] database, interviews with TA-57 site personnel, and site visits. In carrying out the field work, all applicable LANL ER SOPs (LANL, 0875) were followed unless otherwise noted in Chapter 5.

### 1.3.1 Field Screening and Surveying

#### 1.3.1.1 Land Surveys

Surveying control points were established, using Ashtech M-XII differential geographic positioning receivers; two points were established at the TA-57 main compound, and two were established 2 miles west of the main compound (near PRS 57-002, the sludge pit). The control points were used as a reference for geographical surveying of the sampling locations (by total-station electronic theodolite, in accordance with LANL-ER-SOP-3.01.R1). Coordinates for the sampling locations were then calculated from these data (using WILDsoft, a surveying computer software program—Leica, Inc., 1990, 1285), were electronically recorded, and were entered into the FIMAD database. The location of each sampling point was verified against maps generated by FIMAD.

#### 1.3.1.2 Radiological and Chemical Screening

In order to comply with worker safety requirements and Department of Transportation and Laboratory sample transport requirements, radiological and chemical screening were undertaken simultaneously with sample collection. Just before collection of each sample, the sampling location was screened for radioactivity with an ESP-1 beta/gamma meter equipped with an HP 260 pancake probe (following SOPs ESH-1-07-85.R0 and ESH-1-07-04.R0) and for organic vapors with a photoionization detector (Environmental Restoration Decommissioning Project 1995, 1258).

### 1.3.2 Surface Sampling

Surface samples were collected on August 16, 1994, from the Burns Swale portion of PRS 57-001(b), in accordance with LANL-ER-SOP-6.26.R0. On September 15, 1994 a sample was taken from soil beneath the former site of the chemical waste drum (PRS 57-006); and on December 1, 1994, a sample was taken from the gravel at the bottom of PRS 57-007, the chemical waste leach field.

### 1.3.3 Subsurface Sampling

Subsurface soil samples were collected on August 15-16, 1994; from the settling ponds (PRSs 57-001[b], 57-001[c], and 57-004[a]), and from the sludge pit (PRS 57-002). These were taken using a Central Mining Equipment (CME) 45 hollow-stem-auger drill rig and 5-ft stainless-steel core barrel samplers, following LANL-ER-SOP-6.26.R0. Metals concentrations in the core material (in particular, barium) were determined on site using the X-ray fluorescence (XRF) technique. An elevated XRF barium concentration in the core material generally dictated the depth at which the sample was taken for chemical analysis.

On March 14, 1995 a section of stored core (4.5 to 5-ft depth) taken from the sludge pit (PRS 57-002), at sampling location 57-3000, was submitted for metals analysis by the TCLP extraction method.

## 2.0 ENVIRONMENTAL SETTING

The environmental setting of the Laboratory is described in Section 2.4 of the IWP (LANL 1995, 1164). For a detailed discussion of the environmental setting of TA-57, including climate, geology, hydrology, and a conceptual hydrogeologic model for the area and its surroundings, see the RFI Work Plan for OU 1154 (LANL 1994, 1159).

### 2.1 Climate

Los Alamos County has a semiarid, temperate, mountain climate. Summers are generally sunny with moderate, warm days and cool nights. Although temperatures recorded at Fenton Hill are observed to be somewhat colder than the summer and winter temperatures recorded at Los Alamos, according to Petitt (1976, 24-0012), the temperature patterns at Fenton Hill are generally the same as at Los Alamos. With the high altitude, light winds, clear skies, and dry atmosphere, summer temperatures in the TA-57 area range from 50°F at night to 90°F during the day, and winter temperatures typically range from 0°F at night to above 32°F during the day. Average annual precipitation at TA-57 is estimated to be about 17 in. Of this, approximately 40% is produced by brief, intense thunderstorms during the summer months (July through September), which can generate stream flow in area canyons. Spring snowmelt can also generate stream flow in these canyons.

### 2.2 Geology

#### 2.2.1 Geologic Setting

A detailed discussion of the geology of the Los Alamos area can be found in Section 2.5.1 of the IWP (LANL 1995, 1164). Technical Area 57, situated on the Jemez Plateau on the south side of the Jemez Mountains, is about 60 km (37 mi) west of Los Alamos. A geologic column of the region near the site is shown in Figure 2-1. Cenozoic volcanic rocks form the upper surface of the Jemez Plateau, overlying the Permian, Pennsylvanian, and Precambrian rocks (Kaufman & Sicilliano 1979, 24-0013). Bandelier Tuff, a specific age group of cenozoic rocks, is about 106 m (350 ft) thick under the Fenton Hill site. The Tshirege member of the cenozoic rocks forms the uppermost layer of the Bandelier Tuff at Fenton Hill.

#### 2.2.2 Soils

A detailed discussion of the soils in the Los Alamos area can be found in Section 2.5.1.3 of the IWP (LANL 1995, 1164). Although no study of the soils in the high mountain area of Fenton Hill has been published, undisturbed soils are probably typical of the soils described for the plateau tops and edges in the Los Alamos area. However, very little remains of the original surface soil at TA-57 or at the U.S. Forest Service gravel pit, which was used as a sludge dumping site during the geothermal operations.

### 2.3 Hydrology

The hydrology of the Jemez Plateau and of the Fenton Hill area are summarized in the following two sections.

**FENTON HILL STRATIGRAPHY**

| Age | Era | Period | Depth | Formation | Temp. |
|---|---|---|---|---|---|
| | CENOZOIC | Quaternary | | Bandelier Tuff | 46°F 8°C |
| 2.5my | | | 50ft 15m | | 53°F 12°C |
| | | Tertiary | | Paliza Canyon Abiquiu Tuff(?) | |
| 68my | | unconformity | 460ft 140m | | 86°F 30°C |
| | PALEOZOIC | Permian | | Abo red beds | |
| 280my | | | 1,250ft 381m | | 125°F 52°C |
| | | Pennsylvanian-Mississippian | | Madera Limestone<br>Sandia Formation(?) | |
| 345my? | | unconformity | 2,405ft 733m | | 190°F 88°C |
| 570my+ | PROTEROZOIC | | | Fenton Hill granodiorite (intrusive) | |
| 1,300 to 1,700 my | | Precambrian | 15,000ft 4,572m | Metamorphic and igneous complex (undifferentiated) | 608°F 320°C |

Source: Nuckols et al. 1981, 24-0025
Modified by: cARTography by A. Kron 2/1/94

Figure 2-1. Geologic column of Fenton Hill stratigraphy.

### 2.3.1 Surface water

The major surface water drainage near Fenton Hill is the Jemez River and its tributaries (Figure 2-2). The Fenton Hill site slopes gently south, so the major part of the runoff is into Lake Fork Creek, which is tributary to the Rio Cebolla below Fenton Lake. The area immediately northwest of TA-57 drains into an unnamed tributary, which joins the Rio Cebolla at Fenton Lake, and the area immediately northeast of TA-57 drains toward San Antonio Creek but is diverted by a low divide into Lake Fork Creek. At the confluence of the East Fork of the Jemez River and San Antonio Creek, the combined streams become the Jemez River. The Rio Guadalupe drains the area west of Fenton Hill and includes the tributaries Rio de Las Vacas and Rio Cebolla.

### 2.3.2 Groundwater

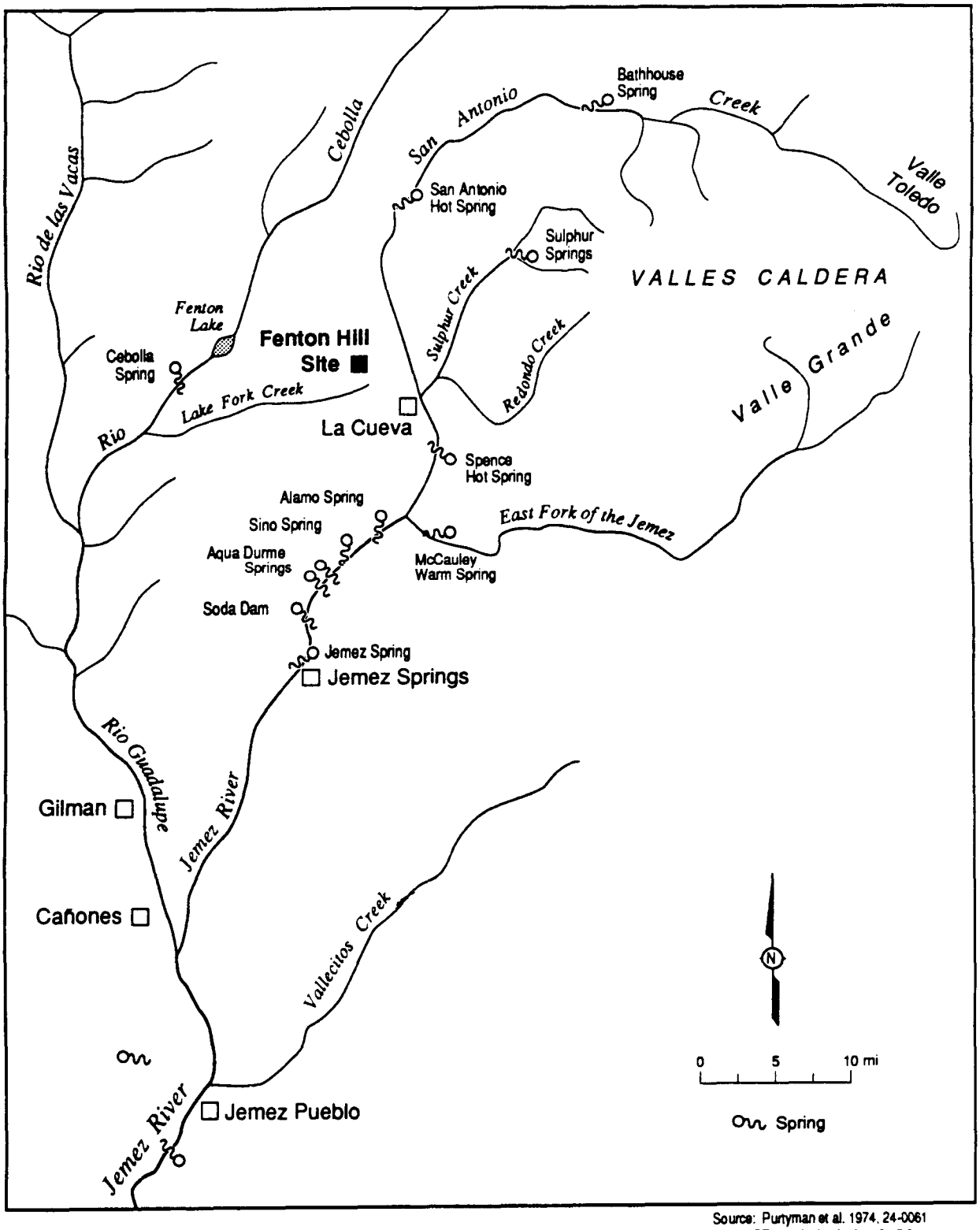
Groundwater is found in the sediments of the Valles caldera and as perched water in volcanic rocks and sediments adjacent to the caldera. The aquifer perched on the Abo Formation produces cold, clean water and is the source tapped by most of the domestic wells that attain bedrock. This perched aquifer is also the water supply for Fenton Hill, via well FH-1, which is about 136 m (450 ft) deep. Beneath the Abo Formation aquifer and other less significant perched aquifers lies the regional aquifer, at a depth of about 533 m (1750 ft), at the base of the Madera formation; many of the hot springs in the region appear at outcrops of this formation.

In Burns Swale, a dry tributary of Lake Fork Canyon, alluvium deposits are 2-6 ft deep in the upper reaches and more than 40 ft deep at the confluence with Lake Fork Canyon. Because alluvium is quite permeable, water can move downgradient in these deposits; alluvial aquifers in the adjacent major river valleys—of the Jemez River, the Rio Guadalupe, and the Rio Cebolla—are the most permeable units in the area.

## 2.4 Biological Surveys

The Fenton Hill site has been surveyed for biological resources, in compliance with the following: the Federal Endangered Species Act of 1973; the New Mexico Wildlife Conservation Act; the New Mexico Endangered Species Act; Executive Order 11990, "Protection of Wetlands"; Executive Order 11988, "Floodplain Management"; 10 CFR 1022; Compliance With Floodplain/Wetlands Environmental Review Requirements (DOE 1979, 0633); and DOE Order 5400.1, General Environmental Protection Program (DOE 1988, 0075). For detailed information on the results of the biological field surveys for TA-57, see the biological assessment report (Keller, in preparation, 24-0074).

The survey identified at least four species classified as endangered and/or threatened on the federal and state lists: the spotted bat, the pine martin, the Jemez Mountain salamander, and the wood lily. Table 2-1 shows the status of each.




Source: Purtyman et al. 1974, 24-0061
Modified by: cARTography by A. Kron 3/15/94

Figure 2-2. Major surface water drainages near Fenton Hill

**TABLE 2-1**

**TA-57: ENDANGERED AND/OR THREATENED SPECIES**

| Species | | Status | |
|---|---|---|---|
| Common Name | Latin Name | Federal | State |
| Spotted bat | *Euderma maculatum* | threatened | endangered |
| Pine martin | *(Martes americana)* | candidate | endangered |
| Jemez Mountain salamander | *Plethodon neomexicanus* | candidate | endangered |
| Wood Lily | *Lilium philadelphicum var. andium* | | endangered |

Mapping of ecological habitats, as part of the survey, showed that suitable habitat for all four species of concern exists in the vicinity of TA-57.

## 2.5 Cultural Surveys

The Fenton Hill site has also been surveyed for cultural resources, as required by the National Historic Preservation Act (amended). No archaeological sites were found in the areas surveyed; three previous surveys of the Fenton Hill environs also reported no archaeological sites (Scheick 1979, 24-0019; Larson 1987, 24-0020; Larson 1987, 24-0021).

## 3.0 APPROACH TO DATA ASSESSMENT AND ANALYSES

Assessment and analysis of the data from the PRSs that are the subject of this report follow the field investigation, chemical analyses, and data reporting, and involve a series of quantitative steps. These begin with data verification and routine data validation and, if necessary, continue with more focused data validation. Data verification ensures that the data are complete, properly organized, and in compliance with contractual requirements. Routine data validation involves comparing each data item with specific targets and adding a qualifier flag to the data if a potential deficiency is noted. Focused data validation consists of analyzing QA/QC data for their potential impact on succeeding data assessment steps, which are: comparing site data with background concentration data; verifying the identities of detected organic chemicals; comparing site data with screening action levels (SALs) for human health effects, and performing human health or ecological risk assessments when necessary. The following subsections provide overviews of the methods used to complete these quantitative steps.

### 3.1 Sample Analyses

All samples requiring chemical and radiological analysis and chain-of-custody documentation were submitted to the sample management office (SMO) for processing and packaging. The SMO shipped the samples to contract laboratories, where all were analyzed for inorganics (metals) and total uranium. In addition, surface samples taken from PRSs associated with the analytical chemistry trailer (PRSs 57-006 and 57-007) were analyzed for volatile organic compounds (VOCs), and samples taken from those areas potentially contaminated by circulating fluids and drilling muds (PRSs 57-001[b], 57-001[c], 57-002, and 57-004[a]) were analyzed for semivolatile organic compounds (SVOCs).

#### 3.1.1 Analytical Methods

All samples were extracted and analyzed using EPA SW-846 methods or equivalent and/or radiological methods, as described in *Quality Control Data Use* (Environmental Restoration Project Decision Support Council, document in preparation). Samples for metals analyses were digested with nitric acid in accordance with EPA-SW-846 Method 3010 (EPA 1986, 1222).

The only deviation from normal ER field operations was that samples were not submitted to the CST-12 Mobile Rad Van for gross radiation screening. Instead, gross alpha and gross beta activities of aliquots of all soil samples were determined by gas proportional counting on a Berthold Counter at the LANL ESH-19 TA-59 Counting Facility, in accordance with LANL ER-SOP 14.01.R0. In this way, a measure of the levels of radioactivity of the samples was obtained before they were shipped to the analytical laboratories.

#### 3.1.2 Data Verification and Validation

Data verification and validation procedures are used to determine whether data packages have been generated according to specifications, are of known quality, and contain the information necessary to ensure the sufficiency of the data for decision making.

Data verification is a check of data deliverables against a set of stated requirements to verify that what has been ordered has been delivered, thus ensuring that the laboratories can be paid. All analytical data generated in support of the ER Project are verified.

Data validation is the process of determining whether individual results can be reliably used to support the decision-making process. Validators determine whether data should be qualified or used with caution because of the potential impact of noted flaws or the failure to achieve precision or bias constraints.

Routine data validation is the comparison of quality indicators (such as surrogate recovery, measurements of method blanks, holding times, differences between replicate measurements) with clearly defined limits to determine whether limitations may need to be placed on the use of the data. Routine validation is most suitable for routine analyses and for those nonroutine analyses for which clearly defined limits have been established.

Focused data validation addresses those characteristics of the data (e.g., precision and bias) that directly affect the decision(s) to be based on the data. The same data set may undergo different focused validations for different decisions.

Personnel from LANL Group CST-3 validated the analytical data for samples from PRSs 57-001(b), 57-001(c), 57-002, 57-004(a), 57-006, and 57-007 in accordance with LANL administrative procedures AP28, AP29, and AP30 (Gautier 1993, 1289). The analytical results and laboratory supporting data are reviewed at one of three levels, as determined by the CST-3 Quality Assurance Officer. The past performance of the laboratory is taken into account in this decision. The most extensive review, Level Three, is a review of all data in the laboratory's data package; Level Two is a review of all final reported data forms, but the raw data is reviewed to a lesser extent if at all; and Level One is a review of most of the final data and of raw data to a lesser extent than Level Two (or not at all). All analytical results for the collected soil samples are reviewed, regardless of the data review level. The analytical data for TA-57 were reviewed at Level One.

Approximately 1475 analyses were conducted for this investigation. Of these, 141 analytical results were qualified as estimated (J) or undetected estimated (UJ). Selenium analyses for 11 samples were rejected (R). (See Chapter 4 for details on the data that were qualified.)

## 3.2 Background Comparisons

Once the data validation process is complete and the site data are finalized, the next step is to compare site metal concentrations with available background data. The comparison provides the basis for deciding whether a metal that has a natural or anthropogenic background distribution should be retained as a COPC or should be eliminated from further consideration. (The results of focused data validation should exclude from this comparison any contaminant that is identified as an artifact of analytical laboratory or field contamination, analytical interference, or improper analyte identification or quantitation.) Background data are available from two sources: (1) chemical analyses of soil samples collected throughout Los Alamos County, for certain inorganic (metal) and naturally occurring radioactive chemicals (Longmire et al. 1995, 1142 and 1266); and (2) background concentrations of radioactive chemicals associated with global fallout from atmospheric nuclear testing (e.g., plutonium, cesium, strontium, and tritium) reported in LANL Environmental Surveillance reports (Purtymun et al. 1987, 0211; ESG 1988, 0408; ESG 1989 0308; Environmental Protection Group 1990, 0497; Environmental Protection Group 1992, 0740)

Each measured concentration of a chemical from the site in question is compared with an upper tolerance limit (UTL) estimated from background data. (Details of statistical methods used to generate UTLs from the background data sets and suggested statistical methods for comparing

site and background concentration distributions are presented in the guidance document, *Statistical Comparisons to Background, Part I*, ER Project Assessments Council 1995, 1218.)

If the reported concentration of a chemical exceeds its UTL or fails other statistical background comparison tests (i.e., the site data are statistically greater than background data), that chemical is carried forward to the screening assessment process. If the reported concentration of a chemical does not exceed the UTL, that chemical is removed from further consideration.

The ER Project has developed UTLs for the most commonly found chemicals and the most commonly analyzed media. For chemicals and/or media not included in the Longmire data (or in FIMAD), UTLs will be developed by the Decision Support Council as needed.

## 3.3 Evaluation of Organic Constituents

Because background data are not available for organic chemicals, the preliminary evaluation of organic chemicals considers detected chemicals and chemicals that were analyzed for but not detected in any sample. This evaluation determines whether, on the basis of detection status, organic chemicals should be retained as COPCs or eliminated from further consideration. Detection status is ascertained by the analytical laboratory on a sample-by-sample, analyte-by-analyte basis. For analytes that are not detected, estimated quantitation limits (EQLs) have been established as reporting limits. (It should be noted that the EQLs reported for individual samples depend on a number of factors and may vary from sample to sample and from analysis to analysis; therefore, the sample-specific EQL must be used in this evaluation.)

As a general rule, if a chemical is reported as detected, then that chemical is carried forward through the screening assessment process. If a chemical is not reported as detected in any sample analyses, that chemical is removed from further consideration. Exceptions may be made if site-specific process knowledge indicates the need. For example, a detected chemical may be removed from further consideration if it can be shown that its presence is not due to Laboratory operations, and a chemical not detected in any sample may be carried through the assessment process if, on the basis of historical operations, it can be expected to be present at the site.

## 3.4 Human Health Assessment

### 3.4.1 Screening Assessment

The screening assessment is used to determine whether, as a result of historical Laboratory operations, chemicals have been released to the environment at levels that may be hazardous to human health or the environment. In the steps described below, which were followed for all TA-57 samples, COPCs retained after comparison with background UTLs are compared with their SALs.

#### 3.4.1.1 Comparison with SALs

SALs are medium-specific concentrations that are calculated using chemical-specific toxicity information and conservative, default exposure assumptions. (A complete discussion of the methods used to generate SALs is provided in *Risk-Based Corrective Action Process*, LANL/SNL 1996,1277.) If the reported concentration is equal to or greater than the SAL, the chemical is retained as a COPC pending further analysis. If the reported concentration is below the SAL, the chemical is generally removed from further consideration (if more than one COPC is present at

the site, this decision is deferred pending the results of the multiple chemical evaluation—see below). The decision to identify a chemical as a COPC when a SAL is not available is made on a case-by-case basis, taking into account the availability of process knowledge and toxicological information.

If the comparison shows that any chemicals are to be retained as COPCs, further action may be proposed. If no COPCs are retained, NFA may be proposed on the basis of no risk to human health.

#### 3.4.1.2 Multiple Chemical Evaluation

It is possible that a chemical should be retained as a COPC because of its potential for adverse health effects when combined with other chemicals present at the site. This possibility is evaluated through the Multiple Chemical Evaluation (MCE): the reported concentration for each chemical is divided by its respective SAL, and the resulting normalized values are incorporated into a simple additive model. If the sum of the normalized values is less than 1, the chemicals are removed from further consideration. If the sum of the normalized values is greater than or equal to 1, any chemical having an individual normalized value greater than or equal to 0.1 is retained as a COPC pending further evaluation (LANL/SNL 1996,1277).

Only those chemicals that exceed background concentration thresholds (certain inorganics and radionuclides) or are detected (organics) in at least one sample are included in the MCE. These chemicals are divided into three classes: noncarcinogens, chemical carcinogens, and radionuclides. Additive effects are assumed within each class, but each class is evaluated separately. For further information on MCEs, see LANL/SNL 1996, 1277.

### 3.4.2 Risk Assessment

Whether or not a human health risk assessment is performed for an individual PRS is decided on the basis of whether any COPCs were identified through the screening assessment. This information is provided, by PRS, in Chapter 5. Risk assessments are carried out in accordance with the guidance in *Risk-Based Corrective Action Process* (LANL/SNL 1996, 1277) and consist of the following four steps:

- identification of chemicals of potential concern,
- exposure assessment,
- toxicity assessment, and
- risk characterization.

## 3.5 Ecological Assessment

The TA-57 environs and the potential for ecological receptors to come into contact with contaminants have been evaluated. LANL Environmental Restoration Project personnel and EPA Region 6 officials have agreed that further ecological risk assessment at this site will be deferred until the PRSs can be assessed through the new Ecological Exposure Unit (Ecozone) approach (currently being developed by LANL in conjunction with the EPA and the NMED).

# 4.0 RESULTS OF QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES

Each group of samples submitted to the LANL Sample Management Office (SMO) for shipment to an analytical laboratory was assigned a unique request number (sometimes referred to as a "sample delivery group" by analytical laboratories). The number assigned was based on the suite of analyses requested (organic, inorganic, and/or radiological). Upon receipt of the completed analyses from the laboratory, a number was assigned to each analytical report for the group represented by the request number. Each report included the results of quality control samples and quality control tests. The following discussion of the quality control results is organized by PRS number and then by request number. In many cases, samples from different PRSs were submitted to the SMO on the same day and thus were included in the same request number package. QC sample results, thus, may apply to more than one PRS.

## 4.1 Inorganic Analyses

### 4.1.1 PRS 57-001(b)

Data from PRS 57-001(b) are usable in support of screening decisions. Six samples were collected at this PRS. As discussed below, there were some problems with respect to percent recoveries that were not within acceptance criteria for the blind QC samples. Nevertheless, the values found in the soil samples were low enough to have little or no effect on the screening assessment discussed in Chapter 5.

Samples from this PRS were analyzed under **Request Number 18574**. For the blind QC sample submitted with the soil samples, percent recovery values for aluminum (70%), chromium (58%), mercury (71%), and vanadium (56%) were in the range of >10% but <75%. In accordance with the validation procedures, the analytical laboratory data for the soil samples are qualified as estimated (J). Nevertheless, the values found in the soil samples—even if adjusted upward to allow for the low recoveries in some of the QC samples—were low enough that they do not affect the outcome of the screening assessments discussed in Chapter 5. The percent recovery values for silver (192%) and arsenic (175%) were in the range of >125% but <200%. These data are usable, but because they could result in false positive values, the reported results for the two analytes were qualified: those that were above or equal to the detection limit (DL) as estimated (J) and those that were below the DL as undetected estimated (UJ).

### 4.1.2 PRS 57-001(c)

Data from PRS 50-001(c) are usable in support of screening decisions. One soil sample was collected at this PRS, which was included in the **Request Number 18574** package. As noted in Section 4.1.1, there were some problems with respect to percent recoveries that were not within acceptance criteria for the blind QC sample associated with this package. But because all the values for the soil samples were either below detection limits or below background UTLs, this problem had little or no effect on the screening assessment.

Arsenic was found in the soil samples above the background UTL. It is possible that these values were biased high, but even so they had no effect on the final outcome of the screening assessment, discussed in Chapter 5. The percent recovery value for selenium, which was >200%, was qualified as unusable (R). Even if this led to an overestimation of selenium values, all affected values would still be below detection limits and should not affect the screening assessment, discussed in Chapter 5.

### 4.1.3 PRS 57-002

Data from PRS 50-002 are usable in support of screening decisions. Three samples were collected at this PRS; two were analyzed for total metals as part of the **Request Number 18574** package, and the third was analyzed for TCLP metals as part of the **Request Number 21559** package.

As discussed in Section 4.1.1, there were some problems with respect to percent recoveries for **Request Number 18574** that were not within acceptance criteria for the blind QC samples. In the case of chromium, these problems could signal that the maximum level reported for the samples collected at PRS 57-002 (18.7 mg/kg) was biased low (the blind QC sample had low recoveries for four analytes, including chromium at 56%). The true value of chromium in the soil samples, then, could be above the background UTL of 19.3 mg/kg. But even if the maximum concentration were doubled to adjust for the low recovery, the resulting concentration would still be far enough below the SAL to have little or no effect on the final outcome of the screening assessment. Therefore, these data are usable for a screening assessment on which decisions can be based.

In the case of the sample included in **Request Number 21559**, the results for the blind QC sample met acceptance criteria. The metal TCLP results are acceptable and unqualified.

### 4.1.4 PRS 57-004(a)

Data from PRS 50-004(a) are usable in support of screening decisions. Two samples were collected at this PRS, which were analyzed as part of the **Request Number 18574** package. As noted in Section 4.1.1, there were some problems with respect to percent recoveries that were not within acceptance criteria for the blind QC sample associated with this package. But because all the values for the soil samples were either below detection limits or below background UTLs, this problem had little or no effect on the screening assessment.

### 4.1.5 PRS 57-006

Data from PRS 57-006 are usable in support of screening decisions. Two samples were collected at this PRS, which were analyzed as part of the **Request Number 19182** package.

Two blind QC samples were submitted in association with this package; for one of these, the results for the metal analytes were in control, but the second sample was not analyzed because of insufficient sample size. Percent recoveries for the QC sample that was analyzed were acceptable. In contrast, the matrix spike sample had percent recoveries for four analytes that were outside of the acceptance criteria: arsenic at 62%, iron at 560%, manganese at 140%, and lead at 330% It is difficult to determine whether the bias seen in the matrix spike sample might be true of the reported soil sample results as well. If so, the actual arsenic levels in the soil at PRS 57-006 may be slightly higher than reported, and the actual lead levels may be lower than reported. However, the magnitudes of these potential biases should still not be large enough to affect the final outcome of the screening assessment discussed in Chapter 5. Cyanide, although not identified in the RFI work plan as a COPC, was inadvertently analyzed for in samples AAB8397 and AAB8398; but because the holding times for cyanide were exceeded, the results were qualified as unusable (R). In any case, given the nature of the operations at PRS 57-006, cyanide was not an analyte expected to be found. The lack of usable cyanide data, therefore, did not affect the screening assessment (see Chapter 5).

### 4.1.6 PRS 57-007

**Request Number 20573:** All of the samples from the one sampling location represented by this request number group met acceptance criteria; the data are deemed acceptable and unqualified.

## 4.2 Organic Analyses

Most of the samples of "service material" submitted for SVOC analysis contained so much organic matter (such as lignite coal, "tall oil," walnut and cottonseed hulls, and organic-based surfactants) that dilutions were required to prevent damage to the analytical instruments and to attempt quantitation of the target compounds. The dilutions caused the target SVOC compounds to be masked, spike recovery to be low, and detection limits to be very large, which made quantitation of the target compounds impossible. In addition, dilutions were used to attempt to quantify tentatively identified compounds (TICs), with similar effects. The one sample of "service material" sediments that allowed routine SVOC analysis, sample number AAB5559, from location 57-2100, was found to have no detectable target SVOC compounds. Even though the SALs for five of the target SVOC compounds in this sample were below the detection limit of 330 mg/kg, one of the five, benzo(a)pyrene, is a known constituent of coal. The other four target SVOC compounds, which have detection limits greater than their SALs, are not known to have been used at Fenton Hill.

Semivolatile organic constituents were used at Fenton Hill only as authorized for the geothermal resource recovery experiments. Therefore, they are not RCRA-regulated constitutents, and the inability to quantify them from soil samples collected at the site is not a reason to consider them COPCs.

### 4.2.1 PRS 57-001(b)

Data from PRS 57-001(b) are usable in support of screening decisions. Six samples were collected at this PRS and were submitted to the SMO, as part of the **Request Number 18570** group, for SVOC analysis.

To attempt to quantify SVOCs in these samples, dilution was required because of the high concentrations of organic matter present. But as a result, no SVOCs were detected in any of the samples, and the surrogates added to samples AAB5558, AAB5560, and AAB5565 were undetectable as well. For this reason, the samples were not qualified.

For QC sample 94.19398, the laboratory reported a concentration of <50% of the spiked value for the following compounds: Anthracene; Benzo(a)pyrene; 1,2-Dichlorobenzene; 1,4-Dichlorobenzene; 4-Methylphenol; Pyrene; Naphthalene; and 1,2,4-Trichlorobenzene. Because the concentrations of these compounds in the soil samples were all below reporting limits, they were qualified as UJ. For 2-Methylphenol and 4-Nitrophenol, the detected concentrations were <10% in the QC sample and below detection limits in the soil sample; even so, the results were qualified as R. Nevertheless, because these two compounds are not known to have been used at this PRS, they are unlikely to be present in the soils at concentrations that could affect the outcome of the screening assessment.

### 4.2.2 PRS 57-001(c)

Data from PRS 57-001(c) are usable in support of screening decisions. One soil sample was collected at this PRS and was submitted under **Request Number 18570.** As discussed in Section 4.2.1, there were some problems with the blind QC sample analyzed with the soil samples in this group (percent recoveries <50%). But because all the values for the soil samples were below

detection limits, the QC blind sample recovery problem should have little effect on the screening assessment discussed in Chapter 5.

### 4.2.3 PRS 57-002

Data from PRS 57-002 are usable in support of screening decisions. Two samples were collected at this PRS and were analyzed for SVOCs under **Request Number 18570**. Because of the high concentrations of organic matter in these samples, as discussed in Section 4.2.1, there were some problems with respect to percent recoveries that were not within acceptance criteria for the blind QC sample associated with this group. But because all the values for the soil samples were below detection limits, this problem should have little effect on the screening assessment discussed in Chapter 5.

### 4.2.4 PRS 57-004(a)

Data from PRS 57-004(a) are usable in support of screening decisions. Two samples were collected at this PRS and were submitted for analysis under **Request Number 18570**. Because of the high concentrations of organic matter in these samples, as discussed in Section 4.2.1, there were some problems with respect to percent recoveries that were not within acceptance criteria for the blind QC sample associated with this group. But because all the values for the soil samples were below detection limits, this problem should have little effect on the screening assessment.

### 4.2.5 PRS 57-006

Data from PRS 57-006 are usable in support of screening decisions. Two samples were collected at this PRS and were analyzed as part of the **Request Number 19224** group. No blind QC sample was analyzed with this group, but specified surrogate recoveries, holding times, and method blank values were all met. Acetone was found in field replicate AAB8398 at 70 mg/kg but in the original sample (AAB8397) at <20 mg/kg. Both of these values were far enough below the SAL for acetone to have no effect on the final outcome of the screening assessment discussed in Chapter 5.

### 4.2.6 PRS 57-007

Data from PRS 57-007 are usable in support of screening decisions. One sample was collected at this PRS and was analyzed for VOCs under **Request Number 20571**. Specified surrogate recoveries, holding times, and method blank requirements were met.

## 4.3 Total Uranium Analyses

### 4.3.1 PRS 57-001(b)

Data from PRS 57-001(b) are fully usable for support of screening decisions. Six soil samples were collected at this PRS and were submitted for total uranium analysis as part of the **Request Number 18574** group. No QC problems were noted for these samples.

### 4.3.2 PRS 57-001(c)

Data from PRS 57-001(c) are fully usable for support of screening decisions. One soil sample was collected at this PRS and was submitted for total uranium analysis as part of the **Request Number 18574** group. No QC problems were noted for this sample.

### 4.3.3 PRS 57-002

Data from PRS 57-002 are fully usable for support of screening decisions. Two soil samples were collected at this PRS and were submitted for total uranium analysis as part of the **Request Number 18574** group. No QC problems were noted for these samples.

### 4.3.4 PRS 57-004(a)

Data from PRS 57-004(a) are fully usable for support of screening decisions. Two soil samples were collected at this PRS and were submitted for total uranium analysis as part of the **Request Number 18574** group. No QC problems were noted for these samples.

### 4.3.5 PRS 57-006

Data from PRS 57-006 are usable in support of screening decisions. Two samples were collected at this PRS and were submitted for total uranium analysis as part of the **Request Number 19182** group. Because the percent recovery value for total uranium in the blind QC sample was above the acceptance criterion, the total uranium results for samples AAB8397 and AAB8398 were qualified as estimated (J). This should not affect the final outcome of the screening assessment, discussed in Chapter 5.

### 4.3.6 PRS 57-007

Data from PRS 57-007 are usable in support of screening decisions. One sample was collected at this PRS and was analyzed for total uranium as part of the **Request Number 19182** group. Because this group consisted of a single soil sample, a blind QC sample was not analyzed with it.

## 5.0 SPECIFIC RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

Information on the sampling done at Fenton Hill is summarized in Table 5-1 (including the depths from which samples were taken and the constituents analyzed for). The sampling locations for the main compound at Fenton Hill are shown in Figure 1-1.

**TABLE 5-1**

**SUMMARY OF SAMPLING AT TA-57**

| FIMAD Site ID | Depth (ft) | PRS | Date Sampled | Metals | TCLP Metals | SVOCs | VOCs | Total U |
|---|---|---|---|---|---|---|---|---|
| 57-2200 | 11-12 | 57-001(b) | 15 Aug 94 | X | | X | | X |
| 57-2300 | 4-5 | 57-001(b) | 16 Aug 94 | X | | X | | X |
| 57-2300 | 0-1 | 57-001(b) | 16Aug 94 | X | | X | | X |
| 57-2350 | 3-4 | 57-001(b) | 16 Aug 94 | X | | X | | X |
| 57-2350 | 0-1 | 57-001(b) | 16 Aug 94 | X | | X | | X |
| 57-2300R | 0-1 | 57-001(b) | 16 Aug 94 | X | | X | | X |
| 57-2100 | 4.5-5 | 57-001(c) | 15 Aug 94 | X | | X | | X |
| 57-3000 | 4.5-5 | 57-002 | 16 Aug 94 | X | | X | | X |
| 57-3100 | 9-10 | 57-002 | 16 Aug 94 | X | | X | | X |
| 57-2000 | 5.25-6 | 57-004(a) | 15 Aug 94 | X | | X | | X |
| 57-2000 | 6-7 | 57-004(a) | 15 Aug 94 | X | | X | | X |
| 57-4000 | 0-1* | 57-007 | 1 Dec 94 | X | | | X | X |
| 57-4010 | 0-0.5** | 57-006 | 15 Sep 94 | X | | | X | X |
| 57-4010R | 0-0.5** | 57-006 | 15 Sep 94 | X | | | X | X |
| 57-3000 | 4-5 | 57-002 | 14 Mar 95 | | X | | | |

x = Analytical report received from CST-9.

* Sample collected from 0- to 6-in. depth directly below drum excavation.

** Sediment sample from leach field, collected at 0- to 1-ft depth at end of drain pipe in excavation trench.

### 5.1 PRS 57-001(b): Settling Ponds and Outfall

This PRS comprises two settling ponds, GTP-3E (east) and GTP-3W (west), as well as an outfall area (Burns Swale). Pond GTP-3E was originally used as the mud pit for the drilling of well GT-2. Pond GTP-3W, which was much larger (estimated to have been about 20 ft deep), was used in conjunction with not only well GT-2 but with the other deep drill holes at the site and was therefore considered to have the higher potential for contamination. For this reason, Pond GTP-3W was selected for sampling. Burns Swale, which received the discharges from Pond GTP-3W and the other settling ponds, was also sampled. On the basis of the analytical results, we recommend NFA for Pond GTP-3W and Phase II investigations for Burns Swale.

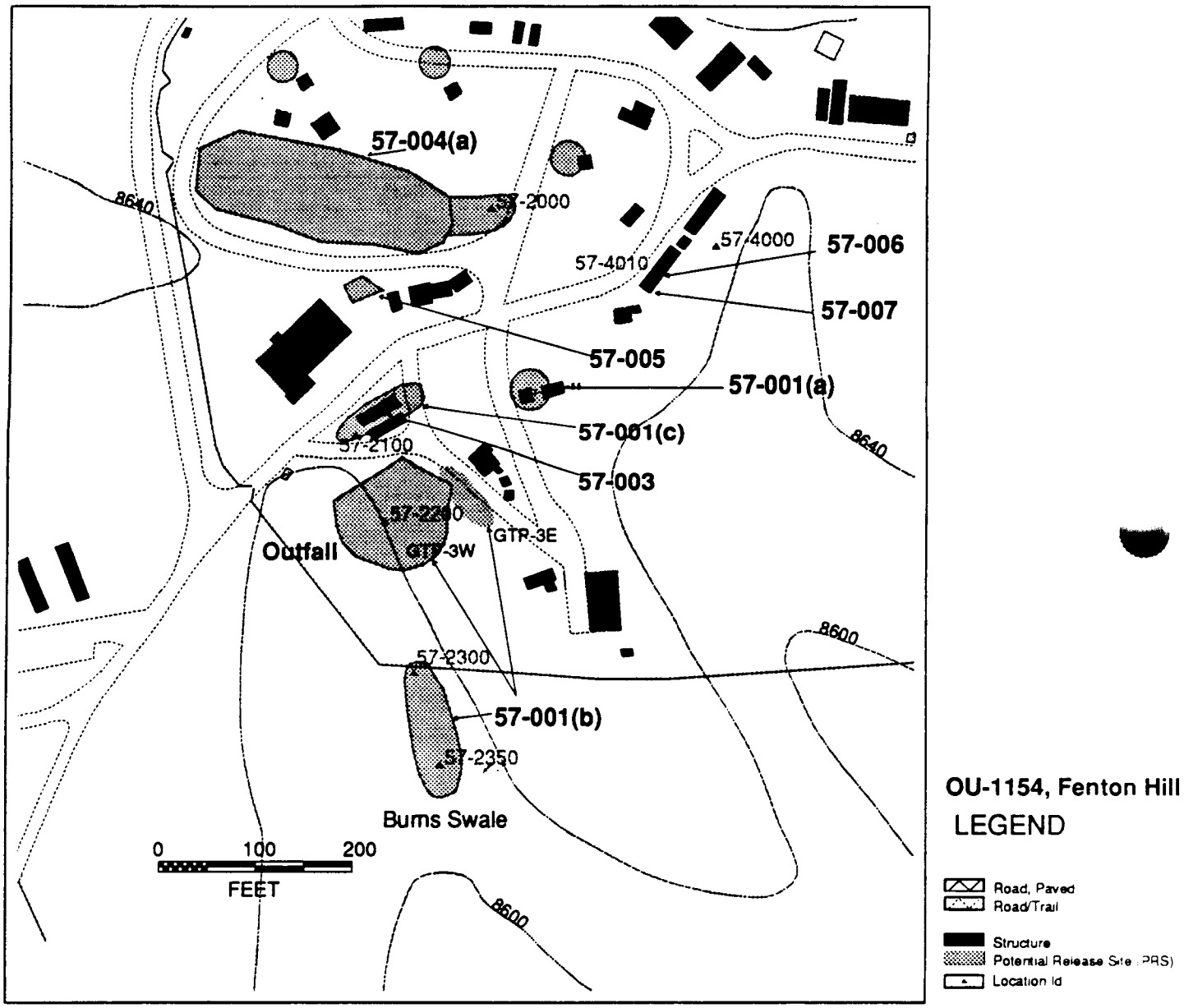



Figure 5-1: Sampling locations at Fenton Hill main compound

Source: FIMAD, 11/21/95, G103966
Modified by: C. Rivera Lyons 1/25/96

### 5.1.1 History

PRS 57-001(b) is discussed in detail in Section 5.2 of the RFI Work Plan for OU 1154 (LANL 1994, 1159).

Pond GTP-3W was created by constructing an approximately 10-ft-high berm across the head of Burns Swale, a natural drainage channel at the southern edge of the site, and excavating into the tuff. A spillway directed overflow water around the west end of the berm and into the swale. This pond was used as a settling pond for particulates from the water used in the drilling and circulating operations. After the particulates had settled out, the water was either recirculated or discharged into the swale. Materials entering this PRS were drilling muds (which included barite and lubricating materials) and chemical constituents dissolved by the water as it circulated through the hot rocks deep underground. In addition, dissolved solids in the water were precipitated in the settling ponds as the water cooled; these may have added contaminants such as metals to the pond-bottom sludge.

### 5.1.2 Description

PRS 57-001(b) is described in Section 5.2 of the RFI Work Plan for OU 1154 (LANL 1994, 1159) and in Section 1.2.1.1 of this report.

### 5.1.3 Previous Investigations

Investigations were conducted for this PRS and for the other settling ponds throughout the geothermal energy recovery project, because water quality, extent of infiltration from ponds, surface releases, and contaminant accumulation in plants were all of concern for experimental as well as environmental reasons. The conclusions of these investigations are summarized below (See Section 5.2 of the RFI Work Plan for OU 1154—LANL 1994, 1159—for further details.)

#### 5.1.3.1 Water Quality

The chemical characteristics and quality of the pond water varied greatly, depending on the type of operation being carried out; for example, in addition to additives from drilling operations being discharged to the ponds, water used in the geothermal energy recovery experiments and drilling operations was returned to the ponds for reuse, and fresh water was added periodically to replace discharged or evaporated water. Over time, through these processes, the concentrations of chemicals in the ponds increased—especially total dissolved solids and residual concentrations of elements such as arsenic, lithium, boron, and uranium. The quality of the water in ponds GTP-1E (PRS 57-004[a]) and GTP-3W (PRS 57-001[b]) was described in the RFI Work Plan as "slightly above discharge standards," as "deteriorating, due to sulfates and TDS," as "highly mineralized," and as having "elevated lithium and boron." The average chemical composition of the pond waters for 1977 and 1978 are shown in Table 5-3 of the RFI Work Plan for OU 1154 (LANL 1994, 1159).

#### 5.1.3.2 Infiltration From Ponds

Findings from the drilling of several test holes showed that water from the settling ponds was infiltrating the underlying tuff, at a rate of about 4 million liters per year. According to water balance calculations, approximately 31% of the water brought onto the site was lost by this route (At the same time, as discussed later in this report, sampling of the tuff beneath the ponds did not show any contamination.)

#### 5.1.3.3 Surface Releases

Water from the settling ponds was periodically released from Pond GTP-3W into Burns Swale. To ensure compliance with EPA standards for irrigation, the water in the pond was sampled before each planned surface release; if it did not meet the standards, the water was not released until the relevant constituent concentrations had been reduced. The quality of the water ultimately released to Burns Swale, then, met EPA's proposed standards for continuous irrigation and livestock consumption.

#### 5.1.3.4 Accumulation In Plants

Between the mid 1970s and mid 1980s, samples of vegetation were collected from the bottom and banks of Burns Swale. Although the plants showed no visible signs of stress, chemical analysis revealed concentrations of boron and lithium in the foliage, at levels reported in the literature to cause plant damage. The foliage was also analyzed for arsenic, cadmium, and fluoride, but none of these was found at levels considered toxic to the plants. Because all of these elements were known to be present in the pond water, their presence in the plants was attributed to the discharges from the ponds.

### 5.1.4 Field Investigation

The sampling done at PRS 57-001(b) is summarized in Table 5-2.

**TABLE 5-2**

**PRS 57-001(b): SUMMARY OF SAMPLING**

| Location ID | Sample ID | Depth (ft) | Sample Matrix | Sample Request Number | | |
|---|---|---|---|---|---|---|
| | | | | SVOCs | INORG | TOTAL U |
| 57-2200 | AAB5560 | 11 - 12 | soil | 18570 | 18574 | 18574 |
| 57-2300 | AAB5561 | 4 - 5 | soil | 18570 | 18574 | 18574 |
| 57-2300 | AAB5562 | 0 - 1 | soil | 18570 | 18574 | 18574 |
| 57-2300R | AAB8396 | 0 - 1 | soil | 18570 | 18574 | 18574 |
| 57-2350 | AAB5563 | 3 - 4 | soil | 18570 | 18574 | 18574 |
| 57-2350 | AAB5564 | 0 - 1 | soil | 18570 | 18574 | 18574 |

#### 5.1.4.1 Pond GTP-3W

Pond GTP-3W, the larger and most used of the two ponds in this PRS, was the focus of the Phase I investigation; it was assumed that the contents of this pond, as revealed by sampling, would be representative of the contents of Pond GTP-3E as well. The sampling location for this pond was designated 57-2200.

At the time of its decommissioning, Pond GTP-3W was mucked out and backfilled—reportedly not only with clean soil but with large boulders taken from a local road construction project. Because the boulders were probably of the same rock type as the Bandelier Tuff underlying the pond, the sampling approach proposed in the RFI Work Plan was to drill an additional 10 ft whenever tuff

was encountered, to ensure that bedrock had been reached, not a boulder. This procedure was found to be unnecessary, however. At 11 ft. a layer of the black "service material" (sludge-like mixture of drilling mud and additives, not entirely removed by the mucking out) was encountered. The black coloration of this material may be due to the thousands of pounds of lignite (a low-grade coal) that was a component of the drilling materials. Visual observations of the "service material" and x-ray fluorescence (XRF) screening, for barium, of sediments from this layer indicated that the 11- to 12-ft depth would contain the highest concentrations of chemicals. Below this layer, at 16.25 ft, tuff bedrock was encountered. Drilling continued to a final depth of 17.25 ft.

Beginning at a depth of 3 ft, the core was sampled at 1-ft intervals; these samples were field-screened for metals by XRF and for VOCs with either an organic vapor analyzer (OVA) or a photoionization detector (PID). Per the RFI Work Plan, these field screenings, as well as visual observations, would be used to determine the horizons having the highest constituent concentrations—an approach adopted because the original depths of the ponds where the most contaminated sediments should be found were not precisely known. The samples to be submitted for laboratory analysis, one for metals and one for SVOCs, were to come from those horizons. If no horizon of high constituent concentration was indicated by the field screening for either metals or organic compounds, the sample was to be taken from the bottom of the hole. Because the Hnu meter did not measure any VOCs at any core horizon, both the metal and the SVOC samples were collected from the 11- to 12-ft depth (the "service" material) on the basis of visual observations and the relatively elevated XRF barium readings at that depth (see Table 5-3).

**TABLE 5-3**

**SAMPLING LOCATION 57-2200: BARIUM CONCENTRATIONS IN SOILS, DETECTED BY FIELD XRF**

| Depth (ft) | Barium Concentration (mg/kg) |
|---|---|
| 2 - 3 | 2285 |
| 3 - 4 | 1221 |
| 4 - 5 | 818 |
| 6 - 7 | 166 |
| 7 - 8 | 358 |
| 8 - 9 | 1543 |
| 9 - 10 | 1612 |
| 11 - 12 | 5318 |
| 12 - 13 | 5058 |
| 13 - 14 | 1009 |
| 14 - 15 | 258 |
| 15 - 16 | 1172 |
| 16 - 17 | 440 |
| 17 - 18 | 175 |

### 5.1.4.2 Burns Swale

Shallow surface (0-1 ft) and subsurface sediment samples were taken at two locations in Burns Swale: (1) 57-2300, just south of the perimeter fence, at the inlet of the swale; and (2) 57-2350, approximately 100 ft downstream of 57-2300. Although the RFI Work Plan had called for sampling 100 ft and 150 ft south of the site's boundary fence, the rugged terrain and extremely muddy conditions caused by recent heavy rains made the latter location inaccessible by the drill rig. It was therefore decided to collect one sample just south of the fence and the second one at

the location 100 ft south of the fence. Both of the selected sampling locations were judged to be in sediment traps within the swale.

The Work Plan also called for collection of subsurface samples from the sediments overlying the bedrock surface, unless XRF screening revealed elevated metal (barium) concentrations in intervening horizons. Bedrock was estimated to lie at a depth of 3 - 8 ft at both locations.

**Sampling location 57-2300**: Evidence of historical surface water discharges were noted at this location. One surface sample and a replicate were collected from the 0- to 1-ft depth and were submitted for total metals, total uranium, and SVOCs. Tuff was encountered at 7 ft, and boring continued to a final depth of 9.75 feet. The subsurface sample was collected at the 4- to 5-ft depth rather than at the tuff interface, on the basis of the slightly elevated barium concentration found at this depth as measured by XRF (Table 5-4). This sample was analyzed for total metals, total uranium, and SVOCs. No "service material" was noted on the ground surface or in the collected core.

**TABLE 5-4**

**SAMPLING LOCATION 57-2300: BARIUM CONCENTRATIONS IN SOILS. DETECTED BY FIELD XRF**

| Depth (ft) | Barium Concentration (mg/kg) |
|---|---|
| 0 - 1 | 233 |
| 1 - 2 | 258 |
| 3 - 4 | 293 |
| 4 - 5 | 494 |
| 5 - 6 | 237 |
| 6 - 7 | 159 |
| 7 - 8 | 127 |

**Sampling location 57-2350:** This site, situated at the bottom of the eroded stream channel, also shows evidence of historical surface water movement. One surface sediment sample was collected from the 0- to 1-ft depth and submitted for total metals, total uranium, and SVOC analyses. Tuff was encountered at 3.5 feet, and boring continued to a final depth of 4.5 ft. Because XRF screening of samples from shallower depths did not show elevated barium concentrations (Table 5-5), the subsurface sample was collected at the tuff interface; it was analyzed for metals, total uranium, and SVOCs.

**TABLE 5-5**

**SAMPLING LOCATION 57-2350: BARIUM CONCENTRATIONS IN SOILS, DETECTED BY FIELD XRF**

| Depth (ft) | Barium Concentration (mg/kg) |
|---|---|
| 3 - 4 | 129 |
| 4 - 5 | 104 |

### 5.1.5 Background Comparisons

All inorganic analytes, except silver, detected in soil samples from PRS 57-001(b) were compared with their natural background Upper Tolerance Limits (UTLs) (no UTL is available for silver). Those whose concentrations exceeded background UTLs are shown in Table 5-6. As shown in Table A-1 (Appendix A), which lists the complete analytical results for those soil samples, all of these analytes except arsenic, barium, calcium, cadmium, copper, lead, magnesium, manganese, sodium, total uranium, and zinc were eliminated as COPCs because they were detected at concentrations below their respective background UTLs. In the case of silver, for which no UTL has been established, detected concentrations were below the SAL for silver in soil (400 mg/kg). Silver was therefore eliminated as a COPC. The detection limits for antimony, which ranged from <4.9 to 5.3 mg/kg for these samples, were greater than the UTL for antimony in soil (1 mg/kg); but because all reported antimony concentrations were less than the SAL (32 mg/kg), this analyte was also eliminated as a COPC.

The locations from which samples were collected that contained analytes in concentrations exceeding background UTLs are shown in Figure 5-2.

**TABLE 5-6**

**PRS 57-001(b): INORGANIC ANALYTES FOUND IN SOILS AT CONCENTRATIONS GREATER THAN BACKGROUND UTLs**

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | UTL (mg/kg) |
|---|---|---|---|---|---|
| Arsenic | 57-2200 | AAB5560 | 11-12 | 103(J) | 7.82 |
| | 57-2300 | AAB5562 | 0-0.5 | 30(J) | |
| | 57-2300R | AAB8396 | 0-0.5 | 22(J) | |
| Barium | 57-2200 | AAB5560 | 11-12 | 11200 | 315 |
| | 57-2300 | AAB5562 | 0-0.5 | 525 | |
| | 57-2300R | AAB8396 | 0-0.5 | 523 | |
| Calcium | 57-2200 | AAB5560 | 11-12 | 22900 | 6120 |
| Cadmium | 57-2300 | AAB5561 | 4.4-5 | 4.3 | 2.7 |
| | 57-2350 | AAB5564 | 0-0.5 | 3.1 | |
| Chromium | 57-2200 | AAB5560 | 11-12 | 23.8(J) | 19.3 |
| Copper | 57-2200 | AAB5560 | 11-12 | 216 | 30.7 |
| Magnesium | 57-2200 | AAB5560 | 11-12 | 25100 | 4610 |
| Manganese | 57-2350 | AAB5564 | 0-0.5 | 862 | 714 |
| Sodium | 57-2200 | AAB5560 | 11-12 | 2800 | 915 |
| Lead | 57-2200 | AAB5560 | 11-12 | 167 | 23.3 |
| Total Uranium | 57-2300 | AAB5561 | 4-5 | 1.899 | 1.87 |
| Zinc | 57-2200 | AAB5560 | 11-12 | 221 | 50.8 |

The twelve metals shown in Table 5-6 are retained as COPCs and will be evaluated further in the screening assessment.

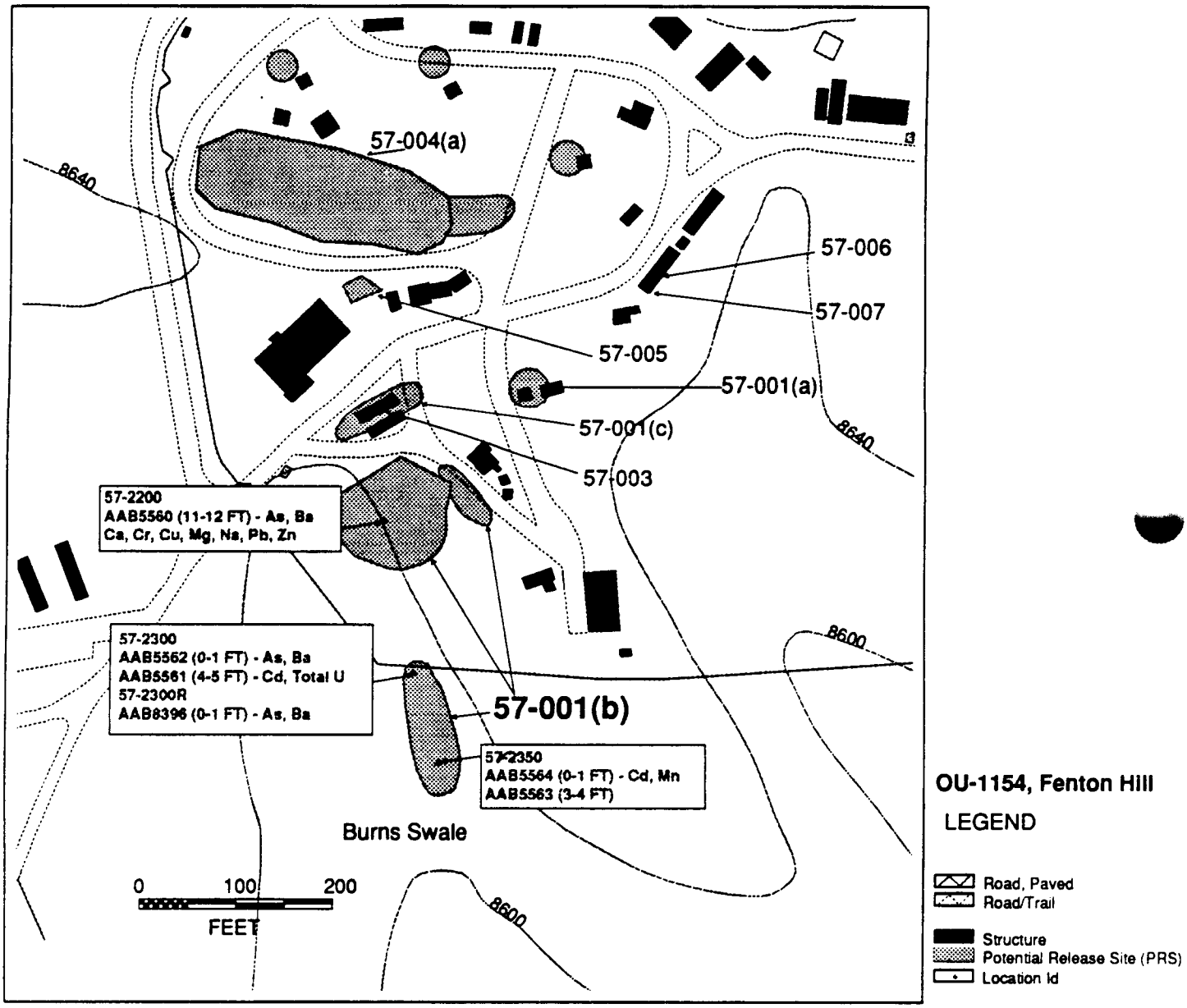



Figure 5-2. PRS 57-001(b): Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs

Source: FIMAD, 11/21/95, G103966
Modified by: C. Rivera Lyons 1/28/96

### 5.1.6 Evaluation of Organic Constituents

No organic chemicals were detected in soil samples from PRS 57-001(b). See Chapter 4, Section 4.2.1.

### 5.1.7 Human Health Assessment

#### 5.1.7.1 Screening Assessment for PRS 57-001(b)

The twelve inorganic analytes retained as COPCs after comparison with their background UTLs were next compared with their SALs.

##### 5.1.7.1.1 Pond GTP-3W

The concentrations of the COPCs found in Pond GTP-3W, as compared with their SALs, are shown in Table 5-7.

**TABLE 5-7**

**POND GTP-3W:**
**CONCENTRATIONS OF COPCs vs SALs**

| Chemical | Location ID | Sample No. | Depth (ft) | Type | Concentration (mg/kg) | SAL (mg/kg) |
|---|---|---|---|---|---|---|
| Arsenic | 57-2200 | AAB5560 | 11-12 | core | 103(J) | N/A |
| Barium | 57-2200 | AAB5560 | 11-12 | core | 11200 | 5300 |
| Calcium | 57-2200 | AAB5560 | 11-12 | core | 22900 | No SAL |
| Chromium | 57-2200 | AAB5560 | 11-12 | core | 23.8(J) | 210 |
| Copper | 57-2200 | AAB5560 | 11-12 | core | 216 | 2800 |
| Lead | 57-2200 | AAB5560 | 11-12 | core | 167 | 400 |
| Magnesium | 57-2200 | AAB5564 | 11-12 | core | 25100 | No SAL |
| Manganese | 57-2200 | AAB5560 | 11-12 | core | 389 | No SAL |
| Sodium | 57-2200 | AAB5560 | 11-12 | core | 2800 | No SAL |
| Zinc | 57-2200 | AAB5560 | 11-12 | core | 221 | 23000 |

**Greater than or equal to SAL.** Only barium was detected at concentrations above its SAL.

**No SAL.** Arsenic, calcium, magnesium, manganese, and sodium fall into the No SAL category. For calcium, magnesium, and sodium, no SALs have been established because they are essential nutrients. As shown in Appendix C, their concentrations at PRS 57-001(b) are well below the recommended daily allowances (RDAs—National Research Council 1989, 1251). On that basis, calcium, magnesium, and sodium are eliminated as COPCs. For arsenic and manganese, the calculated SALs are below the background UTLs of the Los Alamos background dataset; the background UTL, then, in essence becomes the SAL. For manganese, the concentration detected in the sample from the pond was below the background UTL, and on that basis manganese is eliminated as a COPC. Arsenic is retained as a COPC because its concentration is elevated with respect to its background UTL.

**Below SAL.** Chromium, copper, lead, and zinc were all detected in concentrations below their respective SALs.

**Multiple Chemical Evaluation.** To evaluate multiple chemical effects for this data set, chemicals detected at concentrations below their respective SALs were grouped according to their toxicological effects (carcinogenic or noncarcinogenic). Because there was only one carcinogen (chromium), multiple chemical effects were evaluated only for the three noncarcinogens. The concentration of each was normalized to its SAL, and the results were summed, as described in Subsection 3.4.1. Table 5-8 shows the results of the multiple chemical evaluation for the three noncarcinogens.

**TABLE 5-8**

**POND GTP-3W: MULTIPLE CHEMICAL EVALUATION**

| Chemical | Concentration (mg/kg) | SAL (mg/kg) | Normalized Value |
|---|---|---|---|
| Copper | 216 | 2 800 | 0.08 |
| Lead | 167 | 400 | 0.42 |
| Zinc | 221 | 23 000 | 0.01 |
| Sum of Normalized Values | | | **0.51** |

The results of the multiple chemical evaluation based on noncarcinogenic effects is less than one (0.51), indicating that potential adverse human health effects from exposure to these chemicals are unlikely. Therefore, all three chemicals are eliminated as COPCs.

The COPCs remaining for Pond GTP-3W are arsenic and barium.

#### 5.1.7.1.2 Burns Swale

Because Burns Swale did not receive any fill material (the site was not decommissioned), samples were collected from surface soils and from either the tuff interface or from the subsurface depth judged to have the highest concentration of potential contaminants. The maximum detected concentrations of the COPCs found in Burns Swale, as compared with their SALs, are shown in Table 5-9.

**TABLE 5-9**

**BURNS SWALE:**
**CONCENTRATIONS OF COPCs vs SALs**

| Chemical | Location ID | Sample No. | Depth (ft) | Type | Concentration (mg/kg) | SAL (mg/kg) |
|---|---|---|---|---|---|---|
| Arsenic | 57-2300 | AAB5562 | 0-1.0 | surface | 30(J) | N/A |
| | 57-2300R | AAB8396 | 0-1.0 | surface | 22(J) | |
| Barium | 57-2300 | AAB5562 | 0-1.0 | surface | 525 | 5 300 |
| | 57-2300R | AAB8396 | 0-1.0 | surface | 523 | |
| Cadmium | 57-2300 | AAB5561 | 4-5 | core | 4.3 | 38 |
| | 57-2350 | AAB5564 | 0-0.5 | surface | 3.1 | |
| Manganese | 57-2350 | AAB5564 | 0-1.0 | surface | 862 | N/A |
| Uranium | 57-2300 | AAB5561 | 11-12 | core | 1.899 | 230 * |

N/A = Not applicable. SAL is below background concentrations.

*230 mg/kg is the SAL for uranium soluble salts.

**Greater than or equal to SAL.** No chemicals fall into the greater than or equal to SAL category.

**No SAL.** Arsenic and manganese fall into the No SAL category because the calculated SALs are below the background UTLs of the Los Alamos background dataset. The background UTL, then, in essence becomes the SAL. Arsenic and manganese are retained as COPCs because their detected concentrations in Burns Swale are elevated with respect to their background UTLs.

**Below SAL.** The detected concentrations of barium, cadmium, and uranium were all below the respective SALs for these analytes. Antimony detection limits for these samples were all greater than the UTL but were less than the SAL for antimony in soil (32 mg/kg). For this reason, antimony is categorized as below SAL.

**Multiple Chemical Evaluation.** To evaluate multiple chemical effects for this data set, chemicals detected below their respective SALs were grouped according to their toxicological effects (carcinogenic or noncarcinogenic). All of the chemicals in this group are noncarcinogens. The concentration of each was normalized to its SAL, and the results were summed as described in Section 3.4.1. Table 5-10 shows the results of the multiple chemical evaluation.

**TABLE 5-10**

**BURNS SWALE: MULTIPLE CHEMICAL EVALUATION**

| Chemical | Concentration (mg/kg) | SAL (mg/kg) | Normalized Value |
|---|---|---|---|
| Barium | 525 | 5300 | 0.10 |
| Cadmium | 4.3 | 38 | 0.11 |
| Uranium | 1.899 | 230* | 0.01 |
| Sum of Normalized Values | | | **0.22** |

*230 mg/kg is the SAL for uranium soluble salts.

The results of the multiple chemical evaluation based on noncarcinogenic effects is less than one (0.22), indicating that potential adverse human health effects from exposure to these chemicals are unlikely. Therefore, all three chemicals are eliminated as COPCs.

The COPCs remaining for Burns Swale, then, are arsenic and manganese.

#### 5.1.7.2 Risk Assessment for PRS 57-001(b)

Because the elevated concentrations of arsenic and barium detected in the pond sample were all found at 11-12 ft below the ground surface, there is no plausible route under the recreational use scenario by which humans could be exposed to these contaminants. On that basis, no risk assessment is required for Pond GTP-3W.

The elevated levels of arsenic and manganese (exceeding UTLs) in Burns Swale, on the other hand, could pose an unacceptable risk to humans, and a formal risk assessment may be necessary. We therefore propose an accelerated, focused RFI (Phase II) sampling program for Burns Swale to assess the extent of contamination and thereby better estimate risk to humans.

### 5.1.8 Ecological Assessment

Given the largely undeveloped environs of this PRS, the potential for receptors to come in contact with contaminants is high. Threatened and endangered species and/or sensitive habitat (see Chapter 2, above) will be considered in the Phase II investigation, following the guidance of Keller (1995, 24-0074). This PRS will be assessed through the new Ecological Exposure Unit (Ecozone) approach, which considers contaminants with concentrations greater than UTLs, when that approach has been approved through the ER Project office.

### 5.1.9 Extent of Suspected Contamination

The purpose of the Phase I investigations was reconnaissance; the extent of suspected contamination in this PRS can be determined only if additional data are collected.

The suspected contamination of Burns Swale, which is a result of discharges from Pond GTP-3W, consists only of arsenic (location 57-2300) and manganese (location 57-2350) and apparently is limited to the surface. For arsenic, the concentration at sampling location 57-2300 (nearest the discharge point) was above the UTL in the surface sample but not in the subsurface sample (Arsenic was below UTLs in both the surface and subsurface samples from location 57-2350, 100 ft farther downstream.) For manganese, the concentration in the surface sample at location 57-2350 slightly exceeded the UTL and in the subsurface sample was below the UTL. The extent of suspected surface soil contamination in Burns Swale, thus, can be estimated by determining arsenic and manganese concentrations in the surface soils, in the area from the discharge point to 300 ft downstream.

### 5.1.10 Conclusions and Recommendations

In the case of Pond GTP-3W, the potential for human contact with contaminants, which are buried 11-12 ft below the ground surface, is negligible. For this reason, we recommend NFA for the pond portion of PRS 57-001(b) on the basis of NFA criterion 4. This portion of the PRS will not be added to the HSWA Module of the Laboratory RCRA operating permit and is proposed for removal from the ER Project list. For the Burns Swale portion, we recommend Phase II sampling, to determine the extent of the arsenic and manganese contamination in surface soils

and to calculate human health risk under the recreational land-use scenario. The sampling and analysis plan for these Phase II investigations is presented below.

### 5.1.11 Sampling and Analysis Plan for Burns Swale Portion of PRS 57-001(b)

#### 5.1.11.1 Problem Definition

Two inorganic analytes, arsenic and manganese, were detected in Burns Swale at concentrations exceeding the background UTL. The results of a preliminary risk screening did not support an NFA decision. The indication of elevated arsenic and manganese, however, came from only three surface soil samples (including one replicate), and these came from the middle of the drainage—the area expected to have the highest concentrations. This Phase II sampling plan is designed to determine the distributions of arsenic and manganese in Burns Swale surface soils. A human health risk assessment will be performed on the basis of the sampling results. The human health risk assessment will define whether Burns Swale can be recommended for NFA or will require corrective measures.

#### 5.1.11.2 Site Description

Burns Swale, a small drainage off the Fenton Hill site, courses through a wooded area (see Figure 1-2 in Chapter 1 and Sections 5.1 and 5.1.1 in this chapter). The source of the arsenic and manganese found in the surface soils of the swale was the permitted liquid discharges from Pond GTP-3W —a source that no longer exists because the pond has been decommissioned.

As stated in the RFI Work Plan, the depth to the nearest groundwater (perched on the Abo Formation) at this location is approximately 450 ft. PRS 57-001(b) is not believed to pose a threat to this or any other groundwater: neither the tuff underlying the sludge layer in the pond system nor the tuff underlying the soil in Burns Swale has metal concentrations that exceed UTLs, indicating that vertical movement of contaminants into the tuff and towards groundwater is minimal.

#### 5.1.11.2 Historical Data

Elevated arsenic and manganese levels were found in surface soil samples during Phase I sampling in Burns Swale, at locations 57-2300 and 57-2350, respectively (see Table 5-9 and Figure 5-2). This contamination probably resulted from the discharge of fluids from Pond GTP-3W

#### 5.1.11.3 Regulatory Drivers

Because the Fenton Hill site PRSs are not part of the HSWA permit, there are no EPA regulatory drivers for this investigation. The fact that RCRA hazardous constituents were found above UTLs on non-Laboratory property, however, means that the extent of the elevated arsenic and manganese concentrations on surface soils needs to be defined.

### 5.1.12 Design of Sampling and Analysis Plan

#### 5.1.12.1 Overview of Information to be Collected

Surface soil samples will be collected in Burns Swale and analyzed for metals. The data thus obtained will be the basis for a human health risk assessment under a recreational land-use scenario for hikers and campers. The primary COPCs are arsenic and manganese; secondary COPCs are barium and lead, both of which were detected at concentrations greater than 10% of

their respective SALs (even though lead was detected in the pond and not in Burns Swale, it was deemed prudent to calculate the risk associated with the potential presence of this noncarcinogen. The pond is known to have been the source of contaminants in the swale. In this way, we can verify the absence of risk under the hiker/camper scenario). The distributions of these four analytes will be determined, and the upper 95 percent confidence limits of their mean concentrations will be estimated.

#### 5.1.12.3 Assumptions Underlying the Design

Arsenic concentration is highly correlated with barium concentration in soil samples previously collected at the Fenton Hill site ($r^2$ = 0.83). For this reason, surface soil samples (0- to 6-in. depth), to be collected at the approximate locations shown in Figure 5-3, will be analyzed for barium concentrations using the XRF method (LANL 1995, 0951). Those concentrations will be used as a surrogate for arsenic, both in selecting the samples to be submitted for laboratory analysis and in determining the distribution of arsenic concentrations in soil. The precise locations from which the selected samples were taken will be entered into the FIMAD database.

#### 5.1.12.4 Requirements for Data Quality Implied by Intended Data Use

The analytical techniques used must be capable of measuring arsenic concentrations in scil to below the SAL of 7.82 mg/kg (down to 1.0 mg/kg). The XRF instrument should be capable of detecting barium concentrations in soil as low as 25 mg/kg.

#### 5.1.12.5 Measurements to Verify Assumptions and Requirements

The results of laboratory analyses for barium and arsenic will be used to estimate and qualitatively evaluate the correlation between the two. (A poor correlation will not be considered cause for concern if arsenic levels are close to the Lab-wide arsenic UTL.) It is assumed that areas where lead and manganese might be elevated are also closely correlated with elevated barium. The lead/barium and manganese/barium correlations will also be estimated and evaluated qualitatively. Because lead and barium are secondary COPCs and expected to contribute little to the total estimated risk, a poor correlation will not be considered cause for concern.

One field replicate sample will be collected from each of the three (or fewer) strata (see 5.1.13.1) in Burns Swale for laboratory analysis. To evaluate the level of precision of the results, we wil (1) calculate the relative percent difference between each replicate and its "original" (the difference divided by the average); (2) calculate an average for each field replicate pair in the FIMAD data base that was analyzed for arsenic by the same analytical technique as that used for the Burns Swale samples; (3) if a field replicate pair's average is within the range of the arsenic concentrations found in the Burns Swale samples, calculate a relative percent difference for that FIMAD pair; and (4) compare the FIMAD relative percent differences with those of the Burns Swale samples, using graphical techniques such as boxplots. If the distributions appear similar, we will consider the Burns Swale results as having an acceptable level of precision. If they do not, focused validation of the analytical data may be required to determine whether the Burns Swale results are acceptable. The same procedure will be used to evaluate the level of precision of the analytical results for barium, lead, and manganese.

The distribution of above-background concentrations of arsenic is expected to be limited to the first 300 ft of Burns Swale. To determine the boundaries of this distribution, a site-specific background data set will be established. Twenty background samples will be collected from undisturbed areas near Burns Swale where soils are similar to those found in the swale and will

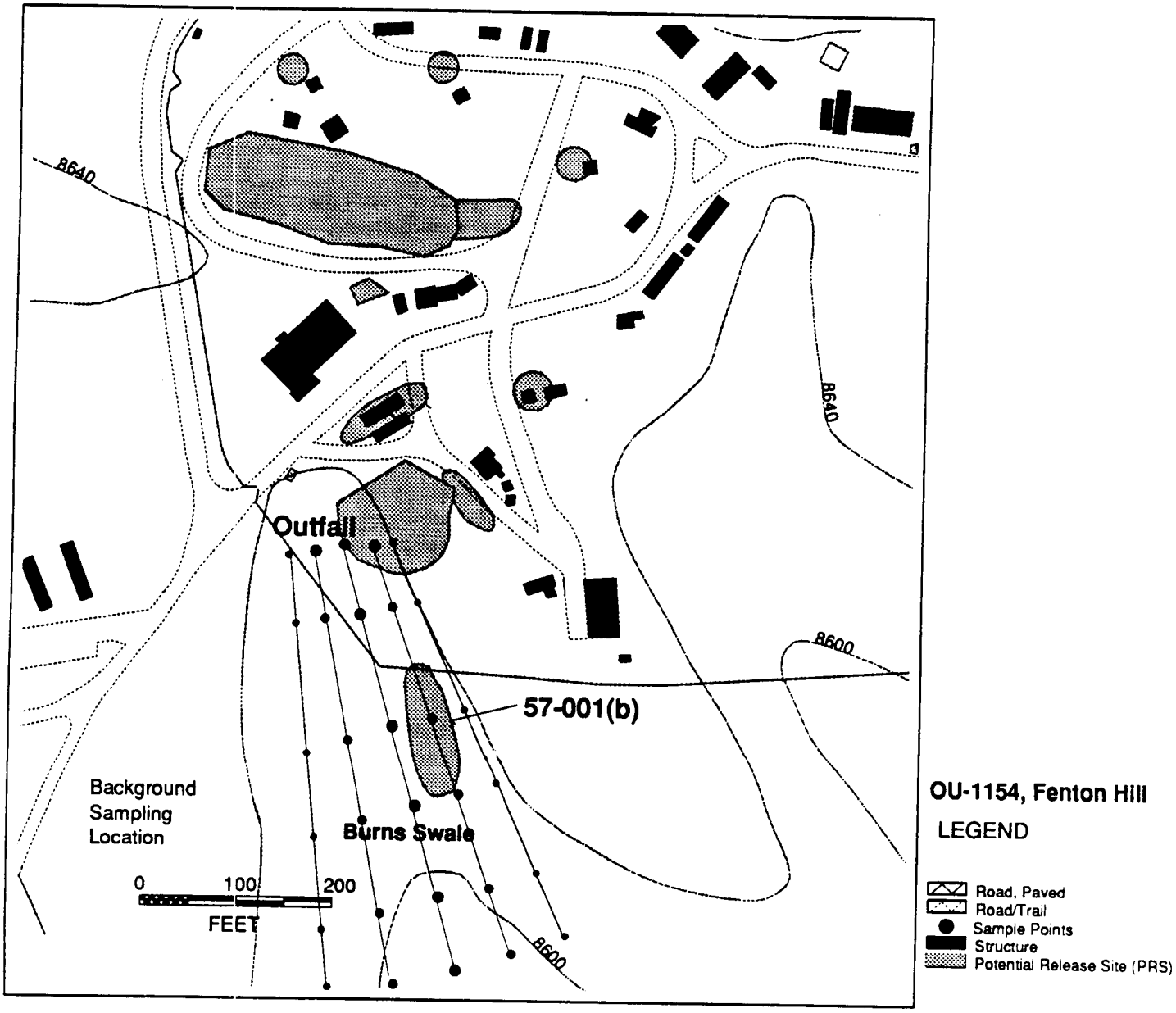



Figure 5-3. Sampling map for Phase II Sampling Plan at PRS 57-001(b) Burns Swale Portion

Source: FIMAD, 11/21/95, G103966
Modified by: C. Rivera Lyons 3/5/96

be screened for barium by XRF. The UTL (the 95 percent upper confidence limit on the 95th percentile of the background samples) for barium will be estimated. The boundaries will then be drawn to delimit the area within which the above-UTL concentrations were found.

In the event that barium concentrations on the periphery of the sampling area still exceed the UTL (i.e., the area selected for sampling was too small), the sampling area will be extended using a grid system similar to the one described below. Samples will be collected and screened by XRF until the boundaries become clear.

### 5.1.13 Implementation of Sampling and Analysis Plan

#### 5.1.13.1 Field Methods

For the XRF survey, a transect line will be established from the discharge point down the center of Burns Swale, for a length of about 300 ft. On either side of this center line, two additional transect lines will be established: one along the bank of the swale (3 ft beyond the top of the bank) and one halfway between the bank and the center line, for a total for five lines. (Should the "bank" not be clearly defined, the lines will be located 3 ft and 15 ft from the channel center.) Samples will be collected at six locations along each of these lines: at approximately 30, 60, 105, 150, 225, and 300 ft from the discharge point. Field observations, a tape measure, and pin flags will be used to establish these 30 sampling locations in Burns Swale.

Because a stratified sampling scheme yields a total variance less than or equal to the variance of a simple sampling scheme, the XRF barium results will be used to stratify the sampling area in Burns Swale into not more than three strata (representing areas of relatively "elevated," relatively "low," and "background" soil concentrations of barium/arsenic). In this way, the number of off-site laboratory analyses will be minimized, as will the degree of uncertainty in the estimated mean concentrations of arsenic, barium, lead, and manganese. A subset of the XRF-screened samples —at least two samples from randomly selected locations in each of the three strata—will be submitted to an off-site laboratory; they will be analyzed for arsenic, barium, lead, and manganese by the SW-846 method (Method 3050 nitric acid extraction and appropriate analytical techniques). The number of samples submitted for wet chemistry analysis will be such that the upper 95 percent confidence level of the mean arsenic concentration is not more than 5 times the mean arsenic concentration. (For 15 samples previously collected at Fenton Hill, the range was 0.23 to 108 mg/kg, and the 95 percent confidence level of the mean was twice the mean.)

In addition, twenty locations will be selected, in deposits of a similar nature but far enough from Burns Swale to have been unaffected by the pond contaminants, for background sampling. These locations will be surveyed in accordance with LANL-ER-SOP-3.01.R1. The soil samples will be collected in accordance with LANL-ER-SOP-6.09 and will be screened by XRF for barium.

#### 5.1.13.2 Measurement Methods

In the Building OH-15 laboratory at TA-59, each soil sample will be thoroughly dried under a heat lamp, ground with a ceramic mortar, and poured into the cups of a Spectrace 9000 XRF instrument. The barium concentrations in the samples will be measured in accordance with LANL-ER-SOP-10.08.R0. At the same time, internal standards will be calibrated and performance standards measured. All the measurements, including the internal standards and performance standard measurements, are included on printouts from the XRF instrument.

#### 5.1.13.3 Field Decisions

As discussed in Section 5.1.12.3, the XRF barium measurements will be the basis for selection of soil samples to be analyzed for arsenic.

#### 5.1.13.4 Sample Handling

The soil samples will be packed in a locked cooler for delivery directly to the SMO, which will send the samples to a contract laboratory. All analyses will be done by Method 3050 nitric acid extraction and the appropriate ICP or AA analytical technique.

#### 5.1.13.5 Data Tracking

For in-house data, FIMAD will prepare a structured blank table into which ESH-19 will enter the barium XRF readings in mg/kg concentration units. Analytical data from contract laboratories will come directly to the SMO, which will be responsible for transmitting the data to FIMAD. Hard copies of these data will be supplied to a data validator, who will be responsible for focused Level One validation.

#### 5.1.13.6 Schedule

The sampling activities, including sampling kit preparation, documentation, and surveying, should take no longer than 3 days. Preparing the samples and doing the XRF measurements should take 1.5 days. The samples will then be submitted immediately to the SMO for laboratory analysis for arsenic, barium, lead, and manganese. The off-site laboratory guarantees a 45-day turnaround. The validation of the data may take from 2 to 4 months. Sampling may take place at risk before the sampling plan has been reviewed and approved by EPA/NMED.

### 5.1.14 Data Assessment

#### 5.1.14.1 Verification and Routine Data Validation

The SMO and the data validator will use their standard procedures to verify and validate the analytical results from the laboratories. The SMO will electronically transfer the data to FIMAD, and the validator will place the appropriate validation qualifiers on the FIMAD data set, which will then be available to the user by either Databrowser or Microsoft Access data accessing systems.

#### 5.1.14.2 Data Quality Assessment

The data quality assessment will be "qualitive" in nature. A chemist will review the results of the routine validation to determine whether a focused validation is warranted for any of the data. To determine precision, field duplicate results will be compared qualitatively with other field duplicate pairs collected throughout the ER Project at LANL. A technical team comprising a chemist, a statistician, a human health risk assessor, and field personnel will assess the usability of the data for determining the extent of arsenic contamination and for risk assessment. If an estimated bias might affect the determination or the outcome of the risk assessment, the bias will be discussed and the need for further sampling will be considered.

### 5.1.15 Administration

#### 5.1.15.1 Project Task Organization

The organization for the Phase II investigations will comprise the following positions.

| | |
|---|---|
| Field Project Leader | Overall responsibility for project. |
| Field Team Manager | Manages all field operations for this task. |
| Field Team Leader | Leads team in field operations; responsible for waste management. |
| Site Safety Officer | Ensures that all operations are performed safely. |
| Samplers | Physically collect samples. |
| Documentation Specialist | Prepares field sampling kits and performs documentation in field. |
| Surveyor | Responsible for the surveying to be done in the field. |
| Surveyor's Helper | Assists surveyor. |
| XRF Operator | Operates Spectrace 9000. |

#### 5.1.15.2 Training

All personnel participating in this task will have met all the ER Project training requirements as defined in LANL-ER-AP-05.2.R1 (LANL 1995, 0951).

#### 5.1.15.3 Records

The field records and hard copies of analytical data will be in the custody of the field team manager, who will be responsible for transmitting the information to the Records Processing Facility.

#### 5.1.15.4 Oversight

No special oversight is being planned for this 1- to 2-day sampling operation. Because soil samples were collected in the same area, by the same field crew, and using the same methods during the Phase I investigation, a readiness review is not planned. The Health and Safety Plan will be modified slightly (new dates and names of personnel will be incorporated).

#### 5.1.15.5 Inspection/Acceptance Policies

Not relevant.

#### 5.1.15.6 Reports to Management

Additional reports to management are not required for this brief sampling operation.

## 5.2 PRS 57-001(c)—Settling Pond GTP-2

Pond GTP-2, used during experiments related to geothermal energy recovery, contained circulation fluids. After geothermal testing ceased, the pond was decommissioned, cleaned, and filled with clean soil to the level of the original ground surface. As shown in Table A-1 (Appendix A), which lists the complete analytical results for those soil samples, all of these analytes except arsenic, barium, calcium, copper, lead, magnesium, sodium, and zinc were eliminated as COPCs because they were detected at concentrations below their respective background UTLs. On the basis of NFA criterion 4, we are recommending NFA for this PRS.

### 5.2.1 History

PRS 57-001(c) is discussed in detail in Section 5.2 of the RFI Work for OU 1154 (LANL 1994, 1159).

### 5.2.2 Description

Pond GTP-2 is described in Section 5.2 of the RFI Work Plan for OU 1154 (LANL 1994, 1159) and in Section 1.2.1.2 of this report.

### 5.2.3 Previous Investigations

Investigations carried out before the RFI, of this and the other settling ponds at TA-57, are discussed in detail in Section 5.2 of the RFI Work Plan for OU 1154 (LANL 1994, 1159) and are summarized in Section 5.1.3 of this report.

### 5.2.4 Field Investigation

Subsurface samples were collected from this pond with a CME-45 drill rig, using a hollow-stem auger and stainless-steel core barrel sampler. Beginning at a depth of 3 ft, sediment samples were taken at 1-ft intervals; these were field-screened for metals by XRF and for VOCs by either OVA or PID. Additional sediment samples were collected for screening from horizons for which olfactory, visual, and/or other evidence indicated the presence of high constituent concentrations. One soil sample was taken from the core (from the horizon judged on the basis of field observations and screening to have the highest constituent concentrations) and was submitted for metals and SVOC analyses. The sampling done at PRS 57-001(c) is summarized in Table 5-11.

**TABLE 5-11**

**PRS 57-001(c): SUMMARY OF SAMPLING**

| Location ID | Sample ID | Depth (ft) | Sample Matrix | Sample Request Number | | |
|---|---|---|---|---|---|---|
| | | | | SVOCs | INORG | TOTAL U |
| 57-2100 | AAB5559 | 4.5 - 5 | soil | 18570 | 18574 | 18574 |

The depth of the pond was estimated to be 12 ft; the drilling planned was to penetrate 10 ft below that depth. At 9.5 ft, the auger encountered a very hard, nonwelded tuff. The maximum drilling depth reached was 15 feet. The core revealed a slimy, black clay-like material, which contained pieces of wood, at 4.5 ft. This material had a strong organic odor, and Fenton Hill site personnel confirmed that it was similar to the "service material" (mainly drilling muds). Because XRF screening of the core detected no horizon having greatly elevated barium concentrations (see Table 5-12), and no detectable amounts of VOCs were found by Hnu, a sample was collected from the "service material" layer, from the 4.5- to 5-ft depth. It was submitted for total metals, total uranium, and SVOC analyses.

TABLE 5-12

SAMPLING LOCATION 57-2100: BARIUM CONCENTRATIONS IN SOILS, DETECTED BY FIELD XRF

| Depth (ft) | Barium Concentrations (mg/kg) |
|---|---|
| 2 - 3 | 307 |
| 3 - 4 | 173 |
| 4 - 5 | 163 |
| 8 - 9 | 46 |
| 9 - 10 | 50 |
| 10 - 11 | 116 |
| 11 - 12 | 79 |
| 12 - 13 | 119 |
| 13 - 14 | 52 |
| 14 - 15 | 30 |

### 5.2.5 Background Comparisons

All inorganic analytes, except silver, detected in soil samples from PRS 57-001(c) were compared with their natural background UTLs (no UTL is available for silver). Because none of these analytes were detected at concentrations greater than their respective UTLs, all were eliminated as COPCs (see Appendix A for the complete analytical results for these samples). Silver, for which no UTL has been established, was also eliminated, because the detected concentrations were below the SAL for silver in soil (400 mg/kg). In the case of antimony, the detection limit in this sample was <5.1 mg/kg, which is greater than the UTL for antimony in soil (1 mg/kg); but because this detection limit is substantially lower than the SAL for antimony (32 mg/kg), this analyte is also eliminated as a COPC.

### 5.2.6 Evaluation of Organic Constituents

No organic chemicals were detected in the samples from PRS 57-001(c).

### 5.2.7 Human Health Assessment

#### 5.2.7.1 Screening Assessment for PRS 57-001(c)

Because no chemicals were found in concentrations exceeding their background UTLs, there was no need for a screening assessment.

#### 5.2.7.2 Risk Assessment for PRS 57-001(c)

Because no chemicals were found in concentrations exceeding their background UTLs, there was no need for a risk assessment.

### 5.2.8 Ecological Assessment

There are no ecotoxicological concerns at this PRS because there are no COPCs.

### 5.2.9 Extent of Contamination

No contamination was detected at this PRS.

### 5.2.10 Conclusions and Recommendations

We recommend NFA for PRS 57-001 (c) on the basis of NFA criterion 4. This PRS will not be added to the HSWA Module of the Laboratory RCRA operating permit and is proposed for removal from the ER Project list of PRSs.

## 5.3 PRS 57-002—Sludge Pit

This PRS is a pit that was used between 1974 and 1990 for disposal of sludge cleaned out of settling ponds GTP-1, GTP-2, and GTP-3, as well as for disposal of mud from the drilling mud pits. The sludge pit is located at the former site of a gravel pit that was used by the State of New Mexico in conjunction with the building of State Road 126; the site is on U.S. Forest Service property about 2 miles west of the main compound of TA-57.

On the basis of the Phase I field investigations, we recommend voluntary corrective action (VCA) for PRS 57-002. Arsenic was found in soil samples at concentrations exceeding background UTLs, and barium was found at concentrations exceeding the SAL. The extent of arsenic and barium contamination at this PRS is unknown.

### 5.3.1 History

PRS 57-002 is discussed in detail in Section 5.3 of the RFI Work Plan for OU 1154 (LANL 1994, 1159).

The sludge pit was a disposal site for wet solids removed from the bottom of the settling ponds and for mud from the drilling mud pits. Materials entering this PRS that may have contributed to the list of COPCs were drilling muds (which included barite and lubricating materials), precipitated constituents from the circulation waters, and other dissolved solids collected during the passage of water through the hot underground rocks.

### 5.3.2 Description

The sludge pit is described in Section 5.3 of the RFI Work Plan for OU 1154 (LANL 1994, 1159) and in Section 1.2.2 of this report.

### 5.3.3 Previous Investigations

Previous investigations at this PRS are discussed in detail in Sections 5.2 and 5.3 of the RFI Work Plan for OU 1154 (LANL 1994, 1159). An EPA SW-846 EP toxicity test Method 3010 (EPA 1986, 1222) was performed on each truckload of sludge before it was discharged to the pit, to ensure that minimal amounts of metals could be leached from the sludge under natural conditions.

### 5.3.4 Field Investigation

The pit was sampled via two coreholes, one in the east portion and one in the west portion. Because the composition of the sludge from the various settling ponds would have been basically the same, and because the low-viscosity sludge would have flowed laterally across the surface of the pit, the pit's contents should be relatively homogeneous. The two coreholes, therefore, should

be fully adequate to provide samples representative of the contents. Both coreholes were projected to penetrate the entire depth of the sludge and to extend into the underlying tuff.

The western portion of the sludge pit was estimated to be 15 - 20 ft deep and the eastern portion to be 6 - 8 ft deep. The RFI Work Plan called for each corehole to be drilled 10 ft into the underlying bedrock and for samples to be taken at 1-ft intervals, beginning at the ground surface, for field XRF and OVA or PID analysis; it also called for sampling at horizons providing visual or other evidence of high constituent concentrations.

Samples for laboratory analysis were to be selected from those horizons judged on the basis of field screening and other information to have the highest constituent concentrations. Two samples were to be selected from each core: one for metals and one for SVOCs. The sampling done at PRS 57-002 is summarized in Table 5-13.

**TABLE 5-13**

**PRS 57-002: SUMMARY OF SAMPLING**

| Location ID | Sample No. | Depth (ft) | Sample Matrix | Sample Request Number | | | |
|---|---|---|---|---|---|---|---|
| | | | | SVOCS | INORG | TOTAL U | TCLP |
| 57-3000 | AAB5565 | 4.5 - 5 | soil | 18570 | 18574 | 18574 | N/A |
| 57-3100 | AAB5566 | 9 - 10 | soil | 18570 | 18574 | 18574 | N/A |
| 57-3000 | AAA5350 | 4.5-5 | soil | N/A | N/A | N/A | 21559 |

N/A - Not Applicable

Sampling location 57-3000 was the site of the corehole drilled in the eastern portion of the sludge pit, which was expected to have a deposit depth of 6 - 8 ft. Tuff was encountered at 7 ft, which was the maximum boring depth. The core revealed a black, saturated clay-like material at 4.5 ft, which was similar to the "service material" (sludge of drilling muds and additives) found in other cores collected at TA-57, and which has been shown at these other locations to be the layer of highest constituent concentrations. For this reason, the sample was taken from the 4.5- to 5-ft depth interval; it was submitted for total metals, total uranium, and SVOC analyses. A second aliquot of this material was submitted for TCLP (SW-846 Method 1311 [EPA 1986, 1222]) metals analysis. Materials collected from the sludge pit were not screened by XRF; no detectable amounts of VOCs were found by Hnu screening, although the "service" material did have an "unpleasant" musty odor similar to that of petroleum.

Sampling location 57-3100 was the site of the corehole drilled in the western portion of the sludge pit, which was expected to have a deposit depth of 15 - 20 ft. Tuff was encountered at 12.75 ft; the maximum drilling depth was 15 ft. The black "service material" was encountered at 9 -10 ft, and as before, the sample was taken from this depth interval; it was submitted for total metals, total uranium, and SVOC analyses. No detectable amounts of VOCs were found by Hnu screening, although the material from the 9- to10-ft horizon did have an "unpleasant" musty odor similar to that of petroleum.

### 5.3.5 Background Comparisons

All inorganic analytes, except silver, detected in soil samples from PRS 57-002 were compared with their natural background UTLs (no UTL is available for silver). Those whose concentrations exceeded background UTLs are shown in Table 5-14. As shown in Table A-1 (Appendix A) which lists the complete analytical results for those soil samples, all of these analytes except

arsenic, barium, calcium, copper, lead, magnesium, sodium, and zinc were eliminated as COPCs because they were detected at concentrations below their respective background UTLs. In the case of silver, for which no UTL has been established, detected concentrations were much lower than the SAL for silver in soil (400 mg/kg). Silver is therefore eliminated as a COPC. For antimony, the detection limits ranged from <5.7 to <10.2 mg/kg for these samples; although greater than the UTL for antimony in soil (1 mg/kg), all the reported antimony concentrations were below the SAL (32 mg/kg), and therefore this analyte was also eliminated as a COPC.

The locations from which samples were collected that contained analytes in concentrations exceeding background UTLs are shown in Fig. 5-4.

**TABLE 5-14**

**PRS 57-002: INORGANIC ANALYTES FOUND AT CONCENTRATIONS GREATER THAN BACKGROUND UTLs**

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | UTL (mg/kg) |
|---|---|---|---|---|---|
| Arsenic | 57-3000 | AAB5565 | 4.5-5 | 108(J) | 7.82 |
| Barium | 57-3000 | AAB5565 | 4.5-5 | 24100 | 315 |
| | 57-3100 | AAB5566 | 9-10 | 686 | |
| Calcium | 57-3000 | AAB5565 | 4.5-5 | 39700 | 6120 |
| | 57-3100 | AAB5566 | 9-10 | 28800 | |
| Copper | 57-3000 | AAB5565 | 4.5-5 | 225 | 30.7 |
| | 57-3100 | AAB5566 | 9-10 | 37.3 | |
| Magnesium | 57-3000 | AAB5565 | 4.5-5 | 13300 | 4610 |
| Sodium | 57-3000 | AAB5565 | 4.5-5 | 4180 | 915 |
| | 57-3100 | AAB5566 | 9-10 | 1660 | |
| Lead | 57-3000 | AAB5565 | 4.5-5 | 249 | 23.3 |
| | 57-3100 | AAB5566 | 9-10 | 248 | |
| Zinc | 57-3000 | AAB5565 | 4.5-5 | 220 | 50.8 |
| | 57-3100 | AAB5566 | 9-10 | 95.8 | |

The eight chemicals shown in Table 5-14 are retained as COPCs and will be evaluated further in the screening assessment. The TCLP extraction done on the sample taken from the 4.5- to 5-ft depth at location 57-3000 did not show metal concentrations that exceeded the EPA regulatory limits established for metals. Thus, the service material is not considered a RCRA hazardous waste.

### 5.3.6 Evaluation of Organic Constituents

No SVOCs were detected at PRS 57-002, because dilutions made in the laboratory (in an attempt to identify TICs and to minimize the matrix effects caused by the highly organic content of this material) raised the detection limits to a point that the SVOCs were masked. However, analyses of a sample from location 57-2100 that was similar in nature (predominantly "service material) but was not diluted showed no detectable SVOCs (see Chapter 4).

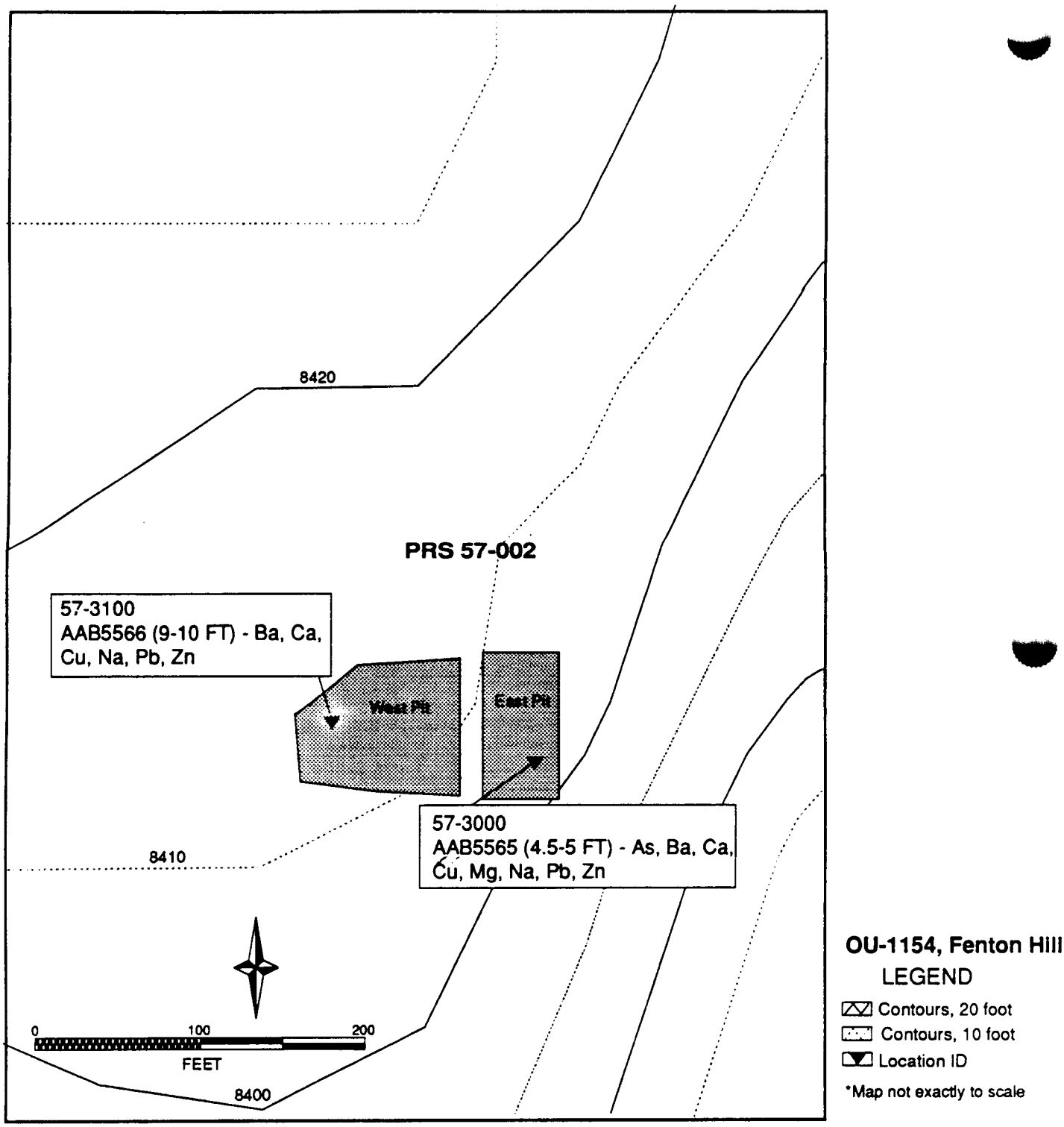



Figure 5-4. PRS 57-002: Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs

Source: FIMAD, 12/14/94, G102838
Modified by: C. Rivera Lyons 2/24/96

### 5.3.7 Human Health Assessment

#### 5.3.7.1 Screening Assessment for PRS 57-002

The detected concentrations of the eight inorganic analytes retained as COPCs after comparison with their background UTLs were next compared with their SALs. The comparison is shown in Table 5-15

**TABLE 5-15**

**PRS 57-002: CONCENTRATIONS OF COPCs vs SALs**

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | SAL (mg/kg) |
|---|---|---|---|---|---|
| Arsenic | 57-3000 | AAB5565 | 4.5 - 5 | 108(J) | N/A |
| Barium | 57-3000 | AAB5565 | 4.5 - 5 | 24100 | 5300 |
| | 57-3100 | AAB5566 | 9 - 10 | 686 | |
| Calcium | 57-3000 | AAB5565 | 4.5 - 5 | 39700 | No SAL |
| | 57-3100 | AAB5566 | 9 - 10 | 28800 | |
| Copper | 57-3000 | AAB5565 | 4.5 - 5 | 225 | 2800 |
| | 57-3100 | AAB5566 | 9 - 10 | 37.3 | |
| Lead | 57-3000 | AAB5565 | 4.5 - 5 | 249 | 400 |
| | 57-3100 | AAB5566 | 9- 10 | 248 | |
| Magnesium | 57-3000 | AAB5565 | 4.5 - 5 | 13300 | No SAL |
| Sodium | 57-3000 | AAB5565 | 4.5 - 5 | 4180 | No SAL |
| | 57-3100 | AAB5566 | 9 - 10 | 1660 | |
| Zinc | 57-3000 | AAB5565 | 4.5 - 5 | 220 | 23000 |
| | 57-3100 | AAB5566 | 9 - 10 | 95.8 | |

N/A = Not applicable. SAL is below background concentration.
No SAL = No SAL is available.

**Greater than or equal to SAL.** Only barium was detected at concentrations exceeding its SAL.

**No SAL.** Arsenic, calcium, magnesium, and sodium fall into the No SAL category. In the case of arsenic, the calculated SAL is less than the background UTL in the Los Alamos background dataset (7.82 mg/kg); the background UTL, then, in essence becomes the SAL. Because the maximum detected concentration of arsenic at PRS 57-002 is 108 mg/kg, which is elevated with respect to this background UTL, arsenic will remain a COPC .

Calcium, magnesium, and sodium have no SALs because they are essential nutrients. Their concentrations at PRS 57-002 are well below the RDAs for humans (see Appendix C); for this reason, calcium, magnesium, and sodium are eliminated as COPCs.

**Below SAL.** Copper, lead, and zinc were detected in concentrations below their respective SALs.

**Multiple Chemical Evaluation.** To evaluate multiple chemical effects for this data set, analytes detected below their respective SALs were grouped according to their toxicological effects (carcinogenic or noncarcinogenic). All three of these chemicals are noncarcinogens. The concentration of each was normalized to its SAL, and the results were summed, as described in

Subsection 3.4.1. Table 5-16 shows the results of the multiple chemical evaluation based on noncarcinogenic effects.

**TABLE 5-16**

**PRS 57-002: MULTIPLE CHEMICAL EVALUATION**

| Chemical | Sample Value (mg/kg) | SAL (mg/kg) | Normalized Value |
|---|---|---|---|
| Copper | 225 | 2 800 | 0.08 |
| Lead | 249 | 400 | 0.62 |
| Zinc | 220 | 23 000 | 0.01 |
| Sum of Normalized Values | | | **0.71** |

The normalized value of the multiple chemical evaluation based on noncarcinogenic effects is less than one (0.71), indicating that potential adverse human health effects from exposure are unlikely. Therefore, all three of these chemicals are eliminated as COPCs.

Only arsenic and barium remain as COPCs for PRS 57-002.

#### 5.3.7.2 Risk Assessment for PRS 57-002

Because the elevated concentrations of arsenic and barium detected at this PRS may pose an unacceptable risk, a formal risk assessment may be necessary.

### 5.3.8 Ecological Assessment

Given the largely undeveloped environs of this PRS, the potential for receptors to come in contact with contaminants is high. For this reason, this PRS will be assessed through the new Ecological Exposure Unit (Ecozone) approach, which considers contaminants with concentrations greater than UTLs, when that approach has been approved through the ER Project office. Threatened and endangered species and/or sensitive habitat (see Chapter 2) will be evaluated as part of this assessment.

### 5.3.9 Extent of Contamination

The purpose of the Phase I investigations was reconnaissance; the extent of contamination in this PRS can be determined only if additional data are collected.

### 5.3.10 Conclusions and Recommendations

On the basis of the screening assessment, we recommend a voluntary corrective action (VCA) for this PRS; a VCA proposal will be prepared.

## 5.4 PRS 57-004 (a)—Settling Ponds

PRS 57-004(a) consists of two settling ponds: a decommissioned, backfilled pond designated GTP-1E (east) and the existing 1-million-gal.-capacity pond designated GTP-1W (west). The eastern pond was originally excavated as a disposal pit for materials produced from the drilling of well EE-1. It was enlarged in several stages as operations advanced, and was also used for settling and recycling of fluids from the circulation loop. The successive enlargements eventually

extended Pond GTP-1E into the area that would later be occupied by Pond GTP-1W. When the entire pond area was decommissioned, it was cleaned of sludge and backfilled with clean soil to original ground level. Subsequently, Pond GTP-1W was excavated and lined with plastic. The Phase I RFI investigation involved only the eastern pond area of this PRS, GTP-1E; the western pond, from which there is no sign of contaminant release, will be investigated after the decommissioning of the Fenton Hill site.

Chemical analysis of samples from Pond GTP-1E showed that there were no COPCs (none of the detected chemicals were found in concentrations exceeding their SALs). On that basis, we recommend NFA for this portion of PRS 57-004(a).

### 5.4.1 History

PRS 57-004 (a) is discussed in detail in Section 5.2 of the RFI Work Plan for OU 1154 (LANL 1994, 1159).

Materials entering this settling pond that may have contributed to the list of chemicals detected during the Phase I investigations were drilling muds (which included barite and lubricating materials) and dissolved constituents originating from the circulation of water through the hot underground rocks. Some of the dissolved constituents would have precipitated out as the circulation waters cooled in the pond, thereby adding contaminants such as metals to the sludge in the pond bottom.

### 5.4.2 Description

Pond GTP-1E is described in detail in Section 5.2 of the RFI Work Plan for OU 1154 (LANL 1994, 1159) and Section 1.2.1.3 of this report.

### 5.4.3 Previous Investigations

Previous investigations carried out at PRS 57-004 (a) and at the other settling ponds within TA-57 are discussed in detail in Section 5.2 of the RFI Work Plan for OU 1154 (LANL 1994, 1159) and are summarized in Section 5.1.3 of this report.

### 5.4.4 Field Investigation

A CME-45 drill rig using a hollow-stem auger and a 5-ft stainless-steel core barrel sampler was used to collect the subsurface samples from pond GTP-1E. As called for in the Work Plan, the core was taken from an area of overlap of this pond with the area now occupied by Pond GTP-1W. Sediment samples were collected from the core at 1-ft intervals, beginning at a depth of 3 ft. and were screened for metals by XRF and for VOCs by OVA or PID. The Work Plan also called for additional samples to be collected for XRF screening from sediment horizons in which visual or other evidence indicated high constituent concentrations. Samples for laboratory analysis were to be selected from the horizon(s) that were judged, on the basis of field screening and other information, to have the highest constituent concentrations. Two samples were to be selected from each core: one for metals and one for SVOCs (both samples could come from the same horizon). If no horizon of high constituent concentration was indicated by the field screening for either metals or SVOCs, the sample was to be taken from the bottom of the core. Information on the sampling done at PRS 57-004(a) is summarized in Table 5-17.

**TABLE 5-17**

**PRS 57-004(a): SUMMARY OF SAMPLING**

| Location ID | Sample ID | Depth (ft) | Sample Matrix | Sample Request Number | | |
|---|---|---|---|---|---|---|
| | | | | SVOCs | INORG | TOTAL U |
| 57-2000 | AAB5558 | 5.25 - 6 | soil | 18570 | 18574 | 18574 |
| 57-2000 | AAB8781 | 6 - 7 | tuff | 18570 | 18574 | 18574 |

At the selected sampling location, 57-2000, the depth of the pond was estimated to be 12 ft; the Work Plan called for drilling 10 ft beyond this depth. At 4.5 ft a grey, sandy, possibly very weathered tuff layer was encountered; at 5.25 ft, a layer of black, bentonite-like material having an organic odor was encountered; and at 6 ft, a very hard, nonwelded tuff was encountered. (Drilling continued to a total depth of only 7.33 ft because of the hardness of this tuff material.) The black 5.25- to 6-ft-depth layer was confirmed by Fenton Hill personnel to be similar to the "service" material (drilling mud and additives) that is assumed to constitute the deepest layer of the pond and to consist of the accumulated solids in which contaminant concentrations are highest. Screening by XRF showed this layer to have relatively high concentrations of barium (Table 5-18). For these reasons, a sample was collected from this horizon to be analyzed for metals, total uranium, and SVOCs. No detectable levels of organic compounds were detected in the core by Hnu, but a second sample was collected from the tuff at the bottom of the core; it was submitted not only for SVOCs analysis but also for metals and total uranium. The purpose of this slight deviation from the Work Plan—to analyze the tuff sample for metals—was to verify that contaminants were not being carried into the tuff below the settling ponds at Fenton Hill (certain water balance calculations had indicated the possibility of significant amounts of water from the ponds infiltrating the tuff).

**TABLE 5-18**

**SAMPLING LOCATION 57-2000: BARIUM CONCENTRATIONS IN SOIL DETECTED BY FIELD XRF**

| Depth (ft) | Barium Concentration (mg/kg) |
|---|---|
| 2 - 3 | 368 |
| 3 - 4 | 325 |
| 4 - 5 | 280 |
| 5 - 6 | 212 |
| 5.25 - 6 | 565 |
| 6 - 7 | 91 |
| 7 - 7.33 | 439 |

### 5.4.5 Background Comparisons

All inorganic analytes, except cyanide and silver, detected in soil samples from PRS 57-004(a) were compared with their natural background UTLs (no background data are available for cyanide and silver). Those whose concentrations exceeded background UTLs are shown in Table 5-19. As shown in Appendix A, which lists the complete analytical results for those samples,all inorganic analytes except arsenic, barium, cadmium, calcium, chromium, copper, lead, total uranium, and zinc were eliminated as COPCs because they were detected at concentrations below their

respective background UTLs. In the case of silver, for which no UTL has been established, detected concentrations were <1.2 and <0.8 mg/ kg, which are much lower than the SAL for silver in soil (400 mg/kg). Silver is therefore also eliminated as a COPC. Sodium, although detected at concentrations exceeding its UTL, is eliminated as a COPC because the RDA for sodium (see Appendix C) is much greater than the amount that could be ingested daily in the camper/hiker risk scenario. For antimony, the detection limit was greater than the UTL for antimony in soil (1 mg/kg), but because the reported antimony concentrations in both samples were below the SAL (32 mg/kg), this analyte was also eliminated as a COPC.

The location from which the core was taken that contained analytes in concentrations exceeding background UTLs is shown in Fig. 5-5.

**TABLE 5-19**

**PRS 57-004(a): INORGANIC ANALYTES FOUND AT CONCENTRATIONS GREATER THAN BACKGROUND UTLs**

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | UTL (mg/kg) |
|---|---|---|---|---|---|
| Arsenic | 57-2000 | AAB5558 | 5.25-6 | 7.9(J) | 7.82 |
| Barium | 57-2000 | AAB5558 | 5.25-6 | 852 | 315 |
| Calcium | 57-2000 | AAB5558 | 5.25-6 | 31500 | 6120 |
| Cadmium | 57-2000 | AAB5558 | 5.25-6 | 6 | 2.7 |
| Chromium | 57-2000 | AAB5558 | 5.25-6 | 28.1(J) | 19.3 |
| Copper | 57-2000 | AAB5558 | 5.25-6 | 244 | 30.7 |
| Lead | 57-2000 | AAB5558 | 5.25-6 | 161 | 23.3 |
| Total Uranium | 57-2000 | AAB5558 | 5.25-6 | 2.3 | 1.87 |
| Zinc | 57-2000 | AAB5558 | 5.25-6 | 1290 | 50.8 |

Ten chemicals—the nine shown in Table 5-19 and cyanide—are retained as COPCs and will be evaluated further in the screening assessment.

### 5.4.6 Evaluation of Organic Constituents

No organic chemicals were detected in the two samples (AAB8781 and AAB5558) collected at PRS 57-004(a), both of which were analyzed for SVOCs. For the latter sample, SVOCs were not detected because dilutions made in the laboratory in an attempt to identify TICs and minimize the matrix effects due to the high organic content of the sample raised the detection limits to a point at which target SVOCs could not be detected. However, analysis of a sample from location 57-2100 that was similiar in nature (predominantly "service material") but was not diluted yielded no detectable SVOCs (see Chapter 4).

### 5.4.7 Human Health Assessment

#### 5.4.7.1 Screening Assessment for PRS 57-004(a)

The detected concentrations of the ten inorganic analytes retained as COPCs after comparison with their background UTLs were next compared with their SALs. Table 5-20 shows the comparison.

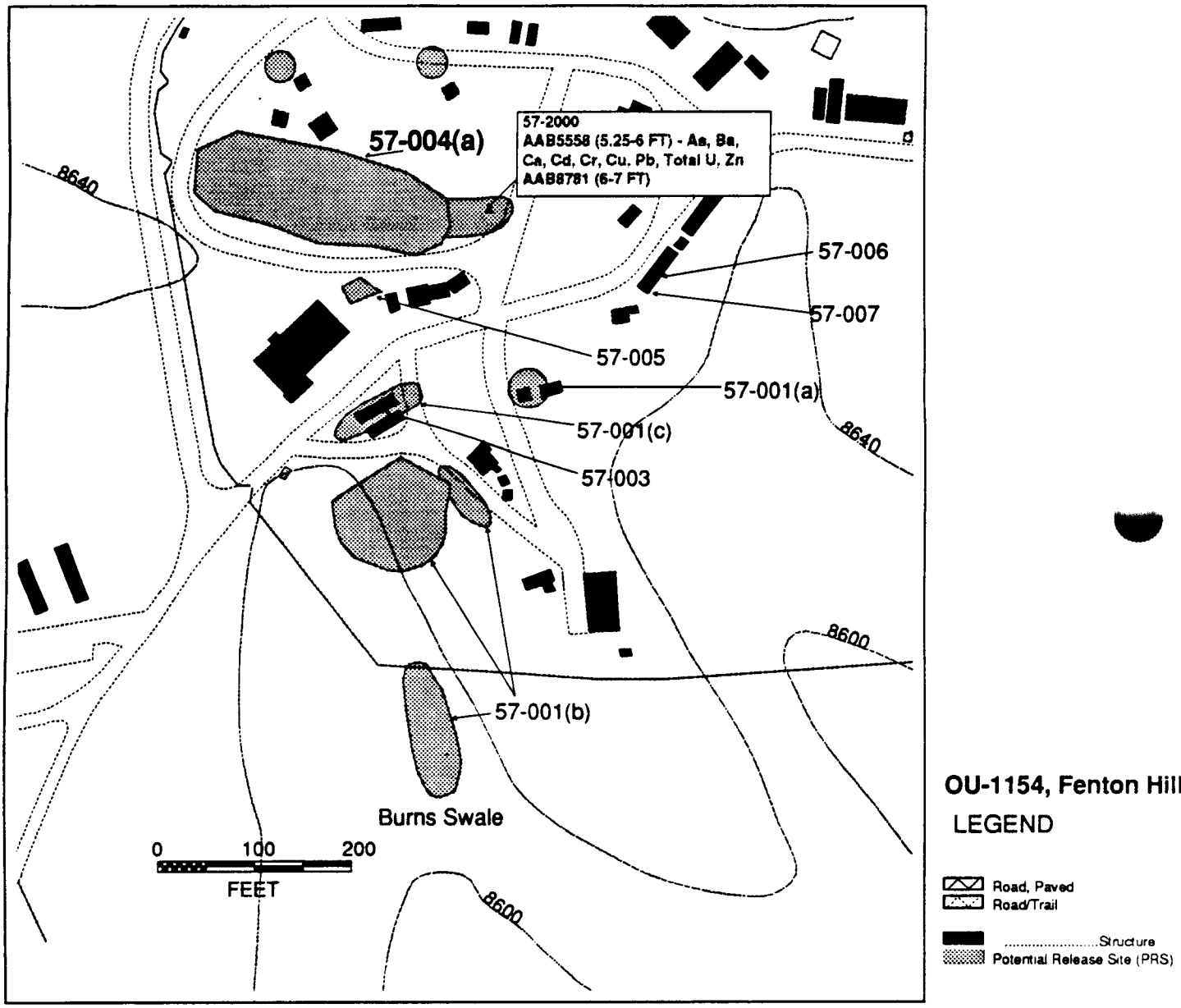



Figure 5-5. PRS 57-004(a): Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs

Source: FIMAD, 11/21/95, G103966
Modified by: C. Rivera Lyons 2/10/96

**TABLE 5-20**

**PRS 57-004(a): CONCENTRATIONS OF COPCs vs SALs**

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | SAL (mg/kg) |
|---|---|---|---|---|---|
| Arsenic | 57-2000 | AAB5558 | 5.25 - 6 | 7.9(J) | N/A |
| Barium | 57-2000 | AAB5558 | 5.25 - 6 | 852 | 5300 |
| Cadmium | 57-2000 | AAB5558 | 5.25 - 6 | 6 | 38 |
| Calcium | 57-2000 | AAB5558 | 5.25 - 6 | 31500 | No SAL |
| Chromium | 57-2000 | AAB5558 | 5.25 - 6 | 28.1(J) | 210 |
| Copper | 57-2000 | AAB5558 | 5.25 - 6 | 244 | 2800 |
| Cyanide | 57-2000 | AAB5558 | 5.25 - 6 | 0.97 | 1300 |
| Lead | 57-2000 | AAB5558 | 5.25 - 6 | 161 | 400 |
| Uranium | 57-2000 | AAB5558 | 5.25 - 6 | 2.3 | 230 * |
| Zinc | 57-2000 | AAB5558 | 5.25 - 6 | 1290 | 23000 |

N/A = Not applicable. SAL is below the background UTL.
No SAL = No SAL is available.
*230 mg/kg is the SAL for uranium soluble salts.

**Greater than or equal to SAL.** No chemicals were detected in concentrations exceeding their SALs.

**No SAL.** Arsenic and calcium fall into the No SAL category. In the case of arsenic, the calculated SAL is below the background UTL of the Los Alamos background dataset (7.82 mg/kg); the laboratory uncertainty associated with Sample AAB5558, in which arsenic was detected at 7.9 mg/kg, is +/- 1.58. This concentration is slightly above the UTL for arsenic in soil. Because the sample in which this slightly elevated concentration was detected came from a depth of 5 ft below the ground surface, there is no plausible pathway by which humans could be exposed to this chemical. For this reason, arsenic is eliminated as a COPC. Calcium falls into the No SAL category because it is an essential nutrient. As shown in Appendix C, concentrations of this nutrient at this PRS are well below the RDA . On that basis, calcium is eliminated as a COPC.

**Below SAL.** Barium, cadmium, chromium, copper, cyanide, lead, uranium, and zinc were all detected at concentrations below their respective SALs.

**Multiple Chemical Evaluation.** To evaluate multiple chemical effects for this data set, chemicals detected at concentrations below their respective SALs were grouped according to their toxicological effects (carcinogenic or noncarcinogenic). Because there was only one carcinogen (chromium), a multiple chemical evaluation was done only for the seven noncarcinogens. The concentration of each was normalized to its SAL, and the results were summed as described in Subsection 3.4.1. Table 5-21 shows the results of the multiple chemical evaluation for the seven noncarcinogens.

TABLE 5-21

PRS 57-004(a): MULTIPLE CHEMICAL EVALUATION

| Chemical | Concentration (mg/kg) | SAL (mg/kg) | Normalized Value |
|---|---|---|---|
| Barium | 852 | 5300 | 0.16 |
| Cadmium | 6 | 38 | 0.16 |
| Copper | 244 | 2800 | 0.09 |
| Cyanide | 0.97 | 1300 | 0.001 |
| Lead | 161 | 400 | 0.4 |
| Uranium | 2.3 | 230* | 0.01 |
| Zinc | 1290 | 23000 | 0.06 |
| Sum of Normalized Values | | | **0.88** |

*230 mg/kg is the SAL for uranium soluble salts.

The results of the multiple chemical evaluation based on noncarcinogenic effects is less than one (0.88), indicating that potential adverse human health effects from exposure to these constituents are unlikely. Therefore, all seven chemicals are eliminated as COPCs. No COPCs remain for this PRS.

#### 5.4.7.2 Risk Assessment for PRS 57-004 (a)

No risk assessment was performed for this PRS because no COPCs were retained following the screening assessment.

### 5.4.8 Ecological Assessment

Because the environs of this PRS are moderately developed, and the residual chemicals are situated several feet underground, there is essentially no potential for receptors to come in contact with any of these constituents. Therefore, there are no ecotoxicological risk concerns at this PRS.

### 5.4.9 Extent of Contamination

No contamination was detected at this PRS.

### 5.4.10 Conclusions and Recommendations

We recommend NFA for the Pond GTP-1E portion of PRS 57-004(a) on the basis of NFA criterion 4. This PRS will not be added to the HSWA Module of the Laboratory RCRA operating permit and is proposed for removal from the ER Project list of PRSs.

## 5.5 PRS 57-006—Chemical Waste Drum

From about 1976 to 1989, real-time chemical analyses were done in a trailer on site at Fenton Hill to monitor the drilling operations, the circulating geothermal fluids, the liquid discharges, and the quality of the sludge at the bottom of the settling ponds. Chemicals that were considered to be too

"dangerous or toxic" for the main sink drain in the trailer and the leach field to which it discharged were poured into a special drain connected to a plastic-lined 55-gal. drum buried in the ground beneath the trailer. The drum contained potentially hazardous concentrations of lead, mercury, and solvents. As part of the Phase I RFI activities at Fenton Hill, the drum, the liner, and the contents were voluntarily removed and disposed of by the Laboratory. Sampling of the soil beneath the former location of the drum showed no chemicals present in concentrations exceeding SALs. On that basis, we are recommending NFA for this PRS.

### 5.5.1 History

PRS 57-006 is discussed in Section 5.4 of the RFI Work Plan for OU 1154 (LANL 1994, 1159).

The chemical waste drum was reportedly emptied one or two times during the years that the trailer was in use; the waste was disposed of in accordance with standard Laboratory waste management procedures. Materials entering this PRS that may have contributed to the list of COPCs were small amounts of drilling muds (which included barite and lubricating materials), constituents dissolved from the circulation of water through the hot underground rock, and solvents and other chemicals used in the trailer operations.

### 5.5.2 Description

The now-removed chemical waste drum is described in Section 5.4 of the RFI Work Plan for OU 1154 (LANL 1994, 1159) and Section 1.2.3.1 of this report.

### 5.5.3 Previous Investigations

The contents of the chemical waste drum were sampled during the spring and summer of 1993. Analysis of these samples revealed the presence of elevated levels of lead and mercury, and a variety of organic solvents. The contents of the drum were subsequently removed and disposed of by standard Laboratory waste disposal practices. See Section 5.4 of the RFI Work Plan for OU 1154 (LANL 1994, 1159) for a more detailed discussion of these activities.

### 5.5.4 Field Investigation

On September 15, 1994, investigation of the 55-gal. drum revealed the presence of approximately one-quarter to one-half in. of sludge residue in the bottom of the drum, and of about 4 - 6 in. of liquid in the space between the drum and its plastic liner. Because the liner was not tightly sealed onto the drum, it is possible that this liquid was rainwater that had gained entry between the drum and the liner.

A VCA was carried out the same day, per the RFI Work Plan. The liquid was removed from the space between the drum and the liner and was disposed of in accordance with standard Laboratory procedures. The drum itself was then excavated by hand. It appeared to be in good condition, having no apparent corrosion or other damage that would affect its integrity. Using a bobcat and a "drum grabber" attachment, it was loaded into an 85-gal. overpack drum and disposed of in accordance with standard Laboratory procedures.

One soil sample and one replicate were then collected from the top 6 in. of soil situated directly beneath the former location of the drum (the bottom of the drum had been 3 ft below the ground surface). These soil samples were submitted for total metals, total uranium, and VOC analyses Information on the sampling done at PRS 57-006 is summarized in Table 5-22.

**TABLE 5-22**

**PRS 57-006: SUMMARY OF SAMPLING**

| Location ID | Sample No. | Depth (ft) | Sample Matrix | Sample Request Number | | |
|---|---|---|---|---|---|---|
| | | | | VOCs | INORG | TOTAL U |
| 57-4010 | AAB8397 | 0 - 0.5 | soil | 19224 | 19182 | 19182 |
| 57-4010R | AAB8398 | 0 - 0.5 | soil | 19224 | 19182 | 19182 |

### 5.5.5 Background Comparisons

All inorganic analytes, except silver, measured at PRS 57-006 were compared with their natural background UTLs (no UTL is available for silver). Those whose concentrations exceeded background UTLs are shown in Table 5-23. As shown in Appendix A, which lists the complete analytical results for these soil samples, all inorganic analytes except lead and mercury were eliminated as COPCs because they were detected at concentrations below their respective background UTLs. In the case of silver, the reported concentration (<0.74 mg/kg) is far below the SAL for silver in soil (400 mg/kg). Silver is therefore also eliminated as a COPC. For antimony, the reported concentration of <4.2 mg/kg, although greater than the UTL for antimony in soil (1 mg/kg), is substantially below the SAL for antimony in soil (32 mg/kg). For this reason, antimony is also eliminated as a COPC.

The location from which samples were collected that contained analytes exceeding their background UTLs is shown in Fig. 5-6.

**TABLE 5-23**

**PRS 57-006: INORGANIC ANALYTES FOUND AT CONCENTRATIONS GREATER THAN BACKGROUND UTLs**

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | UTL (mg/kg) |
|---|---|---|---|---|---|
| Lead | 57-4010 | AAB8398 | 0-0.5 | 90.4 | 23.3 |
| | 57-4010R | AAB8397 | 0-0.5 | 187 | |
| Mercury | 57-4010 | AAB8397 | 0-0.5 | 0.43 | 0.1 |
| | 57-4010R | AAB8398 | 0-0.5 | 1.1 | |

Lead and mercury are retained as COPCs and will be evaluated further in the screening assessment.

### 5.5.6 Evaluation of Organic Constituents

Samples from PRS 57-006 were analyzed for volatile organic chemicals; none were detected, with the exception of acetone: the replicate soil sample collected from beneath the drum had an acetone concentration of 70 mg/kg. But because no acetone was detected in the regular soil sample, the presence of acetone in the replicate sample is attributed to cross-contamination in the analytical chemistry laboratory. In any case, the concentration of acetone in the replicate sample

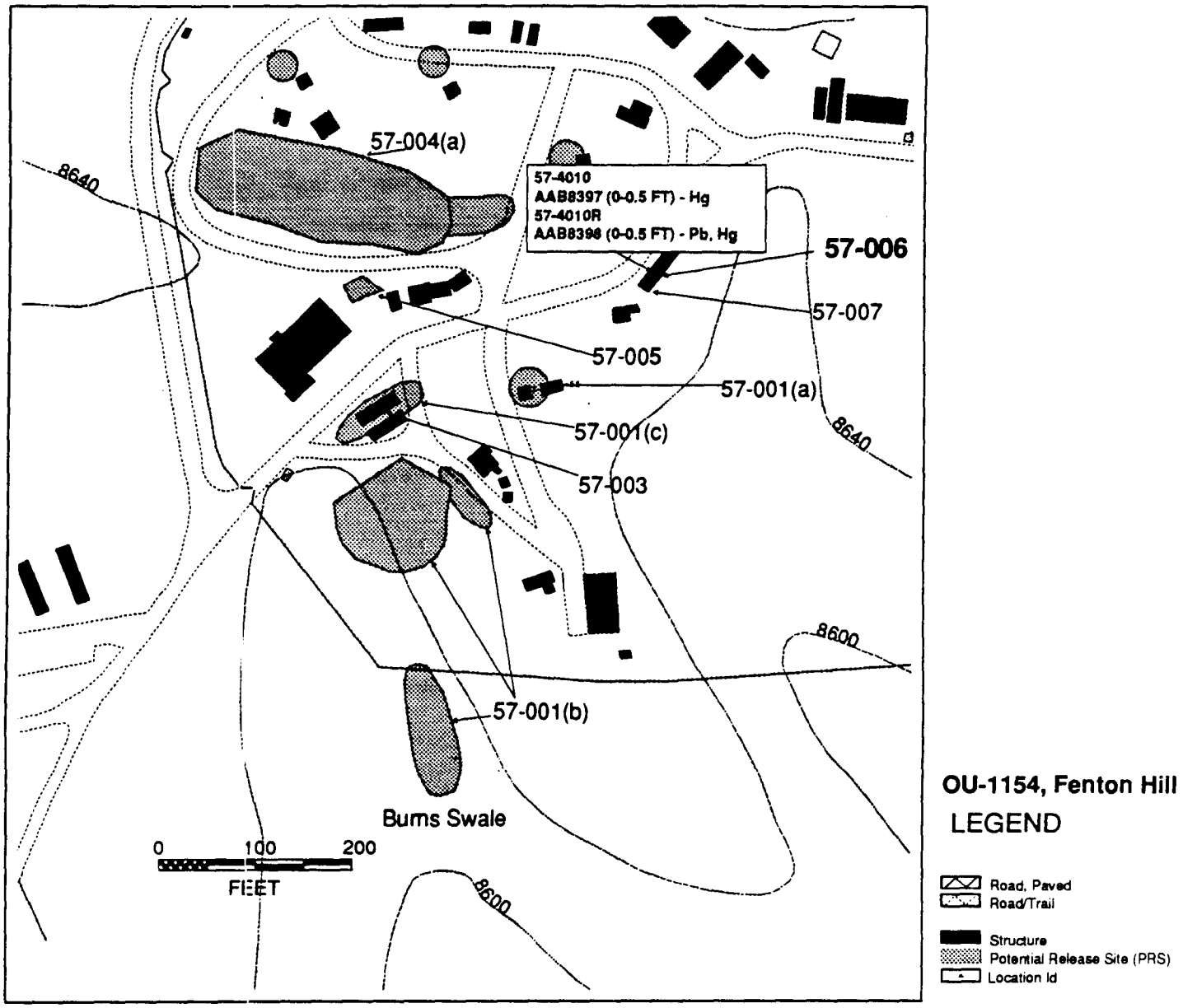



Figure 5-6. PRS 57-006: Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs

Source: FIMAD, 11/21/95, G103966
Modified by: C. Rivera Lyons 2/20/96

is far below the SAL for acetone in soil (2000 mg/kg), and on that basis acetone can be eliminated as a COPC.

### 5.5.7 Human Health Assessment

#### 5.5.7.1 Screening Assessment for PRS 57-006

The concentrations of the two inorganic analytes retained as COPCs after comparison with their background UTLs were next compared with their SALs. Table 5-24 shows the comparison.

**TABLE 5-24**

**PRS 57-006: CONCENTRATIONS OF COPCs vs SALs**

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | SAL (mg/kg) |
|---|---|---|---|---|---|
| Lead | 57-4010 | AAB8397 | 0 - 0.5 | 90.4 | 400 |
| | 57-4010R | AAB8398 | 0 - 0.5 | 187 | |
| Mercury | 57-4010 | AAB8397 | 0 - 0.5 | 0.43 | 23 |
| | 57-4010R | AAB8398 | 0 - 0.5 | 1.1 | |

**Greater than or equal to SAL.** No chemicals were detected in concentrations exceeding their respective SALs.

**No SAL.** No chemicals fall into the No SAL category.

**Below SAL.** Two chemicals, lead and mercury, were detected at concentrations below their SALs.

**Multiple Chemical Evaluation.** To evaluate multiple chemical effects for this data set, chemicals detected at concentrations below their respective SALs were grouped according to their toxicological effects (carcinogenic or noncarcinogenic). Both lead and mercury are noncarcinogens. The concentration of each was normalized to its SAL, and the results were summed as described in Subsection 3.4.1. The results of the evaluation based on noncarcinogenic effects are shown in Table 5-25.

**TABLE 5-25**

**PRS 57-006: MULTIPLE CHEMICAL EVALUATION**

| Chemical | Concentration (mg/kg) | SAL (mg/kg) | Normalized Value |
|---|---|---|---|
| Lead | 187 | 400 | 0.47 |
| Mercury | 1.1 | 23 | 0.05 |
| Sum of Normalized Values | | | **0.52** |

The results of the multiple chemical evaluation based on noncarcinogenic effects is less than one (0.52), indicating that potential adverse human health effects from exposure are unlikely. On that basis, both lead and mercury are eliminated as COPCs. No COPCs are retained for PRS 57-006.

#### 5.5.7.2 Risk Assessment for PRS 57-006

No risk assessment was performed for PRS 57-006 because no COPCs were identified by the screening assessment.

### 5.5.8 Ecological Assessment

Given the moderately developed environs of this PRS, there is some potential for receptors to come in contact with contaminants. For this reason, this PRS will be assessed through the new Ecological Exposure Unit (Ecozone) approach, which considers contaminants with concentrations greater than UTLs, when that approach has been approved through the ER Project office. Threatened and endangered species and/or sensitive habitat (see Chapter 2) will be evaluated as part of this assessment.

### 5.5.9 Extent of Contamination

No contamination was detected at this PRS.

### 5.5.10 Conclusions and Recommendations

We recommend NFA for PRS 57-006 on the basis of NFA criterion 4. This PRS will not be added to the HSWA Module of the Laboratory RCRA operating permit and is proposed for removal from the ER Project list of PRSs.

## 5.6 PRS 57-007—Chemical Waste Leach Field

This PRS is the leach field located adjacent to the trailer in which the materials and fluids from the geothermal activities were chemically analyzed. Waste water not discharged to the chemical waste drum (PRS 57-006) was disposed of in the trailer's main sink, which drained to this leach field. Phase I sampling of the field was designed to determine the presence or absence of metallic and volatile organic indicator constituents in the leach field sediments.

The recommendation for PRS 57-007 is NFA, based on the analytical results and the screening assessment, which indicated negligible risk.

### 5.6.1 History

PRS 57-007 is discussed in detail in Section 5.4 of the RFI Work Plan for OU 1154 (LANL 1994, 1159).

According to existing documentation, the leach field was located approximately 20 ft southeast of the trailer and was constructed of cinder blocks filled with gravel. The field is believed to have been about 8 -10 ft below ground surface and was open at the bottom. Materials that could potentially have contributed contaminants to the leach field, via disposal through the drain in the trailer, are very small amounts of drilling muds (which included barite and lubricating materials), other constituents picked up during circulation of water through the hot underground rock, and small amounts of chemicals used for the analyses carried out in the trailer that were inadvertently disposed of v a the main drain.

### 5.6.2 Description

The leach field is described in Section 5.4 of the RFI Work Plan for OU 1154 (LANL 1994, 1159).

### 5.6.3 Previous Investigations

No previous investigations were performed at PRS 57-007.

### 5.6.4 Field Investigation

The exact location of the leach field was not known, but it was thought to be about 20 ft southeast of the former location of the trailer (which had been removed in 1989). It proved necessary to use power excavating equipment as well as hand tools to locate the field. During the removal of the trailer, the end of the PVC drainline leading to the leach field had been exposed; believing that the leach field could be located by excavating along this line, a bobcat fitted with a front-end loader plus hand excavation techniques were used to expose the line. The leach field was found to be only about 1 - 2 ft below the ground surface, rather than the 8 - 10 ft expected, and was oriented southwest to northeast. Thus, the area actually sampled was northeast of the original location of the trailer.

The RFI Work Plan called for one sample of sediment to be collected from the leach field, from the location judged to be the most highly contaminated (on the basis of field screening data, visual observations, and other field information). If no evidence of contamination was observed, a sampling location immediately beneath the end of the drainline was to be selected on the basis of professional judgment.

Because no visual or olfactory evidence of potential contamination was found in the leach field itself, the sediment sample was collected at the 0- to 1-ft depth from the area beneath the end of the drainline. This sample, consisting of brown sand mixed with gravel, was submitted for total metals, total uranium, and VOC analyses. Information on the sampling done at PRS 57-007 is summarized in Table 5-26.

**TABLE 5-26**

**PRS 57-007: SUMMARY OF SAMPLING**

| Location ID | Sample No. | Depth (ft) | Sample Matrix | Sample Request Number | | |
|---|---|---|---|---|---|---|
| | | | | VOCs | INORG | TOTAL U |
| 57-4000 | AAB5567 | 0 - 1 | sediment | 20571 | 20573 | 20573 |

### 5.6.5 Background Comparisons

All inorganic analytes detected at PRS 57-007, except silver, were compared with their natural background UTLs (no UTL is available for silver). Those analytes whose concentrations exceeded background UTLs are shown in Table 5-27. As shown in Appendix A , which lists the complete analytical results for these soil samples, all inorganic analytes except mercury, total uranium, and zinc were eliminated as COPCs because they were detected at concentrations below their respective background UTLs. In the case of silver, the reported detection limit of <0.69 mg/kg is much smaller than the SAL for silver in soil (400 mg/kg). Silver is therefore eliminated as a COPC. For antimony, the reported detection limit of <3.6 mg/kg, although exceeding the UTL for antimony in soil (1 mg/kg), is much lower than the SAL for antimony in soils. For this reason, antimony is also eliminated as a COPC.

The location from which the sample was collected that contained analytes exceeding their background UTLs is shown in Fig. 5-7.

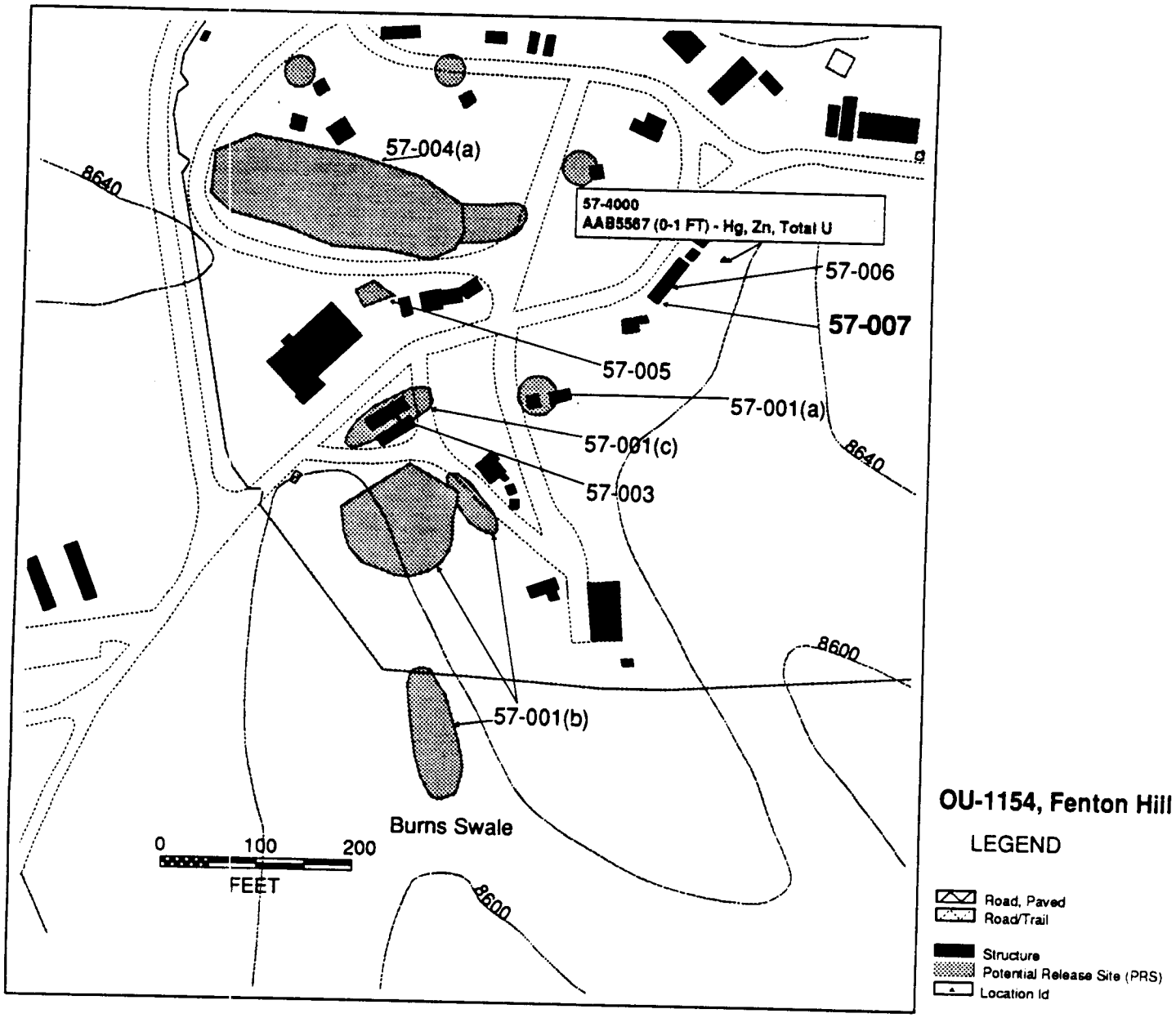



Figure 5-7. PRS 57-007: Locations from which samples were collected that contained analytes in concentrations exceeding background UTLs

Source: FIMAD, 11/21/95, G103966
Modified by: C. Rivera Lyons 2/17/96

TABLE 5-27

PRS 57-007: INORGANIC ANALYTES FOUND AT CONCENTRATIONS GREATER THAN BACKGROUND UTLs

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | UTL (mg/kg) |
|---|---|---|---|---|---|
| Mercury | 57-4000 | AAB5567 | 0-1 | 0.7 | 0.1 |
| Zinc | 57-4000 | AAB5567 | 0-1 | 51.9 | 50.8 |
| Total Uranium | 57-4000 | AAB5567 | 0-1 | 3.8 | 1.87 |

### 5.6.6 Evaluation of Organic Constituents

PRS 57-007 was sampled for volatile organic chemicals; none were detected.

### 5.6.7 Human Health Assessment

#### 5.6.7.1 Screening Assessment for PRS 57-007

The concentrations of the three inorganic analytes retained as COPCs after comparison with their background UTLs were next compared with their SALs. Table 5-28 shows the comparison.

TABLE 5-28

PRS 57-007: CONCENTRATIONS OF COPCs vs SALs

| Chemical | Location ID | Sample No. | Depth (ft) | Concentration (mg/kg) | SAL (mg/kg) |
|---|---|---|---|---|---|
| Mercury | 57-4000 | AAB5567 | 0 - 1.0 | 0.7 | 23 |
| Uranium | 57-4000 | AAB5567 | 0 - 1.0 | 3.8 | 230 * |
| Zinc | 57-4000 | AAB5567 | 0 - 1.0 | 51.9 | 23 000 |

*230 mg/kg is the SAL for uranium soluble salts.

**Greater than or equal to SAL.** No chemicals were detected at concentrations exceeding their respective SALs.

**No SAL.** No chemicals fall into the No SAL category.

**Below SAL.** Mercury, uranium, and zinc were all detected at concentrations below their respective SALs.

**Multiple Chemical Evaluation.** To evaluate multiple chemical effects for this data set, chemicals detected at concentrations below their respective SALs were grouped according to their toxicological effects (carcinogenic or noncarcinogenic). All of the chemicals listed in Table 5-28 are noncarcinogens. The concentration of each was normalized to its SAL, and the results were

summed as described in Subsection 3.4.1. The multiple chemical evaluation based on noncarcinogenic effects is shown in Table 5-29.

**TABLE 5-29**

**PRS 57-007: MULTIPLE CHEMICAL EVALUATION**

| Chemical | Concentration (mg/kg) | SAL (mg/kg) | Normalized Value |
|---|---|---|---|
| Mercury | 0.7 | 23 | 0.03 |
| Uranium | 3.8 | 230* | 0.02 |
| Zinc | 51.9 | 23000 | 0.002 |
| Sum of Normalized Values | | | **0.05** |

*230 mg/kg is the SAL for uranium soluble salts.

The results of the multiple chemical evaluation based on noncarcinogenic effects is less than one (0.05), indicating that potential adverse human health effects from exposure are unlikely. Therefore, all three chemicals are eliminated as COPCs. No chemicals remain as COPCs at this PRS.

#### 5.6.7.2 Risk Assessment for PRS 57-007

No risk assessment was performed for PRS 57-007 because no COPCs were identified by the screening assessment.

### 5.6.8 Ecological Assessment

Because the environs of this PRS are moderately developed, there is some potential for receptors to come in contact with contaminants. For this reason, this PRS will be assessed through the new Ecological Exposure Unit (Ecozone) approach, which considers contaminants with concentrations greater than UTLs, when that approach has been approved through the ER Project office. Threatened and endangered species and/or sensitive habitat (see Chapter 2) will be evaluated as part of this assessment.

### 5.6.9 Extent of Contamination

No contaminants were detected at this PRS.

### 5.6.10 Conclusions and Recommendations

We recommend NFA for PRS 57-007 on the basis of NFA criterion 4. This PRS will not be added to the HSWA Module of the Laboratory RCRA operating permit and is proposed for removal from the ER Project list of PRSs.

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## APPENDIX A ANALYTICAL DATA

The analytical data is presented in two tables. Table A-1 presents the inorganic analytical data for all PRSs. Table A-2 presents the organic analytical data for those compounds in each PRS that exceed their SALs. (Raw data results for the entire site were too lengthy for inclusion here; they may be obtained upon request.)

All analytical data are available from the Facility for Information Management, Analysis, and Display (FIMAD). If FIMAD is not accessible, data will be provided upon request. A hard copy of the data is available from the Records Processing Facility (RPF), under _____.

**LEGEND**
XXX - Exceeds UTL
XXX - Exceeds SAL
N/A -- Not Applicable

| | | | | | | | | | Laboratory Metal Analysis | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FIMAD Site ID | Customer No. | CST-9 Sample No | Sample Type | Begin Depth | End Depth | Depth Units | PRS No. | PRS Description | Ag (mg/kg) | Al (mg/kg) | As (mg/kg) | Ba (mg/kg) | Be (mg/kg) | Cd (mg/kg) | Cn (mg/kg) | Co (mg/kg) |
| 57-2000 | AAB5558 | 94.19387 | CO | 5.25 | 6 | ft. | 57-004(a) | Pond GTP-1E | <1.2 | 7610(J) | 7.9(J) | 852 | <0.84(U) | 6 | 0.97 | <11.9(U) |
| 57-2000 | AAB8781 | 94.19390 | CO | 6 | 7 | ft. | 57-004(a) | Pond GTP-1E | <0.8 | 3390(J) | <1.2(U) | <31.5(U) | <0.56(U) | <0.37 | <0.41 | <0.76 |
| 57-2100 | AAB5559 | 94.19388 | CO | 4.5 | 5 | ft. | 57-001(c) | Pond GTP-2 | <1.3 | 412(J) | <1.8(U) | <13.7(U) | <0.05 | 1.3 | <0.45 | <0.85 |
| 57-2200 | AAB5560 | 94.19389 | CO | 11 | 12 | ft. | 57-001(b) | Pond GTP-3W | <1.7 | 8810(J) | 103(J) | 11200 | <0.84(U) | <0.96(U) | <0.86 | <6.2(U) |
| 57-2300 | AAB5561 | 94.19393 | CO | 4 | 5 | ft. | 57-001(b) | Burns Swale | <0.93 | 13400(J) | <0.61(U) | 129 | 1.6 | 4.3 | <0.47 | <8.3(U) |
| 57-2300 | AAB5562 | 94.19394 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | <0.86 | 3220(J) | 30(J) | 525 | <0.52(U) | 2.4 | <0.43 | <1.9(U) |
| 57-2300R | AAB8396 | 94.19397 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | <0.87 | 3650(J) | 22(J) | 523 | <0.54(U) | 2.2 | <0.44 | <1.7(U) |
| 57-2350 | AAB5563 | 94.19395 | CO | 3 | 4 | ft. | 57-001(b) | Burns Swale | <0.86 | 7960(J) | <0.46 | 50.3(U) | <0.69 | 2.5 | <0.43 | <1.9(U) |
| 57-2350 | AAB5564 | 94.19396 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | <0.93 | 6930(J) | 2.6(J) | 157 | <0.96(U) | 3.1 | <0.47 | <3.3(U) |
| 57-3000 | AAB5565 | 94.19391 | CO | 4.5 | 5 | ft. | 57-002 | Sludge Pit East | <1.8 | 7590(J) | 108(J) | 24100 | <0.67(U) | <0.82 | <0.91 | <6.2(U) |
| 57-3100 | AAB5566 | 94.19392 | CO | 9 | 10 | ft. | 57-002 | Sludge Pit East | <1 | 8340(J) | 7.5(J) | 686 | <0.65(U) | <0.46 | <0.51 | <5.1(U) |
| 57-4000 | AAB5567 | 94.31957 | SU | 0 | 12 | in. | TBD | Chemical Leach Field | <0.69 | 3000 | <1.2 | 54.3 | <0.64 | <0.45(U) | <0.44 | <0.78(U) |
| 57-4010 | AAB8397 | 94.23433 | SU | 0 | 6 | in. | TBD | Chemical Waste Drum | <0.74 | 4930 | <1.4(U) | 78.1(U) | <0.64(U) | <0.48(U) | <0.38 | <1.6(U) |
| 57-4010R | AAB8398 | 94.23434 | SU | 0 | 6 | in. | TBD | Chemical Waste Drum | <0.74 | 4420 | <1.1(U) | 93.2 | <0.62(U) | <0.34 | <0.34 | <1.6(U) |
| **BACKGROUND UTLs** | | | | | | | | | N/A | 38700 | 7.82 | 315 | 1.95 | 2.7 | N/A | 19.2 |
| **SALs (Screening Action Levels)** | | | | | | | | | 400 | N/A | N/A | 5600 | N/A | 80 | 1600 | 4600 |
| | | | | | | | | | | | | | | | | |
| 57-3000** | AAA5350 | 95.05259 | CO | 4.5 | 5 | ft. | 57-002 | Sludge Pit East | <0.055 mg/l | N/A | 0.009 mg/l | 1.6 mg/l | N/A | <0.004 mg/l | N/A | N/A |
| **Regulatory TCLP Values** | | | | | | | | | 5 mg/l | N/A | 5 mg/l | 100 mg/l | 1 mg/l | N/A | N/A | 5 mg/l |

* 230 mg/kg is the SAL for Uranium soluble salts
**However, look at TCLP test results to determine actual COPC.

# TABLE A-1
# CONCENTRATIONS OF INORGANIC ANALYTES IN SOIL
# FENTON HILL PROJECT, TA-57 (OU 1154)

**LEGEND**
XXX - Exceeds UTL
XXX - Exceeds SAL
N/A -- Not Applicable

| FIMAD Site ID | Customer No. | CST-9 Sample No | Sample Type | Begin Depth | End Depth | Depth Units | PRS No. | PRS Description | Cr (mg/kg) | Cu (mg/kg) | Hg (mg/kg) | K (mg/kg) | Mg (mg/kg) | Mn (mg/kg) | Na (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-2000 | AAB5558 | 94.19387 | CO | 5.25 | 6 | ft. | 57-004(a) | Pond GTP-1E | 28.1(J) | 244 | <0.04(UJ) | 1680 | 3340 | 498 | <1600(U) |
| 57-2000 | AAB8781 | 94.19390 | CO | 6 | 7 | ft. | 57-004(a) | Pond GTP-1E | <1.2 | <1.2 | <0.03(UJ) | <657(U) | <91.4(U) | 274 | <447(U) |
| 57-2100 | AAB5559 | 94.19388 | CO | 4.5 | 5 | ft. | 57-001(c) | Pond GTP-2 | <1.3(UJ) | <1.3 | <0.03(UJ) | <116(U) | <63.9(U) | 47 | <41.4(U) |
| 57-2200 | AAB5560 | 94.19389 | CO | 11 | 12 | ft. | 57-001(b) | Pond GTP-3W | 23.8(J) | 216 | <0.06(UJ) | 2920 | 25100 | 389 | 2800 |
| 57-2300 | AAB5561 | 94.19393 | CO | 4 | 5 | ft. | 57-001(b) | Burns Swale | 7.1(J) | 7.3 | <0.03(U) | 1280 | 2570 | 378 | <522(U) |
| 57-2300 | AAB5562 | 94.19394 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | 3.1(J) | 7.2 | <0.03(UJ) | <843(U) | <856(U) | 267 | <237(U) |
| 57-2300R | AAB8396 | 94.19397 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | 2.6(J) | 6.7 | <0.03(U) | <783 | <865(U) | 522 | <187(U) |
| 57-2350 | AAB5563 | 94.19395 | CO | 3 | 4 | ft. | 57-001(b) | Burns Swale | <1.6(J) | <3.3(U) | <0.03(UJ) | <593(U) | <641(U) | 328 | <333(U) |
| 57-2350 | AAB5564 | 94.19396 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | 3.9(J) | <6.1(U) | <0.03(UJ) | 1400 | 1270 | 862 | <220(U) |
| 57-3000 | AAB5565 | 94.19391 | CO | 4.5 | 5 | ft. | 57-002 | Sludge Pit East | 16.6(J) | 225 | <0.17(U) | 2670 | 13300 | 399(UJ) | 4180 |
| 57-3100 | AAB5566 | 94.19392 | CO | 9 | 10 | ft. | 57-002 | Sludge Pit East | 18.7(J) | 37.3 | <0.03(UJ) | 2030 | 2980 | 384 | 1660 |
| 57-4000 | AAB5567 | 94.31957 | SU | 0 | 12 | in. | TBD | Chemical Leach Field | <1.3(U) | <2 | 0.7 | <419 | <210 | 336 | <88 |
| 57-4010 | AAB8397 | 94.23433 | SU | 0 | 6 | in. | TBD | Chemical Waste Drum | 3.1(U) | <4.8(U) | 0.43 | <791(U) | <501(U) | 249 | <252(U) |
| 57-4010R | AAB8398 | 94.23434 | SU | 0 | 6 | in. | TBD | Chemical Waste Drum | 3.7 | 5.6 | 1.1 | <603(U) | <469(U) | 252 | <155(U) |
| **BACKGROUND UTLs** | | | | | | | | | 19.3 | 30.7 | 0.1 | 3410 | 4610 | 714 | 915 |
| **SALs (Screening Action Levels)** | | | | | | | | | 400 | 3000 | 24 | N/A | N/A | 11000 | N/A |
| | | | | | | | | | | | | | | | |
| 57-3000** | AAA5350 | 95.05259 | CO | 4.5 | 5 | ft. | 57-002 | Sludge Pit East | 0.028 mg/l | N/A | 0.0002 mg | N/A | N/A | N/A | N/A |
| **Regulatory TCLP Values** | | | | | | | | | N/A | 0.2 mg/l | N/A | N/A | N/A | N/A | N/A |

* 230 mg/kg is the SAL for Uranium soluble salts
**However, look at TCLP test results to determine actual COPC.

# TABLE A-1 (cont.)
# CONCENTRATIONS OF INORGANIC ANALYTES IN SOIL
# FENTON HILL PROJECT, TA-57 (OU 1154)

| LEGEND |
|---|
| XXX - Exceeds UTL |
| XXX - Exceeds SAL |
| N/A -- Not Applicable |

| FIMAD Site ID | Customer No. | CST-9 ample No | Sample Type | Begin Depth | End Depth | Depth Units | PRS No. | PRS Description | Ni (mg/kg) | Pb (mg/kg) | Sb (mg/kg) | Se (mg/kg) | Tl (mg/kg) | V (mg/kg) | Zn (mg/kg) | Total U (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 57-2000 | AAB5558 | 94.19387 | CO | 5.25 | 6 | ft. | 57-004(a) | Pond GTP-1E | 13.9 | 161 | <6.8 | <0.65(R) | <0.65 | <10.9(UJ) | 1290 | 2.3 |
| 57-2000 | AAB8781 | 94.19390 | CO | 6 | 7 | ft. | 57-004(a) | Pond GTP-1E | <1.3 | 8.4 | <4.5 | <0.43(R) | <0.43 | <0.65(UJ) | 41.2 | 0.708 |
| 57-2100 | AAB5559 | 94.19388 | CO | 4.5 | 5 | ft. | 57-001(c) | Pond GTP-2 | <1.4 | 14.9 | <5.1 | <0.48(R) | <0.48 | <0.73(UJ) | <3.4(U) | 0.602 |
| 57-2200 | AAB5560 | 94.19389 | CO | 11 | 12 | ft. | 57-001(b) | Pond GTP-3W | <10.3(U) | 167 | <9.6 | <0.91(R) | <1(U) | <14.7(UJ) | 221 | 1.435 |
| 57-2300 | AAB5561 | 94.19393 | CO | 4 | 5 | ft. | 57-001(b) | Burns Swale | <7.6(U) | 17.3 | <5.3 | <0.59 | <0.5 | 20.5(J) | 33.1 | 1.899 |
| 57-2300 | AAB5562 | 94.19394 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | <2.7 | 18.3 | <4.9 | <0.56 | <0.46 | <4.9(UJ) | 35.1 | 0.463 |
| 57-2300R | AAB8396 | 94.19397 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | <2.8(U) | 18.4 | <4.9 | <0.47 | <0.47 | <6.4(UJ) | 37.7 | 0.478 |
| 57-2350 | AAB5563 | 94.19395 | CO | 3 | 4 | ft. | 57-001(b) | Burns Swale | <2.7(U) | 9.9 | <4.9 | <0.46 | <0.46 | <4.9(UJ) | 39.6 | 1.161 |
| 57-2350 | AAB5564 | 94.19396 | SU | 0 | 12 | in. | 57-001(b) | Burns Swale | <6.2(U) | 11.1 | <5.3 | <0.5 | <0.5 | <12.2(UJ) | 37 | 1.019 |
| 57-3000 | AAB5565 | 94.19391 | CO | 4.5 | 5 | ft. | 57-002 | Sludge Pit East | <11 | 249 | <10.2 | <0.97 | <4.1(U) | <10.5(UJ) | 220 | 1.66 |
| 57-3100 | AAB5566 | 94.19392 | CO | 9 | 10 | ft. | 57-002 | Sludge Pit East | <10.1(U) | 248 | <5.7 | <0.66 | <0.54 | <12.7(UJ) | 95.8 | 1.48 |
| 57-4000 | AAB5567 | 94.31957 | SU | 0 | 12 | in. | TBD | Chemical Leach Field | <2(U) | 7.6 | <3.6 | <0.55 | <0.54(U) | <1.7 | 51.9 | 3.8 |
| 57-4010 | AAB8397 | 94.23433 | SU | 0 | 6 | in. | TBD | Chemical Waste Drum | <2.7(U) | 90.4 | <4.2 | <0.93(U) | <0.26 | <5.1(U) | 41.7 | 0.494(J) |
| 57-4010R | AAB8398 | 94.23434 | SU | 0 | 6 | in. | TBD | Chemical Waste Drum | <3.1(U) | 187 | <4.2 | <0.53(U) | <0.26 | <4.7(U) | 40.9 | 0.549(J) |
| **BACKGROUND UTLs** | | | | | | | | | 15.2 | 23.3 | 1 | 1.7 | 1 | 41.9 | 50.8 | 1.87 |
| **SALs (Screening Action Levels)** | | | | | | | | | 1600 | 400 | 32 | 400 | 6.4 | 560 | 24000 | 230* |
| | | | | | | | | | | | | | | | | |
| 57-3000** | AAA5350 | 95.05259 | CO | 4.5 | 5 | ft. | 57-002 | Sludge Pit East | N/A | 0.66 mg/l | N/A | <0.002 mg/ | N/A | N/A | N/A | N/A |
| **Regulatory TCLP Values** | | | | | | | | | N/A | 5 mg/l | N/A | 1 mg/l | N/A | N/A | N/A | N/A |

* 230 mg/kg is the SAL for Uranium soluble salts

**However, look at TCLP test results to determine actual COPC.

# TABLE A-1 (cont.)
# CONCENTRATIONS OF INORGANIC ANALYTES IN SOIL
# FENTON HILL PROJECT, TA-57 (OU 1154)

| | | PRS NUMBER<br>FIMAD SITE ID/CUSTOMER NO.<br>CST-9 SAMPLE NO. | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 57-004(a) | | 57-001(c) | 57-001(b) | | | |
| VOCs (ppb) | SALs (ppb) | 57-2000/AAB5558<br>94.19387 | 57-2000/AAB8781<br>94.19390 | 57-2100/AAB5559<br>94.19388 | 57-2200/AAB5560<br>94.19389 | 57-2300/AAB5561<br>94.19393 | 57-2300/AAB5562<br>94.19394 | 57-2300R/AAB8396<br>94.19397 |
| Vinyl Chloride | 5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| **SVOCs** (ppb) | | | | | | | | |
| Aniline | 19000 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Anthracene | 19000 | <98000(UJ) | N/A | N/A | <69000(UJ) | N/A | N/A | N/A |
| Azobenzene | 4000 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Benzo[a]anthracene | 610 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Benzo[a]pyrene | 61 | <98000(UJ) | <330(UJ) | <390(UJ) | <69000(UJ) | <400(UJ) | <350(UJ) | <360(UJ) |
| Benzo[b]fluoranthene | 610 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Benzo[k]fluoranthene | 6100 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Bis(2-chloroethyl)ether | 74 | <98000 | <330 | <390 | <69000 | <400 | <350 | <360 |
| Bis(2-chloroisopropyl)ethe | 3900 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Bis(2-ethylhexy)phthalate | 32000 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Chrysene | 24000 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| p-Dichlorobenzene | 7400 | <98000(R) | N/A | N/A | <69000(R) | N/A | N/A | N/A |
| 3,3'-Dichlorobenzidine | 990 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| 2,4-Dichlorophenol | 200000 | <98000 | N/A | N/A | N/A | N/A | N/A | N/A |
| 2,6-Dinitrotoulene | 65000 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Hexachlorobenzene | 280 | <98000 | <330 | N/A | <69000 | <400 | <350 | <360 |
| Hexachlorobutadiene | 5700 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Hexachloroethane | 32000 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| 2-Nitroaniline | 3900 | <240000 | N/A | N/A | <170000 | N/A | N/A | N/A |
| Nitrobenzene | 33000 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| N-Nitrosodi-n-propylamine | 63 | <98000 | <330 | <390 | <69000 | <400 | <350 | <360 |
| N-Nitrosodiphenylamine | 8.7 | <98000 | <330 | <390 | <69000 | <400 | <350 | <360 |
| Pentachlorophenol | 25000 | <240000 | N/A | N/A | <170000 | N/A | N/A | N/A |
| 2,4,6-Trichlorophenol | 4000 | <98000 | N/A | N/A | <69000 | N/A | N/A | N/A |
| Indeno[1,2,3-cd]pyrene | 610 | N/A | N/A | N/A | <69000 | N/A | N/A | N/A |

N/A - Not Applicable

**TABLE A-2**
**ORGANIC ANALYTES HAVING DETECTION LIMITS THAT EXCEED SALs**
**TA-57 (OU 1154)**

| | | PRS NUMBER<br>FIMAD SITE ID/CUSTOMER NO.<br>CST-9 SAMPLE NO. | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 57-001(b) | | 57-002 | | 57-007 | 57-006 | |
| | SALs | 57-2350/AAB5563 | 57-2350/AAB5564 | 57-3000/AAB5565 | 57-3100/AAB5566 | 57-4000/AAB5567 | 57-4010/AAB8397 | 57-4010R/AAB8398 |
| VOCs (ppb) | (ppb) | 94.19395 | 94.19396 | 94.19391 | 94.19392 | 94.31957 | 94.23433 | 94.23434 |
| Vinyl Chloride | 5 | N/A | N/A | N/A | N/A | <10 | <10 | <10 |
| **SVOCs** (ppb) | | | | | | | | |
| Aniline | 19000 | N/A | N/A | <64000 | N/A | N/A | N/A | N/A |
| Anthracene | 19000 | N/A | N/A | <64000(UJ) | N/A | N/A | N/A | N/A |
| Azobenzene | 4000 | N/A | N/A | <64000 | <4200 | N/A | N/A | N/A |
| Benzo[a]anthracene | 610 | N/A | N/A | <64000 | <4200 | N/A | N/A | N/A |
| Benzo[a]pyrene | 61 | <370(UJ) | <410(UJ) | <64000(UJ) | <4200(UJ) | N/A | N/A | N/A |
| Benzo[b]fluoranthene | 610 | N/A | N/A | <64000 | <4200 | N/A | N/A | N/A |
| Benzo[k]fluoranthene | 6100 | N/A | N/A | <64000 | <4200 | N/A | N/A | N/A |
| Bis(2-chloroethyl)ether | 74 | <370 | <410 | <64000 | <4200 | N/A | N/A | N/A |
| Bis(2-chloroisopropyl)ethe | 3900 | N/A | N/A | <64000 | <4200 | N/A | N/A | N/A |
| Bis(2-ethylhexy)phthalate | 32000 | N/A | N/A | <64000 | N/A | N/A | N/A | N/A |
| Chrysene | 24000 | N/A | N/A | <64000 | N/A | N/A | N/A | N/A |
| p-Dichlorobenzene | 7400 | N/A | N/A | <64000(R) | N/A | N/A | N/A | N/A |
| 3,3'-Dichlorobenzidine | 990 | N/A | N/A | <64000 | N/A | N/A | N/A | N/A |
| 2,4-Dichlorophenol | 200000 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 2,6-Dinitrotoulene | 65000 | N/A | N/A | <64000 | N/A | N/A | N/A | N/A |
| Hexachlorobenzene | 280 | <370 | <410 | <64000 | <4200 | N/A | N/A | N/A |
| Hexachlorobutadiene | 5700 | N/A | N/A | <64000 | N/A | N/A | N/A | N/A |
| Hexachloroethane | 32000 | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| 2-Nitroaniline | 3900 | N/A | N/A | <160000 | <10000 | N/A | N/A | N/A |
| Nitrobenzene | 33000 | N/A | N/A | <64000 | N/A | N/A | N/A | N/A |
| N-Nitrosodi-n-propylamine | 63 | <370 | <410 | <64000 | <4200 | N/A | N/A | N/A |
| N-Nitrosodiphenylamine | 8.7 | <370 | <410 | <64000 | <4200 | N/A | N/A | N/A |
| Pentachlorophenol | 25000 | N/A | N/A | <160000 | N/A | N/A | N/A | N/A |
| 2,4,6-Trichlorophenol | 4000 | N/A | N/A | <64000 | <4200 | N/A | N/A | N/A |
| Indeno[1,2,3-cd]pyrene | 610 | N/A | N/A | <64000 | <4200 | N/A | N/A | N/A |

N/A - Not Applicable

**TABLE A-2 (cont)**
**ORGANIC ANALYTES HAVING DETECTION LIMITS THAT EXCEED SALs**
**TA-57 (OU 1154)**

## APPENDIX B DATA QUALITY EVALUATION SUMMARY

The table below summarizes quality data for the PRSs covered in this report. Chapter 4 discusses quality assurance and quality control.

### DATA QUALITY EVALUATION FOR TA-57 SAMPLES

| SUITE | REQUEST NUMBER | COMMENTS |
|---|---|---|
| Inorganic | 18574 | The percent recovery values for Al, Cr, Hg and V in the blind QC sample were >10 and <75% (70%, 58%, 71%, and 56%, respectively). The percent recovery values for Ag and As were > 125 and < 200% (192% and 175%, respectively). The reported results for these analytes were qualified as estimated (UJ or J). The percent recovery value for Se was > 200 %; the results were therefore qualified as unusable (R). |
| Total U | 18574 | Total Uranium analyzed by KPA. No problems. |
| Organic | 19224 | Surrogate recoveries, holding times, and method blank requirements were met. A blind QC sample was not assigned to this request number group. Acetone was found in a concentration of 70 mg/kg in the field replicate (AAB8398) but at less than 20 mg/kg in the original sample (AAB8397). |
| Organic | 20571 | Surrogate recoveries, holding times, and method blank requirements were met. |
| Organic | 18570 | The laboratory was unable to detect any of the surrogates spiked into samples AAB5558, AAB5560, and AAB5565. The surrogates were masked as a result of dilutions (made in an attempt to quantify TICs present in the samples and to prevent damage to laboratory instruments from the high concentrations of organic matter). Because it was not possible to recover the surrogate spiking compounds,the samples were not qualified.<br><br>The laboratory reported a concentration < 50% of the spiked value for the following spiked components of Sample 94.19398: Anthracene; Benzo(a)pyrene; 1,2-Dichlorobenzene; 1,4-Dichlorobenzene; 4-Methylphenol; Pyrene; Naphthalene; and 1,2,4-Trichlorobenzene. The analytical results for these compounds were qualified as UJ. The detected concentration for 2-Methylphenol and 4-Nitrophenol was <10%; the results were therefore qualified as R |
| Inorganic | 20573 | The samples were within the EPA-EMSL/LV control limits. |
| Total U | 20573 | A blind QC sample was not analyzed with this request number group because the group consisted of only one sample. |
| Total U | 19182 | The percent recovery value for the blind QC sample was not within control limits; the total uranium results for samples AAB8397 and AAB8398 were therefore qualified as estimated (J). |
| Inorganic | 19182 | Of two blind QC samples submitted with this request number group, one was not analyzed because of insufficient sample size—inaccurate recoveries for As (62%), Fe (560%), Mn (140%), and Pb(330%). For the other QC sample, results for the metal analytes were in control. The holding times for Cn for samples AAB8397 and AAB8398 were exceeded; the results were therefore qualified as rejected (R). |
| Inorganic | 21559 | The results for the blind QC sample were in control and were not qualified |

## APPENDIX C RISK ASSESSMENT CALCULATIONS

Risk assesment calculations were not done at the Fenton Hill site. Therefore, this appendix provides the calculations used for the screening assessment, on the basis of which the need for risk assessments was precluded.

All recommended daily allowances (RDAs) listed below are from *Recommended Dietary Allowances*, 10th Edition (National Research Council 1989, 1251).

## ESSENTIAL NUTRIENTS

The essential nutrients detected at concentrations exceeding background UTLs are calcium, magnesium, and sodium. For each of the following calculations, the standard soil ingestion rate is 200 mg/day for a child and 100 mg/day for an individual 11 to 24 years of age.

The generic equation is:

mg of nutrient per kg of soil ÷ a conversion factor X mg of soil per day ingested

### Calcium

The RDAs for calcium are

- 800 mg/day for a child 1 to 10 years of age.
- 1200 mg/day for an individual 11 to 24 years of age.

Calculations for PRS 57-001(b)

22 900 mg calcium per kg of soil ÷ 1 000 000 mg/kg X 200 mg of soil per day = **4.58** mg calcium per day.

22 900 mg calcium per kg of soil ÷ 1 000 000 mg/kg X 100 mg of soil per day = **2.29** mg calcium per day.

Using the standard ingestion rates and the highest concentration of calcium found in the soil at this PRS, the amounts of calcium that would be ingested are 200 to 600 times lower than the RDAs. Calcium is therefore eliminated as a COPC at PRS 57-001(b).

Calculations for PRS 57-002

39 700 mg calcium per kg of soil ÷ 1 000 000 mg/kg X 200 mg of soil per day = **7.94** mg calcium per day.

39 700 mg calcium per kg of soil ÷ 1 000 000 mg/kg X 100 mg of soil per day = **3.97** mg calcium per day.

Using the standard ingestion rates and the highest concentration of calcium in the soil at this PRS, the amounts of calcium that would be ingested are100 to 300 times lower than the RDAs. Calcium is therefore eliminated as a COPC at PRS 57-002.

Calculations for PRS 57-004(a)

31 500 mg calcium per kg of soil ÷ 1 000 000 mg/kg X 200 mg of soil per day = **6.3** mg calcium per day.

31 500 mg calcium per kg of soil ÷ 1 000 000 mg/kg X 100 mg of soil per day = **3.15** mg calcium per day.

Using the standard ingestion rates and the highest concentration of calcium in the soil at this PRS, the amounts of calcium that would be ingested are 190 to 250 times lower than the RDAs. Calcium is therefore eliminated as a COPC at PRS 57-004(a).

**Magnesium**

The RDAs for magnesium are

- 40 mg/day for an infant 0 to 6 months of age
- 50 mg/day for an infant 6 months to 1 year of age
- Amount varies, depending on weight, for a child 1 to 14 years of age
- 400 mg/day for a male 14 to 18 years of age
- 300 mg/day for a female 14 to 18 years of age
- 350 mg/day for a male 19 years of age and older
- 280 mg/day for a female 19 years of age and older

Calculations for PRS 57-001(b)

25 100 mg magnesium per kg of soil ÷ 1 000 000 mg/kg X 200 mg of soil per day = **5.02** mg magnesium per day.

25 100 mg magnesium per kg of soil ÷ 1 000 000 mg/kg X 100 mg of soil per day = **2.51** mg magnesium per day.

Using the standard ingestion rates and the highest concentration of magnesium found in the soil at PRS 57-001(b), the amounts of magnesium that would be ingested are approximately 8 to 150 times lower than the RDAs. Magnesium is therefore eliminated as a COPC at PRS 57-001(b).

Calculations for PRS 57-002

13 300 mg magnesium per kg of soil ÷ 1 000 000 mg/kg X 200 mg of soil per day = **2.66** mg magnesium per day.

13 300 mg magnesium per kg of soil ÷ 1 000 000 mg/kg X 100 mg of soil per day = **1.33** mg magnesium per day.

Using the standard ingestion rates and the highest concentration of magnesium found in the soil at PRS 57-002, the amounts of magnesium that would be ingested are 15 to 300 times lower than the RDAs. Magnesium is therefore eliminated as a COPC at PRS 57-002.

**Sodium**

The RDAs for sodium are

- 46 mg/day for infants
- 500 mg/day for adults

Calculations for PRS 57-001(b)

2 800 mg sodium per kg of soil ÷ 1 000 000 mg/kg X 200 mg of soil per day = **0.56** mg sodium per day.

2 800 mg sodium per kg of soil ÷ 1 000 000 mg/kg X 100 mg of soil per day = **0.28** mg sodium per day.

Using the standard soil ingestion rates and the highest concentration of sodium found at PRS 57-001(b), the amounts of sodium that would be ingested are 80 to 2000 times lower than the RDAs. Sodium is therefore eliminated as a COPC for PRS 57-001(b).

Calculations for PRS 57-002

4 180 mg sodium per kg of soil ÷ 1 000 000 mg/kg X 200 mg of soil per day = **0.83** mg sodium per day.

4 180 mg sodium per kg of soil ÷ 1 000 000 mg/kg X 100 mg of soil per day = **0.42** mg sodium per day.

Using the standard soil ingestion rates and the highest concentration of sodium found at PRS 57-002, the amounts of sodium that would be ingested are 55 to 1000 times lower than the RDAs. Sodium is therefore eliminated as a COPC for PRS 57-002.

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# Investigation Report for Technical Area 57 Aggregate Area (Fenton Hill), Revision 1

Los Alamos
NATIONAL LABORATORY
EST. 1943

Prepared by the Environmental Programs Directorate

Los Alamos National Laboratory, operated by Los Alamos National Security, LLC, for the U.S. Department of Energy under Contract No. DE-EM0003528, has prepared this document pursuant to the Compliance Order on Consent, signed March 1, 2005. The Compliance Order on Consent contains requirements for the investigation and cleanup, including corrective action, of contamination at Los Alamos National Laboratory. The U.S. government has rights to use, reproduce, and distribute this document. The public may copy and use this document without charge, provided that this notice and any statement of authorship are reproduced on all copies.

EP2015-0203

# Investigation Report for the Technical Area 57 Aggregate Area (Fenton Hill), Revision 1

December 2015

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## EXECUTIVE SUMMARY

This investigation report presents the investigation activities at two areas of concern (AOCs) in the Technical Area 57 (TA-57) Aggregate Area, located at Fenton Hill, which lies on the western side of the Jemez Mountains, approximately 12 mi west of Los Alamos National Laboratory (LANL or the Laboratory). Two AOCs within the TA-57 Aggregate Area were addressed during the 2014 investigation because these sites are potentially contaminated with hazardous chemicals and/or radionuclides, and final assessments of site contamination, associated risks, and recommendations for additional corrective actions were incomplete.

The objectives of this investigation were to define the nature and extent of contamination associated with AOCs 57-006 and 57-007 and to obtain data to support decisions regarding the need to remediate or remove contamination at these sites. This report presents the results of site characterization activities conducted during the 2014 investigation, as directed by the approved investigation work plan for the TA-57 Aggregate Area.

The 2014 investigation activities included surface and subsurface characterization sampling at AOCs 57-006 and 57-007. Analysis of sampling data identified two locations of arsenic-contaminated soil above the residential soil screening level at AOC 57-007. Soil removal was completed at two locations, and additional step-out characterization samples were collected to define extent.

Based on the evaluation of the data, the extent of contamination has been defined or no further sampling for extent is warranted at AOCs 57-006 and 57-007. After soil removal, human health and ecological risk assessments were performed for both AOCs, and no potential unacceptable risks exist for any receptors.

Based on the evaluation of the sampling data and risk assessments, the Laboratory recommends corrective action complete without controls for both sites.

## CONTENTS

**1.0 INTRODUCTION ..... 1**
1.1 General Site Information ..... 1
1.2 Purpose of the Investigation ..... 2
1.3 Document Organization ..... 2

**2.0 AGGREGATE AREA SITE CONDITIONS ..... 3**
2.1 Surface Conditions ..... 3
2.1.1 Soil ..... 3
2.1.2 Surface Water ..... 3
2.1.3 Land Use ..... 3
2.2 Subsurface Conditions ..... 4
2.2.1 Stratigraphic Units ..... 4
2.2.2 Hydrogeology ..... 5

**3.0 SCOPE OF ACTIVITIES ..... 6**
3.1 Site Access and Premobilization Activities ..... 6
3.2 Field Activities ..... 6
3.2.1 Geodetic Survey ..... 6
3.2.2 Field Screening ..... 7
3.2.3 Surface and Subsurface Soil Investigation ..... 7
3.2.4 Soil Removal ..... 7
3.2.5 Equipment Decontamination ..... 8
3.2.6 Chemical and Radiological Sample Analyses ..... 8
3.2.7 Health and Safety Measures ..... 8
3.2.8 IDW Storage and Disposal ..... 8
3.3 Deviations ..... 8

**4.0 REGULATORY CRITERIA ..... 8**
4.1 Current and Future Land Use ..... 9
4.2 Screening Levels ..... 9
4.3 Ecological Screening Levels ..... 10
4.4 Cleanup Standards ..... 10

**5.0 DATA REVIEW METHODOLOGY ..... 10**
5.1 Identification of COPCs ..... 10
5.1.1 Inorganic Chemical and Radionuclide Background Comparisons ..... 11
5.1.2 Statistical Methods Overview ..... 12
5.2 Extent of Contamination ..... 13

**6.0 TA-57 BACKGROUND AND FIELD-INVESTIGATION RESULTS ..... 14**
6.1 Background of TA-57 ..... 15
6.1.1 Operational History ..... 15
6.1.2 Summary of Releases ..... 15
6.1.3 Current Site Usage and Status ..... 16
6.2 AOC 57-006, Former Waste Storage Drum ..... 16
6.2.1 Site Description and Operational History ..... 16
6.2.2 Relationship to Other SWMUs and AOCs ..... 16
6.2.3 Summary of Previous Investigations ..... 16
6.2.4 Site Contamination ..... 16

6.2.5 Summary of Human Health Risk Screening ..... 20
6.2.6 Summary of Ecological Risk Screening ..... 20
6.3 AOC 57-007, Leach Field ..... 21
6.3.1 Site Description and Operational History ..... 21
6.3.2 Relationship to Other SWMUs and AOCs ..... 21
6.3.3 Summary of Previous Investigations ..... 21
6.3.4 Site Contamination ..... 21
6.3.5 Summary of Human Health Risk Screening ..... 27
6.3.6 Summary of Ecological Risk Screening ..... 28

**7.0 CONCLUSIONS ..... 28**
7.1 Nature and Extent of Contamination ..... 28
7.1.1 TA-57 Aggregate Area ..... 28
7.2 Summary of Risk-Screening Assessments ..... 28
7.2.1 Human Health Risk-Screening Assessments ..... 28
7.2.2 Ecological Risk-Screening Assessment ..... 28

**8.0 RECOMMENDATIONS ..... 29**
8.1 Additional Field Characterization Activities ..... 29
8.2 Recommendations for Corrective Actions Complete ..... 29

**9.0 REFERENCES AND MAP DATA SOURCES ..... 29**
9.1 References ..... 29
9.2 Map Data Sources ..... 32

**Figures**

Figure 1.1-1 Location of TA-57 Aggregate Area with respect to the Laboratory and surrounding area ..... 33
Figure 2.1-1 Geologic and surface water features in the vicinity of the TA-57 Aggregate Area ..... 34
Figure 6.2-1 Site map of AOCs 57-006 and 57-007 with sample locations ..... 35
Figure 6.2-2 Inorganic chemicals detected or detected above BVs at AOC 57-006 ..... 36
Figure 6.2-3 Organic chemicals detected at AOC 57-006 ..... 37
Figure 6.2-4 Radionuclides detected above BVs at AOC 57-006 ..... 38
Figure 6.3-1 Inorganic chemicals detected or detected above BVs at AOC 57-007 ..... 39
Figure 6.3-2 Organic chemicals detected at AOC 57-007 ..... 40
Figure 6.3-3 Radionuclides detected above BVs at AOC 57-007 ..... 41

**Tables**

Table 1.1-1 Sites Included in the TA-57 Aggregate Area Investigation ..... 43
Table 3.2-1 Surveyed Coordinates for Locations Sampled in 2014 ..... 43
Table 3.2-2 Field-Screening Results for Samples Collected in 2014 ..... 44
Table 3.2-3 Crosswalk of Proposed and Sampled Locations ..... 45
Table 6.2-1 Samples Collected and Analyses Requested at AOC 57-006 ..... 46
Table 6.2-2 Inorganic Chemicals above BVs at AOC 57-006 ..... 47

Table 6.2-3 Organic Chemicals Detected at AOC 57-006 ..... 48
Table 6.2-4 Radionuclides Detected above BVs at AOC 57-006 ..... 48
Table 6.3-1 Samples Collected and Analyses Requested at AOC 57-007 ..... 49
Table 6.3-2 Inorganic Chemicals above BVs at AOC 57-007 ..... 51
Table 6.3-3 Organic Chemicals Detected at AOC 57-007 ..... 52
Table 6.3-4 Radionuclides Detected above BVs at AOC 57-007 ..... 53

**Appendixes**

Appendix A Acronyms and Abbreviations, Metric Conversion Table, and Data Qualifier Definitions
Appendix B Field Methods
Appendix C Investigation-Derived Waste Management
Appendix D Analytical Program
Appendix E Analytical Suites and Results and Analytical Reports (on CD included with this document)
Appendix F Box Plots and Statistical Results
Appendix G Risk Assessments
Appendix H Documentation of Past Investigations and Corrective Actions at New Mexico Oil Conservation Division–Regulated Sites

# 1.0 INTRODUCTION

Los Alamos National Laboratory (LANL or the Laboratory) is a multidisciplinary research facility owned by the U.S. Department of Energy (DOE) and managed by Los Alamos National Security, LLC. The Laboratory is located in north-central New Mexico, approximately 60 mi northeast of Albuquerque and 20 mi northwest of Santa Fe. The Laboratory site covers 36 $mi^2$ of the Pajarito Plateau, which consists of a series of fingerlike mesas that are separated by deep canyons containing perennial and intermittent streams running from west to east. Mesa tops range in elevation from approximately 6200 ft to 7800 ft above mean sea level (amsl).

The Laboratory is participating in a national effort by DOE to clean up sites and facilities formerly involved in weapons research and development. The goal of the Laboratory's efforts is to ensure past operations do not threaten human or environmental health and safety in and around Los Alamos County, New Mexico. To achieve this goal, the Laboratory is currently investigating sites potentially contaminated by past Laboratory operations. These sites are designated as either solid waste management units (SWMUs) or areas of concern (AOCs).

This investigation report addresses AOCs 57-006 and 57-007 within the Technical Area 57 (TA-57) Aggregate Area. These sites are potentially contaminated with hazardous constituents and radionuclides. The New Mexico Environment Department (NMED), pursuant to the New Mexico Hazardous Waste Act, regulates cleanup of hazardous wastes and hazardous constituents. DOE regulates cleanup of radioactive contamination, pursuant to DOE Order 458.1, Administrative Change 3, Radiation Protection of the Public and the Environment, and DOE Order 435.1, Radioactive Waste Management. Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to NMED in accordance with DOE policy.

Corrective actions for hazardous constituents at the Laboratory are subject to the March 2005 Compliance Order on Consent (the Consent Order). This investigation report describes work activities completed in accordance with the Consent Order and the approved TA-57 Aggregate Area investigation work plan (LANL 2012, 214550; NMED 2012, 520936).

## 1.1 General Site Information

The TA-57 Aggregate Area is located at Fenton Hill, which lies on the western side of the Jemez Mountains, approximately 12 mi west of the Laboratory, at an elevation of approximately 8700 ft amsl (Figure 1.1-1). The TA-57 Aggregate Area is located on property owned by the U.S. Forest Service and has been used by DOE pursuant to agreements with the Forest Service. Laboratory operations have been conducted in the aggregate area since 1974. The TA-57 Aggregate Area consists of 10 AOCs, 8 of which have previously been approved for no further action (NFA) or closed under another regulatory program. Three AOCs were approved for NFA by the U.S. Environmental Protection Agency (EPA). The 5 AOCs used to manage geothermal exploration wastes were not subject to regulation under the Resource Conservation and Recovery Act (RCRA). These sites were closed under a discharge plan issued by the New Mexico Oil Conservation Division (NMOCD). Following termination of the discharge plan by NMOCD, no additional corrective actions are required for NMOCD-regulated sites and activities. As indicated in the approval with modifications for the investigation work plan for TA-57 Aggregate Area (LANL 2012, 214550; NMED 2012, 520936), supporting documentation related to past investigations and corrective actions at the closed sites is provided in this report (on CD in Appendix H).

The remaining two AOCs were addressed in the approved TA-57 Aggregate Area investigation work plan (LANL 2012, 214550; NMED 2012, 520936). This investigation report describes the investigation status and results from sampling activities conducted at the two sites. Table 1.1-1 lists the sites included in the investigation report with a brief description and summary of the investigation activities conducted in 2014 for each site.

## 1.2 Purpose of the Investigation

Two AOCs within the TA-57 Aggregate Area were addressed during the 2014 investigation because these sites are potentially contaminated with hazardous chemicals and/or radionuclides, and final assessments of site contamination, associated risks, and recommendations for additional corrective actions are incomplete. The objectives of the 2014 investigation were to (1) define the nature and extent of contamination associated with historical waste management activities at AOCs 57-006 and 57-007, and (2) obtain data to support decisions regarding the need to remediate or remove contamination at these sites.

The process for evaluating the data collected during the 2014 TA-57 Aggregate Area investigation is as follows:

- Initially identify chemicals of potential concern (COPCs) to focus efforts on the constituents of most concern.
- Screen COPCs against soil screening levels (SSLs) and screening action levels (SALs) during determination of extent to focus efforts on characterizing contamination potentially posing a risk/dose and requiring corrective action.
- Perform risk/dose screening level evaluations on all sites to incorporate risk/dose reduction into recommendations for further actions.

All analytical data collected during the 2014 investigation activities are presented and evaluated in this report.

## 1.3 Document Organization

This report is organized into nine sections, including this introduction, with multiple supporting appendixes. Section 2 provides details on the aggregate area site conditions (surface and subsurface). Section 3 provides an overview of the scope of the activities performed during the implementation of the work plan. Section 4 describes the regulatory criteria used to evaluate potential risk to ecological and human receptors. Section 5 describes the data review methods. Section 6 presents an overview of the operational history of the sites, historical releases, summaries of previous investigations, results of the field activities performed, site contamination, and evaluation of the nature and extent of contamination. Section 7 presents the conclusions of the nature and extent evaluations and risk-screening assessments. Section 8 discusses recommendations based on the nature and extent discussions and the risk-screening assessments. Section 9 includes a list of references cited and the map data sources used in all figures.

The appendixes include acronyms, a metric conversion table, and definitions of the data qualifiers used in this report (Appendix A); field methods (Appendix B); investigation-derived waste (IDW) management (Appendix C); analytical program descriptions and summaries of data quality (Appendix D); analytical suites and results and analytical reports (Appendix E on CD); box plots and statistical comparisons (Appendix F); risk-screening assessments (Appendix G); and NFA documentation for other sites from NMOCD (Appendix H).

# 2.0 AGGREGATE AREA SITE CONDITIONS

## 2.1 Surface Conditions

### 2.1.1 Soil

No site-specific soil surveys have been performed at TA-57. Undisturbed soil at TA-57 is probably typical of the soil described by Nyhan et al. (1978, 005702) for the plateau tops and edges in the Los Alamos area (LANL 1994, 034757, p. 3-17). The parent material is the Bandelier Tuff, and the processes-forming soil are expected to be very similar to the processes-forming soils in the Los Alamos area. For most of TA-57, no undisturbed soil remains because of site development activities. Much of the TA-57 site has been filled and regraded. The depth to bedrock noted during previous investigations at TA-57 ranged from 3.5–16 ft.

A thin veneer of physically weathered bedrock colluvium is the only surficial material left in the few undisturbed areas of TA-57. The residual material is thicker on the top of the plateau and thins along the edges to bedrock outcrops on the steep portions of the canyon walls. Some fine-grained to coarser material was observed in the two small alluvial channels draining the site to the southeast and northwest; however, these channels have been considerably altered by activities related to site construction and operations.

### 2.1.2 Surface Water

The major surface water drainage near TA-57 is the Jemez River and its tributaries. The East Fork of the Jemez River drains the Valle Grande. Base flow is from discharge of groundwater to the stream from the near-surface water table in the Valle Grande and from the relatively large amount of precipitation that occurs in the high mountains around the Valles Caldera. San Antonio Creek drains the Valle Toledo to the north of the Valle Grande as well as an area along the west side of the Valles Caldera and is a tributary to the Jemez River at the confluence with the East Fork of the Jemez River. Several thermal springs discharge into the creek. Base flow in San Antonio Creek is from the discharge of groundwater from the near-surface water table in Valle Toledo and from precipitation. At the confluence of the East Fork of the Jemez River and San Antonio Creek, approximately 10 mi south of TA-57, the combined streams become the Jemez River.

The Rio Guadalupe drains the area west of TA-57 and includes the tributaries Rio de las Vacas and Rio Cebolla. The Rio de las Vacas drains an area west of the Valles Caldera. Base flow to the Rio Cebolla is from groundwater discharge from the shallow alluvial aquifers along numerous tributaries and from springs on the canyon walls.

The TA-57 site slopes gently south so the major part of the run-off is into Lake Fork Creek, a tributary to the Rio Cebolla below Fenton Lake. The land immediately northwest of TA-57 drains into an unnamed tributary that joins the Rio Cebolla at Fenton Lake. The land immediately northeast of TA-57 drains toward San Antonio Creek but is diverted by a low divide into Lake Fork Creek (Figure 2.1-1).

### 2.1.3 Land Use

Currently, land use at TA-57 is industrial. The TA-57 site is fenced and locked and is accessible only to authorized workers. A portion of the area immediately adjacent to TA-57 is used by the U.S. Forest Service as a seasonal support area for firefighters. The area around TA-57 is within the Santa Fe National Forest and is used recreationally. Current land uses are not expected to change in the foreseeable future.

## 2.2 Subsurface Conditions

### 2.2.1 Stratigraphic Units

This section summarizes the stratigraphy of the bedrock beneath the TA-57 Aggregate Area. The stratigraphy includes, in descending order, the Bandelier Tuff, the Paliza Canyon Formation, the Abiquiu Tuff, the Abo Formation, the Madera limestone, the Sandia Formation, and Precambrian granite (LANL 1994, 034757, pp. 3-12–3-14).

#### 2.2.1.1 Bandelier Tuff

The Bandelier Tuff is a nonwelded to densely welded rhyolite tuff that ranges from light to dark gray. It is composed of quartz and sanadine crystals, lithic fragments of latite and rhyolite, and fragments of glass shards and rare mafic minerals in a fine-grained ash matrix. This tuff layer thins to the west and southwest away from its source at the Valles Caldera (Rea 1977, 005713; Kaufman and Siciliano 1979, 005941). The Bandelier Tuff is approximately 350 ft thick under the TA-57 Aggregate Area (Purtymun et al. 1974, 005483).

#### 2.2.1.2 Paliza Canyon Formation

The Paliza Canyon Formation underlies the Bandelier Tuff and is composed of andesite and basaltic andesite breccias interbedded with sand and gravels and is approximately 50 ft thick under the site (Purtymun et al. 1974, 005483).

#### 2.2.1.3 Abiquiu Tuff

The Abiquiu Tuff underlies the Paliza Canyon Formation and is a light gray, friable tuffaceous sandstone and is approximately 50 ft thick under the TA-57 site (Purtymun et al. 1974, 005483).

#### 2.2.1.4 Abo Formation

The Permian redbeds of the Abo Formation underlie the Abiquiu Tuff. The lithologies are typically arkosic siltstone, sandstone, and shale with small inclusions of calcareous gray clay. Particles include granules of quartz and feldspar and pieces of igneous rock. The thickness is highly variable because of erosion before Cenozoic volcanism (Rea 1977, 005713; Kaufman and Siciliano 1979, 005941).

#### 2.2.1.5 Magdalena Group

The Magdalena group consists of Madera limestone over the Sandia Formation. The Madera limestone is an arkosic limestone containing both gray and red arkosic shale overlying a dark gray limestone with insets of gray shale and beds of sandstone. The Sandia Formation has an upper clastic member of sandstone, shale, and limestone. The lower part is a discontinuous dark gray siliceous limestone (Rea 1977, 005713; Kaufman and Siciliano 1979, 005941).

#### 2.2.1.6 Precambrian Granite

The Precambrian granite is a coarse basement rock beneath the Sandia Formation and consists or large microcline crystals, quartz-feldspar lenticular gneiss, schists, amphibolites, and pegmatites. Veins include quartz and hornblendite. Minerals include quartz and microcline, oligoclase-andesine, hornblende, biotite, epidote, sphene, apatite, zircon, and magnetite (Rea 1977, 005713; Kaufman and Siciliano 1979, 005941).

### 2.2.2 Hydrogeology

#### 2.2.2.1 Groundwater

Groundwater in the area of TA-57 occurs as (1) water in saturated alluvium, (2) perched aquifers, and (3) the regional aquifer.

**Saturated Alluvium**

Burns Swale, a dry tributary of Lake Fork Canyon at the south side of TA-57, has a 2.0–6.0-ft depth of alluvium in its upper reaches and more than a 40-ft depth of alluvium at the confluence with Lake Fork Canyon (Figure 2.1-1). In May 1979, water was encountered in four holes bored in the alluvium. Later that year, these holes were dry (Kaufman and Siciliano 1979, 005941). After a release of water into Burns Swale in September 1979, the two holes closest to the site again contained water. Releases to Burns Swale were observed to infiltrate the alluvium and then either moved downstream along the alluvium/Cenozoic volcanic bedrock interface or infiltrated the underlying bedrock.

**Perched Aquifers**

The water supply for TA-57 is furnished by a well completed in a perched aquifer at a depth of about 450 ft below ground surface (bgs). The aquifer is in the Abiquiu Tuff and is perched on the clays and siltstones of the Abo Formation. The aquifer is of limited extent, terminating to the east along the canyon cut by San Antonio Creek. Water movement in the aquifer is to the southwest, where a part is discharged through springs and seeps in the lower part of Lake Fork Canyon and along the Rio Cebolla.

Other perched aquifers were identified beneath the site as part of an evaluation of alternate water supplies. Four saturated zones were identified in the Abo Formation at depths of 780–800 ft, 970–995 ft, 1005–1015 ft, and 1100–1120 ft bgs. These zones were described as fine-grained sandstones underlain by shales. Six perched zones were also identified in the Madera limestone.

**Regional Aquifer**

The regional aquifer is at the base of the Madera formation. Many of the hot springs in the region appear at outcrops of this horizon. These are generally hot mineral springs. The regional aquifer is encountered at a depth of 1750 ft bgs below TA-57. All the aquifers above this depth are perched. Within the regional aquifer, a permeable horizon was found in the depth interval 1770–1800 ft bgs. It consisted of 30 ft of arkosic sandstone or granite wash. Geophysical log data indicate the zone is “only fair” as an aquifer (LANL 1994, 034757). Water in the granitic basement is primarily contained in fracture porosity.

#### 2.2.2.2 Vadose Zone

The unsaturated zone from the mesa surface to the top of the regional aquifer is referred to as the vadose zone. The vadose zone underlying TA-57 is in thin surficial soil deposits and in the underlying volcanic tuff. Flow and transport in the vadose zone will be mainly downward to the perched water at the base of the volcanic tuff. The source of moisture for the vadose zone is precipitation, but much of it runs off, evaporates, or is absorbed by plants. The subsurface vertical movement of water is influenced by properties and conditions of the materials that make up the vadose zone.

The Bandelier Tuff is generally dry and does not readily transmit moisture. Most of the pore spaces in the tuff are of capillary size and have a strong tendency to hold water against gravity by surface-tension forces. Vegetation is very effective at removing moisture near the surface. During the summer rainy season, when rainfall is highest, near-surface moisture content is variable because of higher rates of evaporation and transpiration by vegetation, which flourishes at this time.

The various units of the Bandelier Tuff tend to have relatively high porosities. Porosity ranges between 30% and 60% by volume, generally decreasing for more highly welded tuff. Permeability varies for each cooling unit of the Bandelier Tuff. The moisture content of tuff beneath the mesa tops is low, generally less than 5% by volume throughout the profile (Kearl et al. 1986, 015368; Purtymun and Stoker 1990, 007508).

## 3.0 SCOPE OF ACTIVITIES

This section presents an overview of field activities performed during the implementation of the TA-57 Aggregate Area approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). The field investigation results and observations are presented in detail in section 6 and in the appendixes. The scope of activities for the 2014 investigation included site access and premobilization activities; geodetic and field-screening surveys; surface and subsurface sampling; soil removal; site restoration; health and safety monitoring; and waste management activities.

When possible, all field activities were conducted following the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). The applicable field methods are summarized below and are discussed in Appendix B. Any deviations from the approved investigation work plan are noted in section 6 and are described in detail in Appendix B.

### 3.1 Site Access and Premobilization Activities

The area encompassing TA-57 is behind a locked fence and is currently used to operate a fully automated observatory in support of the Thinking Telescopes project overseen by the Laboratory's Intelligence and Space Research Division. A portion of the area immediately adjacent to TA-57 is used by the U.S. Forest Service as a seasonal support area for firefighters. Before field mobilization, the issue of Laboratory worker access (e.g., health and safety documents, notifications) was reviewed as part of the management self-assessment process. All efforts were made to provide a secure and safe work area and to reduce impacts to any site operations, cultural resources, and the environment.

### 3.2 Field Activities

The following subsections describe the field activities conducted during the 2014 investigation, including geodetic surveys, field screening, surface and subsurface sampling, and soil removal. Details regarding the field methods and procedures used to perform these field activities are presented in Appendix B.

#### 3.2.1 Geodetic Survey

Geodetic surveys were conducted during the TA-57 Aggregate Area investigation to locate surface and subsurface sampling locations. Initial geodetic surveys were performed to establish and mark the planned sampling locations in the field in accordance with the most current version of Standard Operating Procedure (SOP) 5028, Coordinating and Evaluating Geodetic Surveys, using a Trimble 5700 differential global positioning system. The surveyed coordinates for all sampling locations at sites included in this report are presented in Table 3.2-1. All geodetic coordinates are expressed as State Plane Coordinate System 1983, New Mexico Central, U.S.

### 3.2.2 Field Screening

Environmental samples were analyzed for organic vapors with a MiniRAE 2000 photoionization detector equipped with an 11.7 electronvolt lamp before they were submitted to the Sample Management Office (SMO). Calibration was performed in accordance with the manufacturer's specifications and the most current version of SOP-06.33, Headspace Vapor Screening with a Photoionization Detector, and recorded on the corresponding sample collection logs (SCLs), chain-of-custody (COC) forms, and the field logbook. The SCLs and COC forms are provided on CD in Appendix E. The organic vapor screening results for the sites are presented Table 3.2-2.

All samples collected were field-screened for radioactivity before they were submitted to the SMO. A Laboratory radiological control technician conducted radiological screening using an Eberline E-600 radiation meter with an SHP-380AB alpha/beta scintillation detector held within 1 in. of the sample. The SCLs and COC forms are provided on CD in Appendix E. The radiological screening results for the sites are presented in Table 3.2-2.

### 3.2.3 Surface and Subsurface Soil Investigation

Samples were collected according to the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). Table 3.2-3 lists the proposed sampling locations for the sites crosswalked with actual location identifiers. Surface samples were collected using the spade-and- scoop method in accordance with SOP-06.09, Spade and Scoop Method for Collection of Soil Samples, or with a hand auger in accordance with SOP-06.10, Hand Auger and Thin-Wall Tube Sampler. The samples were collected in stainless-steel bowls and transferred to sample collection bottles with a stainless-steel spoon.

All surface and shallow subsurface samples were placed in appropriate sample containers and submitted to the laboratory for the analyses specified by the approved work plan. Samples for volatile organic compound (VOC) analysis were collected immediately to minimize the loss of subsurface VOCs during the sample collection process. Standard quality assurance (QA)/quality control (QC) samples (field duplicates, field trip blanks, and rinsate blanks) were also collected in accordance with SOP-5059, Field Quality Control Samples.

All sample collection activities were coordinated with the SMO. After the samples were collected, they remained in the controlled custody of the field team at all times until they were delivered to the SMO. Sample custody was then relinquished to the SMO for delivery of samples to a preapproved off-site analytical laboratory (SCLs and COC forms are included on CD in Appendix E).

### 3.2.4 Soil Removal

Analytical data collected from AOC 57-007 identified levels of arsenic above the residential SSL in surface samples (0.0–1.0 ft bgs) at locations 57-4011 and 57-4020. Specifically, arsenic was detected at concentrations of 13.8 mg/kg and 18.6 mg/kg at locations 57-4011 and 57-4020, respectively. The Laboratory conducted soil removal of the arsenic-contaminated soil using hand tools. A 2-ft radius was removed around locations 57-4011 and 57-4020 to a depth of 2.0 ft and 2.5 ft bgs, respectively. Confirmation samples were not necessary because samples collected at depth at both locations defined the extent of soil removal.

The remediated areas were backfilled to original grade using clean fill, reseeded using an approved native seed mix, and raked. Straw wattles were placed on the downslope side of each area to prevent run off.

### 3.2.5 Equipment Decontamination

All field equipment that had the potential to contact sample material (e.g., hand augers, sampling scoops, bowls, shovels, picks) was decontaminated between sample collection and between sampling locations to prevent cross-contamination. Decontamination was performed in accordance with the current version of SOP-5061, Field Decontamination of Equipment. Rinsate blanks on sampling equipment were collected to check the effectiveness of decontamination. The dry decontamination methods used are described in Appendix B.

### 3.2.6 Chemical and Radiological Sample Analyses

All investigation samples were shipped by the SMO to off-site contract analytical laboratories for the requested analyses. The analyses requested were as specified by the approved work plan (LANL 2012, 214550; NMED 2012, 520936). The samples were analyzed for the following; target analyte list (TAL) metals, total cyanide, nitrate, perchlorate, VOCs, semivolatile organic compounds (SVOCs), and isotopic uranium. Four samples were analyzed for arsenic only.

### 3.2.7 Health and Safety Measures

All 2014 investigation activities were conducted in accordance with an integrated work document that detailed work steps, potential hazards, hazard controls, and required training to conduct work. These health and safety measures included using Level-D personal protective equipment.

### 3.2.8 IDW Storage and Disposal

All IDW generated during the TA-57 Aggregate Area field investigations was managed in accordance with SOP-10021, Characterization and Management of Environmental Program Waste. This procedure incorporates the requirements of all applicable EPA and NMED regulations, DOE orders, and Laboratory implementation requirements, policies, and/or procedures. IDW was also managed in accordance with the approved waste characterization strategy form (WCSF). Details of IDW management for the TA-57 Aggregate Area investigation are presented in Appendix C.

The waste streams associated with the investigation included arsenic-contaminated soil, contact waste, and solid waste. Each waste stream was containerized and placed in an accumulation area appropriate for the regulatory classification of the waste, in accordance with the approved WSCF.

## 3.3 Deviations

Deviations occurred while conducting field activities as defined in the approved work plan (LANL 2012, 214550; NMED 2012, 520936). The deviations did not adversely affect the completion or results of the investigation. Specific deviations are described in Appendix B, section B-9.0.

# 4.0 REGULATORY CRITERIA

This section describes the criteria used for evaluating potential risk to ecological and human receptors. Regulatory criteria identified by medium in the Consent Order include cleanup standards, risk-based screening levels, and risk-based cleanup goals.

Human health risk-screening evaluations were conducted for the TA-57 Aggregate Area using NMED guidance (NMED 2014, 600115). Ecological risk-screening assessments were performed using Laboratory guidance (LANL 2012, 226715).

## 4.1 Current and Future Land Use

The specific screening levels used in the risk evaluation and corrective action decision process at a site depend on the current and reasonably foreseeable future land use(s). The current and reasonably foreseeable future land use(s) for a site determines the receptors and exposure scenarios used to select screening and cleanup levels. The land use within and surrounding the TA-57 Aggregate Area is currently industrial and is expected to remain industrial for the reasonably foreseeable future. The residential scenario is evaluated for comparison purposes per the Consent Order and is the decision scenario for sites that do not require future controls.

## 4.2 Screening Levels

Human health and ecological risk-screening evaluations were conducted for the COPCs detected in solid media at the sites within the TA-57 Aggregate Area. The human health risk-screening assessments (Appendix G) were performed on inorganic and organic COPCs using NMED SSLs for the industrial and residential scenarios (NMED 2014, 600115). When an NMED SSL was not available for a COPC, SSLs were obtained from EPA regional tables (http://www.epa.gov/earth1r6/6pd/rcra_c/pd-n/screen.htm) (adjusted to a risk level of $10^{-5}$ for carcinogens). Radionuclides were assessed using the Laboratory SALs for the same scenarios (LANL 2014, 600064).

Total chromium now has NMED SSLs (NMED 2014, 600115). Because the toxicity of chromium strongly depends on its oxidation state, NMED and EPA have SSLs for trivalent chromium and hexavalent chromium. For screening purposes, the NMED SSLs for total chromium are used for comparison unless there is a known or suspected source of hexavalent chromium at the site. Total chromium screening levels are appropriate for low-level releases to soil from sources not associated with hexavalent chromium. However, NMED and EPA recommends collecting valence-specific data for chromium when it is likely to be an important contaminant at a site and when hexavalent chromium may exist (NMED 2014, 600115; http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/usersguide.htm). Otherwise, total chromium data are used.

Based on the site operational history and email correspondence with an individual who worked in the on-site chemistry trailer (former structure 57-23), no sources of hexavalent chromium are associated with AOCs 57-006 and 57-007 (Haagenstad 2015, 600266). The chemistry trailer was used until 1989 and was removed from the site in 1994. Two potential oxidizing agents were used at the site that could have potentially converted trivalent chromium to hexavalent chromium: nitric acid (<1% solution) was used to preserve water samples, and dilute potassium permanganate was also used occasionally in very small quantities. However, even if some of the chromium had been oxidized to the hexavalent form in the presence of these oxidants, site conditions for decades following the operational activity at the site strongly favor stability of chromium in the trivalent form. The soil pH is circumneutral, which tends to stabilize chromium as trivalent chromium and form insoluble chromium hydroxide. The redox conditions of the soil from the organic matter concentrated in the vegetation and plant litter enhance and maintain the stability of trivalent chromium and prevent oxidation to hexavalent chromium. Furthermore, iron and manganese are present at background concentrations, and the iron concentrations are greater than the manganese concentrations, which favors reducing conditions for chromium and the formation of trivalent chromium. Based on these lines of evidence, chromium is present in the environment in the stable trivalent form. Total chromium results for these AOCs are screened for potential risk using the NMED total chromium SSLs, and no additional sampling and analysis for hexavalent chromium are warranted. The sampling and analysis approach was presented in in the investigation work plan and approved by NMED (LANL 2012, 214550; NMED 2012, 520936).

### 4.3 Ecological Screening Levels

The ecological risk-screening assessments (Appendix G) were conducted using ecological screening levels (ESLs) obtained from the ECORISK Database, Version 3.2 (LANL 2014, 262559). The ESLs are based on similar species and are derived from experimentally determined no observed adverse effect levels, lowest observed adverse effect levels (LOAELs), or doses determined lethal to 50% of the test population. Information relevant to the calculation of ESLs, including concentration equations, dose equations, bioconcentration factors, transfer factors, and toxicity reference values, are presented in the ECORISK Database, Version 3.2 (LANL 2014, 262559).

### 4.4 Cleanup Standards

As specified in the Consent Order, SSLs for inorganic and organic chemicals (NMED 2014, 600115) are used as soil cleanup levels unless they are determined to be impracticable or values do not exist for the current and reasonably foreseeable future land uses. SALs are used as soil cleanup levels for radionuclides (LANL 2014, 600064). Screening assessments compare COPC concentrations for each site with industrial and residential SSLs and SALs.

The cleanup goals specified in Section VIII of the Consent Order are a target risk of $10^{-5}$ for carcinogens or a hazard index (HI) of 1 for noncarcinogens. For radionuclides, the target dose is 25 mrem/yr as authorized by DOE Order 458.1. The SSLs/SALs used for the risk-screening assessments in Appendix G are based on these cleanup goals.

## 5.0 DATA REVIEW METHODOLOGY

The purpose of the data review is to define the nature and extent of contaminant releases for AOCs 57-006 and 57-007 in the TA-57 Aggregate Area. The nature of a contaminant release refers to the specific contaminants that are present, the affected media, and associated concentrations. The nature of contamination is defined through identification of COPCs, as discussed in section 5.1. The extent of contamination refers to the spatial distribution of COPCs, with an emphasis on the distribution of COPCs potentially posing a risk or requiring corrective action. The process for determining the extent of contamination and for concluding no further sampling for extent is warranted is discussed in section 5.2.

### 5.1 Identification of COPCs

COPCs are chemicals and radionuclides that may be present as a result of releases from sites. Inorganic chemicals and some radionuclides occur naturally, and inorganic chemicals and radionuclides detected because of natural background are not considered COPCs. Similarly, some radionuclides may be present as a result of fallout from historical nuclear weapons testing, and these radionuclides are also not considered COPCs. The Laboratory has collected data on background concentrations of many inorganic chemicals, naturally occurring radionuclides, and fallout radionuclides. These data have been used to develop media-specific background values (BVs) and fallout values (FVs) (LANL 1998, 059730). For inorganic chemicals and radionuclides for which BVs or FVs are available, identification of COPCs involves background comparisons, which are described in sections 5.1.1 and 5.1.2. If no BVs or FVs are available or if samples are collected where FVs are not appropriate (i.e., greater than 1.0-ft depth or in rock), COPCs are identified based on detection status (i.e., if the inorganic chemical or radionuclide is detected, it is identified as a COPC).

Organic chemicals may also be present as a result of anthropogenic activities unrelated to the AOC or, to a lesser extent, from natural sources. Because there are no background data for organic chemicals, background comparisons cannot be performed in the same manner as for inorganic chemicals or radionuclides. Therefore, organic COPCs are identified on the basis of detection status (i.e., if an organic chemical is detected, it is identified as a COPC). When assessing the nature of contamination, the history of site operations may be evaluated to determine whether an organic COPC is present because of a release from a site or is present from a non-site-related source. Organic chemicals that are clearly present from sources other than releases from a site (e.g., polycyclic aromatic hydrocarbons) may be eliminated as COPCs.

### 5.1.1 Inorganic Chemical and Radionuclide Background Comparisons

The COPCs are identified for inorganic chemicals and radionuclides following EP-SOP-10071, Background Comparisons for Inorganic Chemicals, and EP-SOP-10073, Background Comparisons for Radionuclides. Inorganic COPCs are identified by comparing site data with BVs and maximum concentrations in a background data set and using statistical comparisons, as applicable (LANL 1998, 059730). Radionuclides are identified as COPCs based on background comparisons and statistical methods if BVs or FVs are available or based on detection status if BVs or FVs have not been established.

Background data are generally available for inorganic chemicals in soil, sediment, and tuff (LANL 1998, 059730). However, some analytes (e.g., nitrate, perchlorate, and hexavalent chromium) have no BVs. A BV may be either a calculated value from the background data set (upper tolerance limit [UTL] or the 95% upper confidence bound on the 95th quantile) or a detection limit (DL). When a BV is based on a DL, there is no corresponding background data set for that analyte/media combination.

For inorganic chemicals, data are evaluated by sample media to facilitate the comparison with media-specific background data. To identify inorganic COPCs, the first step is to compare the sampling result with BVs. If sampling results are above the BV and sufficient data are available (eight or more sampling results and five or more detections), statistical tests are used to compare the site sampling data with the background data set for the appropriate media. If statistical tests cannot be performed because of insufficient data or a high percentage of nondetections, the sampling results are compared with the BV for the appropriate media. If at least one sampling result is above the BV, the inorganic chemical is identified as a COPC unless lines of evidence can be presented to establish the inorganic chemical is not a COPC. Such lines of evidence include, but are not limited to, comparison to the maximum background concentration, number of detects below or above the BV(s), number of nondetects in the data set, and site history. The same evaluation is performed using DLs when an inorganic chemical is not detected but has a DL above the BV. If no BV is available, detected inorganic chemicals are identified as COPCs.

Radionuclides are identified as COPCs based on comparisons to BVs for naturally occurring radionuclides or to FVs for fallout radionuclides. Thorium-228, thorium-230, thorium-232, uranium-234, uranium-235/236, and uranium-238 are naturally occurring radionuclides. Americium-241, cesium-137, plutonium-238, plutonium-239/240, strontium-90, and tritium are fallout radionuclides.

Naturally occurring radionuclides detected at activities above their respective BVs are identified as COPCs. These radionuclides background have no data sets. If there is no associated BV or FV and the radionuclide is detected, it is retained as a COPC.

The FVs for the fallout radionuclides apply to the top 0.0–1.0 ft of soil and fill and to sediment regardless of depth. If a fallout radionuclide is detected in soil or fill samples collected below 1.0 ft or in tuff samples, the radionuclide is identified as a COPC. For soil and fill samples from 1.0 ft bgs or less, if the activity of a

fallout radionuclide is greater than the FV, comparisons of the top 0.0–1.0-ft sampling data are made with the fallout data set and the radionuclide is eliminated as a COPC if activities are similar to fallout activities. Sediment results are evaluated in the same manner, although all data are included, not only the data from 0.0–1.0 ft bgs.

The FV for tritium in surface soil (LANL 1998, 059730) is in units of pCi/mL. This FV requires using sample percent moisture to convert sample tritium data from pCi/g (as provided by analytical laboratories) to the corresponding values in units of pCi/mL. Because sample percent moisture historically has been determined using a variety of methods, often undocumented, the Laboratory has adopted the conservative approach of identifying tritium in soil as a COPC based on detection status.

### 5.1.2 Statistical Methods Overview

A variety of statistical methods may be applied to each of the data sets. The use of any of these methods depends on how appropriate the method is for the available set.

#### 5.1.2.1 Distributional Comparisons

Comparisons between site-specific data and Laboratory background data are performed using a variety of statistical methods. These methods begin with a simple comparison of site data with a UTL estimated from the background data (UTL or the 95% upper confidence bound on the 95th quantile). The UTLs are used to represent the upper end of the concentration distribution and are referred to as BVs. The UTL comparisons are then followed, when appropriate, by statistical tests that evaluate potential differences between the distributions. These tests are used for testing hypotheses about data from two potentially different distributions (e.g., a test of the hypothesis that site concentrations are elevated above background levels). Nonparametric tests most commonly performed include the Gehan test (modification of the Wilcoxon Rank Sum test) and the quantile test (Gehan 1965, 055611; Gilbert and Simpson 1990, 055612).

The Gehan test is recommended when between 10% and 50% of the data sets are nondetections. It handles data sets with nondetections reported at multiple DLs in a statistically robust manner (Gehan 1965, 055611; Millard and Deverel 1988, 054953). The Gehan test is not recommended if either of the two data sets has more than 50% nondetections. If there are no nondetected concentrations in the data, the Gehan test is equivalent to the Wilcoxon Rank Sum test. The Gehan test is the preferred test because of its applicability to a majority of environmental data sets and its recognition and recommendation in EPA sponsored workshops and publications.

The quantile test is better suited to assessing shifts in a subset of the data. The quantile test determines whether more of the observations in the top chosen quantile of the combined data set come from the site data set than would be expected by chance, given the relative sizes of the site and background data sets. If the relative proportion of the two populations being tested is different in the top chosen quantile of the data than in the remainder of the data, the distributions may be partially shifted because of a subset of site data. This test is capable of detecting a statistical difference when only a small number of concentrations are elevated (Gilbert and Simpson 1992, 054952). The quantile test is the most useful distribution shift test where samples from a release represent a small fraction of the overall data collected. The quantile test is applied at a prespecified quantile or threshold, usually the 80th percentile. The test cannot be performed if more than 80% (or, in general, more than the chosen percentile) of the combined data are nondetected values. It can be used when the frequency of nondetections is approximately the same as the quantile being tested. For example, in a case with 75% nondetections in the combined background and site data set, application of a quantile test comparing $80^{th}$ percentiles is appropriate.

However, the test cannot be performed if nondetections occur in the top chosen quantile. The threshold percentage can be adjusted to accommodate the detection rate of an analyte or to analyze differences further into the distribution tails. The quantile test is more powerful than the Gehan test for detecting differences when only a small percentage of the site concentrations are elevated.

If the differences between two distributions appear to occur far into the tails, the slippage test might be performed. This test evaluates the potential for some of the site data to be greater than the maximum concentration in the background data set if, in fact, the site data and background data came from the same distribution. This test is based on the maximum concentration in the background data set and the number ("n") of site concentrations that exceed the maximum concentration in the background set (Gilbert and Simpson 1990, 055612, pp. 5–8). The result (p-value) of the slippage test is the probability that "n" site samples (or more) exceed the maximum background concentration by chance alone. The test accounts for the number of samples in each data set (the number of samples from the site and the number of samples from background) and determines the probability of "n" (or more) exceedances if the two data sets came from identical distributions. This test is similar to the BV comparison in that it evaluates the largest site measurements but is more useful than the BV comparison because it is based on a statistical hypothesis test, not simply on a statistic calculated from the background distribution.

For all statistical tests, a p-value greater than 0.05 was the criterion for accepting the null hypothesis that site sampling results are not different from background (Appendix F).

#### 5.1.2.2 Graphical Presentation

Box plots are provided for a visual representation of the data and to help illustrate the presence of outliers or other anomalous data that might affect statistical results and interpretations. The plots allow a visual comparison among data distributions. The differences of interest may include an overall shift in concentration (shift of central location) or, when the centers are nearly equal, a difference between the upper tails of the two distributions (elevated concentrations in a small fraction of one distribution). The plots may be used in conjunction with the statistical tests (distributional comparisons) described above. Unless otherwise noted, the nondetected concentrations are included in the plots at their reported DLs.

The box plots presented in Appendix F of this report consist of a box, a line across the box, whiskers (lines extended beyond the box and terminated with a short perpendicular line), and points outside the whiskers. The box area of the plot is the region between the 25$^{th}$ percentile and the 75$^{th}$ percentile of the data, the interquartile range or middle half of the data. The horizontal line within the box represents the median (50$^{th}$ percentile) of the data. The whiskers extend to the most extreme point that is not considered an outlier, with a maximum whisker length of 1.5 times the interquartile range, outside of which data may be evaluated for their potential to be outliers. The concentrations are plotted as points overlying the box plot. When a data set contains both detected concentrations and nondetected concentrations reported as DLs, the detected concentrations are plotted as Xs, and the nondetected concentrations are plotted as Os.

### 5.2 Extent of Contamination

Spatial concentration trends are initially used to determine whether the extent of contamination is defined. Evaluation of spatial concentration data considers the conceptual site model of the release and subsequent migration. Specifically, the conceptual site model should define where the highest concentrations would be expected if a release had occurred and how these concentrations should vary with distance and depth. If the results are different from the conceptual site model, it could indicate that no release has occurred or there are other sources of contamination.

In general, both laterally and vertically decreasing concentrations are used to define extent. If concentrations are increasing or not changing, other factors are considered to determine whether extent is defined or if additional extent sampling is warranted. These factors include

- the magnitude of concentrations and rate of increase compared with SSLs/SALs,
- the magnitude of concentrations of inorganic chemicals or radionuclides compared with the maximum background concentrations for the medium,
- concentrations of organic chemicals compared to estimated quantitation limits (EQLs), and
- results from nearby sampling locations.

The primary focus for defining the extent of contamination is characterizing contamination that potentially poses a potential unacceptable risk and may require additional corrective actions. As such, comparison with SSLs/SALs is used as an additional step following a determination of whether extent is defined by decreasing concentrations with depth and distance and whether concentrations are below EQLs or DLs. The initial SSL/SAL comparison is conducted using the residential SSL/SAL (regardless of whether the current and reasonably foreseeable future land use is residential) because this value is typically the most protective. If the current and reasonably foreseeable future land use is not residential, the relevant SSL/SAL may also be compared if the residential SSL/SAL is exceeded or otherwise similar to COPC concentrations. For the AOCs in the TA-57 Aggregate Area, the current and reasonably foreseeable future land use is industrial (section 4.1).

The SSL/SAL comparison is not necessary, if all COPC concentrations are decreasing with depth and distance. If, however, concentrations increase with depth and distance or do not display any obvious trends, the SSLs/SALs are used to determine whether additional sampling for extent is warranted. If the COPC concentrations are sufficiently below the SSL/SAL (e.g., the residential and/or industrial SSL/SAL is 10 times [an order of magnitude] or more than all concentrations), the COPC does not pose a potential unacceptable risk and no further sampling for extent is warranted. The validity of the assumption that the COPC does not pose a risk is confirmed using the results of the risk-screening assessment. The calculation of risk also assists in determining whether additional sampling is warranted to define the extent of contamination that needs additional corrective actions.

Several inorganic chemicals (calcium, magnesium, potassium, and sodium) may be COPCs but do not have SSLs. These constituents are essential nutrients and their maximum concentrations are compared with NMED's essential nutrient screening levels (NMED 2014, 600115). If the maximum concentration is less than the screening level, no additional sampling for extent is warranted.

## 6.0 TA-57 BACKGROUND AND FIELD-INVESTIGATION RESULTS

Two AOCs located in TA-57 are addressed in this investigation report (Table 1.1-1). Each site is described separately in sections 6.2 and 6.3, including the site description and operational history, relationship to other SWMUs and AOCs, previous investigations, site contamination results based on decision-level data from the current and previous investigations, and summaries of human health and ecological risk screening assessments.

## 6.1 Background of TA-57

### 6.1.1 Operational History

TA-57 was established at the Fenton Hill site in 1974 to support the Laboratory's Hot Dry Rock (HDR) program. HDR was an experimental geothermal energy program designed to test the feasibility of extracting heat from deep geologic units near the Valles Caldera. The first location selected for HDR was in Barley Canyon north of the current TA-57 site. After one test well had been drilled, this location was abandoned because of poor winter access and topographic limitations. Operations were moved to the current TA-57 location, which offered a large flat area with easier access. Operations at TA-57 began in 1974.

The HDR energy recovery concept was based on drilling two deep (i.e., 10,000–15,000 ft) wells into the low-permeability, hot-crystalline rock beneath TA-57. Hydraulic fracturing was then used to create a permeable fractured zone between the two wells. During operations, pressurized water was injected into one well and extracted from the other after it flowed through the fractured zone and became heated. Heat exchangers on the surface were used to extract heat from the water, which was then reinjected.

The first geothermal well drilled at TA-57 was well GT-2, which was started in 1974 and completed in 1975. Upon completion of hydraulic fracturing of well GT-2, drilling began on well EE-1, which was to be the extraction well used with GT-2. After completion of fracturing and additional drilling, testing of the two-well system began in 1978. Work on a larger Phase II system began in 1979 with the drilling of well EE-2, the injection well for the Phase II system. Well EE-2 was completed in 1980, and drilling began on extraction well EE-3, which was completed in 1981. Testing of the Phase II system began in 1985 and continued until 1992, when operations were reduced substantially because of funding limitations.

When the extraction wells were drilled, drilling muds were discharged to mud pits and settling ponds near the drill sites. Drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of geothermal energy are solid wastes that are specifically excluded from regulation as hazardous wastes under RCRA [40 Code of Federal Regulations 261.4(b)(5)]. These waste management sites were regulated by NMOCD and were closed in accordance with NMOCD requirements (NMOCD 2003, 101265).

After the HDR project ended, the 5-million-gal. pond originally constructed for the HDR program was converted to a gamma-ray observatory for a project known as Milagro. To construct the observatory, liquid was removed from the pond, the interior of the pond was cleaned, over 700 photomultiplier tubes were placed in the pond, and the pond was refilled with treated water and covered. This water was obtained from an on-site supply well and off-site sources and treated with ion-exchange, granular activated carbon, and ultraviolet light. The Milagro observatory began operating in 1996, and it was decommissioned in June 2008.

TA-57 is currently used to operate a fully automated observatory in support of the Thinking Telescopes project overseen by the Laboratory's Intelligence and Space Research Division. This project combines automated telescope observation, feature extraction from image data, change and anomaly detection, and automated response. An automated measurement program continuously scans the sky to detect optical transients.

### 6.1.2 Summary of Releases

Releases at the TA-57 Aggregate Area sites may have occurred as a result of normal site operations or spills/leaks. Potential contaminant sources include a waste storage drum (AOC 57-006) and a leach field (AOC 57-007).

### 6.1.3 Current Site Usage and Status

The fenced area at TA-57 is industrial. A portion of the area immediately adjacent to TA-57 is used by the U.S. Forest Service as a seasonal support area for firefighters.

## 6.2 AOC 57-006, Former Waste Storage Drum

### 6.2.1 Site Description and Operational History

AOC 57-006 is the former location of a plastic-lined 55-gal. drum that was buried in the ground at TA-57 beneath a trailer (structure 57-23) that served as an analytical chemistry laboratory (Figure 6.2-1). The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer was used to dispose of wastewater associated with chemical analyses. The sink drained to a leach field (AOC 57-007) near the trailer. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to the polyethylene drum. When the drum was full, its contents were transported to the Laboratory for disposal. In 1994, the drum was removed as part of a voluntary corrective action (VCA). The chemistry trailer was removed from the site in March 1994.

The site of the former waste drum is currently vegetated with grasses. The ground surface where the trailer was located is level and then slopes to the southeast toward a drainage swale.

### 6.2.2 Relationship to Other SWMUs and AOCs

AOC 57-006 is located southwest and upgradient of AOC 57-007.

### 6.2.3 Summary of Previous Investigations

A VCA was conducted in 1994 to remove the waste collection drum (LANL 1995, 054336). The contents of the drum had previously been removed in January 1994 (LANL 1995, 054336, p. 1). Sampling of the contents indicated elevated levels of lead and mercury as well as various organic solvents, and the waste was classified as hazardous (LANL 1995, 054336, p. 1). During the VCA, the 55-gal. drum was removed. No evidence of leakage was observed during the removal. After the drum was removed, a sample was collected from the bottom of the excavation at a depth of 0.0–0.5 ft below the bottom of the excavation and submitted for laboratory analysis of TAL metals, total cyanide, total uranium, and VOCs. Data from the 1994 VCA are screening-level data and are summarized below. Section 2.1.3 of the historical investigation report (HIR) (LANL 2012, 214549) presents a more detailed discussion of the screening-level results.

Lead and mercury were each detected above BVs in one sample. Organic chemicals were not detected.

### 6.2.4 Site Contamination

#### 6.2.4.1 Soil, Rock and Sediment Sampling

Based on previous investigation results, further characterization using decision-level data was required to assess the potential contamination at AOC 57-006. As a result, the following activities were completed as part of the 2014 investigation:

- All investigation samples were field-screened for organic vapors and gross-alpha, -beta, and -gamma radiation. Field-screening results were recorded on the SCLs (Appendix E).

- Twelve samples were collected from four locations. Three samples were collected at the previously sampled location of the former waste storage drum (location 57-4022), and three samples each were collected at three step-out locations. At each location, samples were collected from 3.0–4.0 ft (approximately 0.0–1.0 ft below the bottom of the former drum location), 5.0−6.0 ft bgs, and 8.0–9.0 ft bgs. All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.

The 2014 sampling locations at AOC 57-006 are shown in Figure 6.2-1. Table 6.2-1 presents the samples collected and analysis requested for AOC 57-006. The geodetic coordinates of sampling locations are presented in Table 3.2-1.

#### 6.2.4.2 Soil, Rock, and Sediment Field-Screening Results

During headspace screening for organic vapors at AOC 57-006, no organic vapors were detected. No radiological screening results exceeded twice the daily background levels. Field-screening results are presented in Table 3.2-2. There were no changes to sampling or other activities because of field-screening results.

#### 6.2.4.3 Soil, Rock, and Sediment Analytical Results

Decision-level data at AOC 57-006 consist of 12 samples (7 fill and 5 tuff) collected from 4 locations.

**Inorganic Chemicals**

Twelve samples (seven fill and five tuff) were analyzed for TAL metals, total cyanide, nitrate, and perchlorate. Table 6.2-2 presents the inorganic chemicals above BVs and detected inorganic chemicals with no BVs. Figure 6.2-2 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Antimony was not detected above the soil and Qbt 2,3,4 BVs (0.83 mg/kg and 0.5 mg/kg) but had DLs (0.946 mg/kg to 1.12 mg/kg) above BVs in all 12 samples. The DLs were also above the maximum soil or Qbt 2,3,4 background concentrations (1 mg/kg and 0.4 mg/kg) in 10 samples. Antimony is retained as a COPC.

Barium was detected above the Qbt 2,3,4 BV (46 mg/kg) in four samples with a maximum concentration of 136 mg/kg. Barium is retained as a COPC.

Cadmium was not detected above the soil and Qbt 2,3,4 BVs (0.4 mg/kg and 1.63 mg/kg) but had DLs (0.477 mg/kg to 0.56 mg/kg) above the soil BV in 7 samples. The DLs were only 0.077 mg/kg to 0.16 mg/kg above the soil BV and were approximately 2 mg/kg to 2.1 mg/kg below the maximum soil background concentration (2.6 mg/kg). Cadmium was not detected in the 7 soil samples and was not detected above BVs in the 12 samples (detected in 1 tuff sample below the Qbt 2,3,4 BV). The single detected concentration of cadmium (0.14 mg/kg) was well below both BVs and indicates that cadmium, when present, is background. Cadmium is not a COPC.

Chromium was detected above the soil and Qbt 2,3,4 BVs (19.3 mg/kg and 7.14 mg/kg) in one fill sample and three tuff samples with a maximum concentration of 113 mg/kg. Chromium is retained as a COPC.

Copper was detected above the Qbt 2,3,4 BV (4.66 mg/kg) in two samples with a maximum concentration of 26 mg/kg. Copper is retained as a COPC.

Lead was detected above the Qbt 2,3,4 BV (11.2 mg/kg) in four samples with a maximum concentration of 14.5 mg/kg. The concentrations were only 0.6 mg/kg to 3.3 mg/kg above the Qbt 2,3,4 BV and were approximately 1 mg/kg to 3.7 mg/kg below the maximum Qbt 2,3,4 background concentration (15.5 mg/kg). Lead was detected below the soil and Qbt 2,3,4 BVs in the other eight samples and at similar concentrations in soil and tuff samples with concentrations ranging from 9.05 mg/kg to 14.5 mg/kg (a difference of 5.45 mg/kg). Lead is not a COPC.

Manganese was detected above the Qbt 2,3,4 BV (482 mg/kg) in 1 sample at a concentration of 536 mg/kg. The concentration was 54 mg/kg above the Qbt 2,3,4 BV and approximately 216 mg/kg below the maximum Qbt 2,3,4 background concentration (752 mg/kg). Manganese was detected below the soil and Qbt 2,3,4 BVs in the other 11 samples and at similar concentrations in soil and tuff samples with concentrations ranging from 326 mg/kg to 552 mg/kg (the maximum concentration was detected in a fill sample below the soil BV). Manganese is not a COPC.

Nitrate was detected in 12 samples with a maximum concentration of 8.03 mg/kg. Nitrate is naturally occurring, and the concentrations reflect naturally occurring levels of nitrate. Nitrate is not a COPC.

Selenium was detected above the Qbt 2,3,4 BV (0.3 mg/kg) in two samples with a maximum concentration of 0.358 mg/kg and had DLs (0.944 mg/kg to 1.06 mg/kg) above the BV in three samples. Selenium is retained as a COPC.

Zinc was detected above the soil and Qbt 2,3,4 BVs (48.8 mg/kg and 63.5 mg/kg) in five fill samples and two tuff samples with a maximum concentration of 75.1 mg/kg. Zinc is retained as a COPC.

### Organic Chemicals

Twelve samples (seven fill and five tuff) were analyzed for SVOCs and VOCs. Table 6.2-3 summarizes the analytical results for detected organic chemicals. Figure 6.2-3 shows the spatial distribution of detected organic chemicals.

The organic chemicals detected at AOC 57-006 include bis(2-ethylhexyl)phthalate, methylene chloride, and trichloroethene. All detected organic chemicals are retained as COPCs.

### Radionuclides

Twelve samples (seven fill and five tuff) were analyzed for isotopic uranium. Table 6.2-4 summarizes radionuclides detected above BVs. Figure 6.2-4 shows the spatial distribution of detected radionuclides.

Uranium-235/236 was detected above the Qbt 2,3,4 BV (0.09 mg/kg) in 1 sample at an activity of 0.0956 pCi/g. The activity was only 0.0056 pCi/g above the BV, and uranium-235/236 was not detected or was detected below the soil or Qbt 2,3,4 BVs in the other 11 samples (detected in 4 samples below the BVs). The Qbt 2,3,4 BV for uranium-235/236 is calculated using the total uranium measured in rock and the isotopic abundance and activity of uranium-234, uranium-235/236, and uranium-238. As presented in Table 5.3-4 of the Laboratory's background report (LANL 1998, 059730), the maximum activity of total uranium in Qbt 2,3,4 is about 23% greater (7.123 pCi/g versus 5.79 pCi/g) than the BV based on 26 background samples. A calculated maximum uranium-235/236 activity for Qbt 2,3,4 background is 0.11 pCi/g. This activity is 0.014 pCi/g above the maximum site activity and indicates the uranium-235/236 activities are naturally occurring. The other uranium isotopes (uranium-234 and uranium-238) are not different from background, also indicating naturally occurring activities of uranium-235/236. Uranium-235/236 is not a COPC.

#### 6.2.2.4 Nature and Extent of Contamination

The nature and extent of inorganic, organic, and radionuclide COPCs at AOC 57-006 are discussed below.

**Inorganic Chemicals**

Inorganic COPCs at AOC 57-006 are antimony, barium, chromium, copper, selenium, and zinc.

Antimony was not detected above the soil and Qbt 2,3,4 BVs but had DLs (0.946 mg/kg to 1.12 mg/kg) above BVs in all 12 samples. Because antimony was not detected in any sample and the residential SSL is approximately 28 times the maximum DL, further sampling for extent of antimony is not warranted.

Barium was detected above the Qbt 2,3,4 BV in four samples with a maximum concentration of 136 mg/kg. Concentrations decreased with depth at location 57-4023. The concentrations at locations 57-4022, 57-4024, and 57-4025 increased with depth, and concentrations increased laterally from location 57-4022. The residential and industrial SSLs were approximately 115 times and 1875 times the maximum concentration. Further sampling for extent of barium is not warranted.

Chromium was detected above the soil and Qbt 2,3,4 BVs in one fill sample and three tuff samples with a maximum concentration of 113 mg/kg. Concentrations decreased with depth at location 57-4024. The concentrations at locations 57-4022, 57-4023, and 57-4025 increased with depth and increased laterally from location 57-4022. As discussed in section 4.2, no source of hexavalent chromium was present at this site, and site conditions would not have produced hexavalent chromium. Therefore, the results were compared with trivalent chromium SSLs for extent purposes. The trivalent chromium residential and industrial SSLs were approximately 1035 times and 15,044 times the maximum concentration, respectively. Further sampling for extent of chromium is not warranted.

Copper was detected above the Qbt 2,3,4 BV in two samples with a maximum concentration of 26 mg/kg. Concentrations at location 57-4022 did not change substantially with depth (2.2 mg/kg) and increased with depth at location 57-4025. Concentrations increased laterally to the north from location 57-4022 to location 57-4025. The residential and industrial SSLs were approximately 120 times and 1996 times the maximum concentration, respectively. Further sampling for extent of copper is not warranted.

Selenium was detected above the Qbt 2,3,4 BV in two samples at concentrations of 0.347 mg/kg and 0.358 mg/kg and had DLs (0.944 mg/kg to 1.06 mg/kg) above the BV in three samples. The detected concentrations at locations 57-4022 and 57-4025 were in the deepest samples but only 0.047 mg/kg and 0.058 mg/kg above the BV. Selenium was not detected at locations 57-4023 and 57-4024. The residential SSL was approximately 1092 times the detected concentrations and approximately 368 times the maximum DL. Further sampling for extent of selenium is not warranted.

Zinc was detected above the soil and Qbt 2,3,4 BVs in five fill samples and two tuff samples with a maximum concentration of 75.1 mg/kg. Concentrations decreased with depth at locations 57-4024 and 57-4022. The concentrations at locations 57-4023 and 57-4025 increased slightly with depth (12.9 mg/kg and 24.7 mg/kg) and increased slightly laterally (12.3 mg/kg or less at depth) from location 57-4022. However, the concentrations were reported at similar ranges at each location across the site (44.5 mg/kg to 75.1 mg/kg) and were below the maximum soil background concentration (75.5 mg/kg) and below or slightly above (9.5 mg/kg or less) the maximum Qbt 2,3,4 background concentration (65.6 mg/kg). The residential and industrial SSLs were approximately 313 times and 5180 times the maximum concentration, respectively. Further sampling for extent of zinc is not warranted.

#### Organic Chemicals

Organic COPCs at 57-006 include bis(2-ethylhexyl)phthalate, methylene chloride, and trichloroethene.

Bis(2-ethylhexyl)phthalate was detected in one sample at a concentration of 0.269 mg/kg. The concentration was below the EQL and decreased laterally from location 57-4022. The residential SSL was approximately 1412 times the concentration. Further sampling for extent of bis(2-ethylhexyl)phthalate is not warranted.

Methylene chloride was detected in two samples with a maximum concentration of 0.0028 mg/kg. Concentrations decreased with depth and were below the EQLs. Concentrations decreased or did not change substantially laterally (0.00032 mg/kg). The residential SSL was approximately 146,071 times the maximum concentration. The vertical extent of methylene chloride is defined, and further sampling for lateral extent is not warranted.

Trichloroethene was detected in two samples with a maximum concentration of 0.000726 mg/kg. The concentrations did not change substantially with depth and were below the EQLs. Concentrations increased laterally from location 57-4022. The residential SSL was approximately 9325 times the maximum concentration. The vertical extent of trichloroethene is defined, and further sampling for lateral extent is not warranted.

#### Radionuclides

No radionuclide COPCs were identified at AOC 57-006.

### 6.2.5 Summary of Human Health Risk Screening

#### Industrial Scenario

Samples were not collected from the 0.0–1.0-ft depth interval; therefore, the industrial scenario was not evaluated for AOC 57-006.

#### Residential Scenario

The total excess cancer risk for the residential scenario is $6 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$. The HI for the residential scenario is 0.05, which is less than the NMED target HI of 1.

Based on the risk-screening assessment results, no potential unacceptable risks or doses exist for the industrial and residential scenarios at AOC 57-006.

### 6.2.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations, and LOAEL analyses, no potential ecological risks to the earthworm, plant, American robin, American kestrel, deer mouse, montane shrew, desert cottontail, and red fox exist at AOC 57-006.

## 6.3 AOC 57-007, Leach Field

### 6.3.1 Site Description and Operational History

AOC 57-007 is a leach field at TA-57 that served a former trailer (structure 57-23) that was used as an analytical chemistry laboratory (Figure 6.2-1). The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer drained to the leach field and was used to dispose of wastewater associated with chemical analyses. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to a polyethylene-lined 55-gal. drum (AOC 57-006). The chemistry trailer was removed from the site in March 1994.

The RCRA facility investigation (RFI) work plan for Operable Unit 1154 (LANL 1994, 034757) described the leach field's location as approximately 20 ft southeast of the trailer at 8.0–10.0 ft bgs. During the 1994 Phase I RFI at this site, the leach field was discovered to be northeast of the trailer and at a depth of 1.0–2.0 ft bgs. The site of the leach field is currently vegetated with grasses, shrubs, and small trees. The ground surface slopes to the southeast toward a drainage swale. An elevated electrical conduit rack runs across the site roughly parallel to the road.

### 6.3.2 Relationship to Other SWMUs and AOCs

AOC 57-007 is located northeast and downgradient of AOC 57-006.

### 6.3.3 Summary of Previous Investigations

During the 1994 Phase I RFI conducted at AOC 57-007, the drainline from the trailer to the leach field was found to be in place, uncovered, and used to locate the leach field (LANL 1996, 053801). One sample was collected where the drainline discharged to the leach field from a depth 0.0–1.0 ft below the bottom of the drainline. The sample was submitted for laboratory analysis of TAL metals, total cyanide, total uranium, and SVOCs. Data from the 1994 RFI are screening-level data and are summarized below. Section 2.2.3 of the HIR presents a more detailed discussion of the screening-level results (LANL 2012, 214549).

Mercury, uranium, and zinc were each detected above the soil BVs in the one sample. Organic chemicals were not detected.

### 6.3.4 Site Contamination

#### 6.3.4.1 Soil, Rock, and Sediment Sampling

Based on previous investigation results, further characterization using decision-level data was required to assess the potential contamination at AOC 57-007. As a result, the following activities were completed as part of the 2014 investigation:

- All investigation samples were field-screened for organic vapors and gross-alpha, -beta, and -gamma radiation. Field screening results were recorded in the SCLs (Appendix E).

- Nine samples were collected where the drainline exited the former trailer (location 57-4011), beneath the midpoint of the drainline (location 57-4013), and near the previously sampled location where the drainline entered the leach field (location 57-4012) (see discussion of deviations in Appendix B). At each location, samples were collected from three depth intervals: the interval encompassing the former drainline; the interval 0.0–1.0 ft below the drainline/1 ft above tuff; and approximately 2.0–3.0 ft into tuff. These intervals deviate slightly from those proposed in investigation work plan because two of the intervals specified in the work plan were the same (see discussion of deviations in Appendix B). At location 57-4011, samples were collected from 0.0–1.0 ft, 1.0–2.0 ft, and 3.0–4.0 ft bgs. At location 57-4012, samples were collected from 0.0–1.0 ft, 1.25–2.25 ft, and 4.25–5.25 ft bgs. At location 57-4013, samples were collected from 0.0–1.0 ft, 1.0–2.0 ft, and 4.0–5.0 ft bgs. All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.
- Six samples were collected from two locations within the leach field. At location 57-4014 samples were collected from 1.0–2.0 ft, 2.0–3.0 ft, and 4.0–5.0 ft bgs. At location 57-4015 samples were collected from 1.5–2.5 ft, 2.5–3.5 ft, and 4.5–5.5 ft bgs. All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.
- Nine samples were collected from three step-out locations around the leach field. At location 57-4016, samples were collected from 2.5–3.5 ft, 3.0–4.0 ft, and 6.0–7.0 ft bgs. At location 57-4017, samples were collected from 1.0–2.0 ft, 2.5–3.5 ft, and 4.0–5.0 ft bgs. At location 57-4018, samples were collected from 2.5–3.5 ft, 4.4–5.4 ft, and 7.4–8.4 ft bgs. Samples were also collected from 0.0–1.0 ft bgs at each location (see deviations in Appendix B). All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.
- Nine samples were collected from three locations in the drainage downgradient of the leach field to define lateral extent of contamination. At location 57-4019, samples were collected from 0.0–1.0 ft, 1.5–2.5 ft, and 4.5–5.5 ft bgs. At location 57-4020, samples were collected from 0.0–1.0 ft, 2.5–3.5 ft, and 5.5–6.5 ft bgs. At location 57-4021, samples were collected from 0.0–1.0 ft, 4.5–5.5 ft, and 6.5–7.5 ft bgs. All samples were analyzed at off-site fixed laboratories for TAL metals, total cyanide, nitrate, perchlorate, VOCs, SVOCs, and isotopic uranium.
- Soil removal occurred at locations 57-4011 and 57-4020 to remove elevated arsenic concentrations in the 0.0−1.0-ft depth interval. Excavations were to 2.0 ft bgs at location 57-4011 and to 2.5 ft bgs at location 57-4020 (three samples were eliminated from the data set because of this activity). No additional samples were collected because sampling data from the bottom of the excavations were available.
- Four samples were collected from 2 locations (57-4026 and 57-4027) southwest of location 57-4011. At location 57-4026, samples were collected from 3.5–4.5 ft and 6.5–7.5 ft bgs. At location 57-4027, samples were collected from 2.0–3.0 ft and 5.0–6.0 ft bgs. Samples were analyzed at an off-site fixed laboratory for arsenic only.

The 2014 sampling locations at AOC 57-007 are shown in Figure 6.2-1. Table 6.3-1 presents the samples collected and analysis requested for AOC 57-007. The geodetic coordinates of sampling locations are presented in Table 3.2-1.

#### 6.3.4.2 Soil, Rock, and Sediment Field-Screening Results

During headspace screening for organic vapors at AOC 57-007, no organic vapors were detected. No radiological screening results exceeded twice the daily background levels. Field-screening results are presented in Table 3.2-2. There were no changes to sampling or other activities because of field-screening results.

#### 6.3.4.3 Soil, Rock, and Sediment Analytical Results

Decision-level data at AOC 57-007 consist of 37 samples (21 soil/fill and 16 tuff) collected from 13 locations.

**Inorganic Chemicals**

Thirty-three samples (19 soil/fill and 14 tuff) were analyzed for TAL metals, total cyanide, nitrate, and perchlorate. Four samples (2 soil and 2 tuff) were analyzed for arsenic only. Table 6.3-2 presents the inorganic chemicals above BVs and detected inorganic chemicals with no BVs. Figure 6.3-1 shows the spatial distribution of inorganic chemicals detected or detected above BVs.

Aluminum was detected above the soil and Qbt 2,3,4 BVs (29,200 mg/kg and 7340 mg/kg) in one soil and one tuff sample with a maximum concentration of 29,600 mg/kg. The Gehan and quantile tests indicated site concentrations of aluminum in soil are not statistically different from background (Figure F-1 and Table F-1). The quantile and slippage tests indicated site concentrations of aluminum in tuff are not statistically different from background (Figure F-1 and Table F-2). Aluminum is not a COPC.

Antimony was not detected above the soil and Qbt 2,3,4 BVs (0.83 mg/kg and 0.5 mg/kg) but had DLs (0.875 mg/kg to 1.15 mg/kg) above BVs in 14 soil samples and 12 tuff samples (78% of samples). The DLs were also above the maximum soil and Qbt 2,3,4 background concentrations (1 mg/kg and 0.4 mg/kg, respectively). Antimony is retained as a COPC.

Arsenic was detected above the Qbt 2,3,4 BV (2.79 mg/kg) in one sample at a concentration of 5.12 mg/kg. The Gehan and quantile tests indicated site concentrations of arsenic in tuff are statistically different from background (Table F-2 and Figure F-2). Arsenic is retained as a COPC.

Barium was detected above the soil and Qbt 2,3,4 BVs (295 mg/kg and 46 mg/kg) in one soil sample and eight tuff samples with a maximum concentration of 384 mg/kg. The Gehan and quantile tests indicated the site concentrations of barium in soil are not statistically different from background (Figure F-3 and Table F-1). The Gehan and quantile tests indicated site concentrations of barium in tuff are statistically different from background (Figure F-3 and Table F-2). Barium is retained as a COPC.

Beryllium was detected above the soil BV (1.83 mg/kg) in one soil sample at a concentration of 2.29 mg/kg. The Gehan and quantile tests indicated the site concentrations of beryllium in soil are not statistically different from background (Figure F-4 and Table F-1). Beryllium is not a COPC.

Cadmium was detected above the soil BV (0.4 mg/kg) in 1 sample at a concentration of 0.574 mg/kg and had DLs (0.479 mg/kg to 0.575 mg/mg) above the soil BV in 17 samples (the DLs for all samples, whether soil or tuff, were similar, ranging from 0.438 mg/kg to 0.575 mg/kg). The detected concentration above BV was only 0.174 mg/kg and the DLs were only 0.079 mg/kg to 0.175 mg/kg above the soil BV. The detected concentration and DLs were approximately 2 mg/kg to 2.1 mg/kg below the maximum soil background concentration (2.6 mg/kg). Cadmium was not detected in 27 samples, was detected below the soil BV in 1 sample, and was detected below the Qbt 2,3,4 BV (1.63 mg/kg) in 4 samples

(concentrations were also below the soil BV). The detected concentrations of cadmium are well below both BVs and indicate that cadmium, when present, is background. Cadmium is not a COPC.

Chromium was detected above the Qbt 2,3,4 BV (7.14 mg/kg) in eight samples with a maximum concentration of 68.3 mg/kg. The Gehan and quantile tests indicated the site concentrations of chromium in tuff are statistically different from background (Table F-2 and Figure F-5). Chromium is retained as a COPC.

Copper was detected above the soil and Qbt 2,3,4 BVs (14.7 mg/kg and 4.66 mg/kg) in one soil sample and two tuff samples with a maximum concentration of 65.1 mg/kg. The Gehan and slippage tests indicated site concentrations of copper in soil are not statistically different from background (Figure F-6 and Table F-1).The Gehan and quantile tests indicated the site concentrations of copper in tuff are statistically different from background (Figures F-6 and Table F-2). Copper is retained as a COPC.

Cyanide was detected above the soil BV (0.5 mg/kg) in one soil sample at a concentration of 0.73 mg/kg. Cyanide is retained as a COPC.

Lead was detected above the soil and Qbt 2,3,4 BVs (22.3 mg/kg and 11.2 mg/kg) in one soil sample and seven tuff samples with a maximum concentration of 33.6 mg/kg. The Gehan and quantile tests indicated site concentrations of lead in soil are not statistically different from background (Figure F-7 and Table F-1). The Gehan and quantile tests indicated the site concentrations of lead in tuff are statistically different from background (Figure F-7 and Table F-2). Lead is retained as a COPC.

Mercury was detected above the soil and Qbt 2,3,4 BV (0.1 mg/kg) in two soil samples and two tuff samples with a maximum concentration of 20.6 mg/kg. Mercury is retained as a COPC.

Nitrate was detected in four soil samples and two tuff samples with a maximum concentration of 1.16 mg/kg. Nitrate is naturally occurring and the concentrations reflect naturally occurring levels of nitrate. Nitrate is not a COPC.

Perchlorate was detected in six soil samples and two tuff samples with a maximum concentration of 0.00159 mg/kg. Perchlorate is retained as a COPC.

Selenium was not detected above the Qbt 2,3,4 BV (0.3 mg/kg) but had DLs (0.917 mg/kg to 1.08 mg/kg) above the BV in 14 samples. Selenium is retained as a COPC.

Silver was detected above the soil BV (1 mg/kg) in two soil samples with a maximum concentration of 15.2 mg/kg. Silver is retained as a COPC.

Zinc was detected above the soil and Qbt 2,3,4 BVs (48.8 mg/kg and 63.5 mg/kg) in five soil samples and six tuff samples with a maximum concentration of 113 mg/kg. The Gehan and quantile tests indicated site concentrations of zinc in soil are statistically different from background (Figure F-8 and Table F-1). The Gehan and quantile tests indicated site concentrations of zinc in tuff are statistically different from background (Figure F-8 and Table F-2). Zinc is retained as a COPC.

### Organic Chemicals

Thirty-three samples (19 soil/fill and 14 tuff) were analyzed for SVOCs and VOCs. Table 6.3-3 summarizes the analytical results for detected organic chemicals. Figure 6.3-2 shows the spatial distribution of detected organic chemicals.

The organic chemicals detected at AOC 57-007 include benzoic acid; bis(2-ethylhexyl)phthalate; butylbenzylphthalate; 1,4-dichlorobenzene; fluoranthene; methylene chloride; phenanthrene; and trichloroethene. All detected organic chemicals are retained as COPCs.

**Radionuclides**

Thirty-three samples (19 soil/fill and 14 tuff) were analyzed for isotopic uranium. Table 6.3-4 summarizes radionuclides detected or detected above BVs/FVs. Figure 6.3-3 shows the spatial distribution of detected radionuclides.

Uranium-235/236 was detected above the Qbt 2,3,4 BV (0.09 pCi/g) in 4 samples with a maximum activity of 0.115 pCi/g. The differences in activities between the site activities and the BV are 0.0056 pCi/g to 0.025 pCi/g, and the frequency of detected activities above BVs is only 4 of 33 samples. The Qbt 2,3,4 BV for uranium-235/236 is calculated using the total uranium measured in rock and the isotopic abundance and activity of uranium-234, uranium-235/236, and uranium-238. As presented in Table 5.3-4 of the Laboratory's background report (LANL 1998, 059730), the maximum activity of total uranium in Qbt 2,3,4 is about 23% greater than the BV (7.123 pCi/g versus 5.79 pCi/g) based on 26 background samples. A calculated maximum uranium-235/236 activity for Qbt 2,3,4 background is 0.11 pCi/g. This activity is similar to the maximum site activity and indicates the uranium-235/236 activities are naturally occurring. The other uranium isotopes (uranium-234 and uranium-238) are not different from background, also indicating naturally occurring activities of uranium-235/236. Uranium-235/236 is not a COPC.

#### 6.3.4.4 Nature and Extent of Contamination

The nature and extent of inorganic, organic, and radionuclide COPCs at AOC 57-007 are discussed below.

**Inorganic Chemicals**

Inorganic COPCs at AOC 57-007 are antimony, arsenic, barium, chromium, copper, cyanide, lead, mercury, perchlorate, selenium, silver, and zinc.

Antimony was not detected above the soil and Qbt 2,3,4 BVs but had DLs (0.875 mg/kg to 1.15 mg/kg) above BVs in 14 soil samples and 12 tuff samples. The residential SSL was approximately 27 times the maximum DL. Further sampling for extent of antimony is not warranted.

Arsenic was detected above the Qbt 2,3,4 BV in one sample at a concentration of 5.12 mg/kg. The concentration at location 57-4026 increased slightly with depth (approximately 3.3 mg/kg), but the concentration at depth (5.12 mg/kg) is similar to the maximum Qbt 2,3,4 background concentration (5 mg/kg). The industrial SSL was approximately 4.2 times the detected concentration. Further sampling for extent of arsenic is not warranted.

Barium was detected above the soil and Qbt 2,3,4 in one soil sample and eight tuff samples with a maximum concentration of 384 mg/kg. Concentrations decreased with depth at all locations and decreased downgradient. The lateral and vertical extent of barium are defined.

Chromium was detected above the Qbt 2,3,4 BV in eight samples with a maximum concentration of 68.3 mg/kg. Chromium concentrations decreased downgradient. Chromium concentrations decreased with depth at locations 57-4014 and 57-4015. Concentrations increased with depth at locations 57-4012, 57-4013, 57-4016, 57-4017, and 57-4018. As discussed in section 4.2, no source of hexavalent chromium is present at this site, and site conditions would not have produced hexavalent chromium. Therefore, the

results were compared with trivalent chromium SSLs for extent purposes. The trivalent chromium residential SSL was approximately 1713 times the maximum concentration. The lateral extent of chromium is defined, and further sampling for vertical extent is not warranted.

Copper was detected above the soil and Qbt 2,3,4 BVs in one soil sample and two tuff samples with a maximum concentration of 65.1 mg/kg. Concentrations decreased with depth at locations 57-4014, and 57-4015 and decreased downgradient. The lateral and vertical extent of copper are defined.

Cyanide was detected above the soil BV in one sample at a concentration of 0.73 mg/kg. Concentrations decreased with depth and decreased downgradient. The lateral and vertical extent of cyanide are defined.

Lead was detected above the soil and Qbt 2,3,4 BVs in one soil sample and seven tuff samples with a maximum concentration of 33.6 mg/kg. Lead concentrations decreased with depth at locations 57-4011 and 57-4020 (Appendix E, Excavated Samples Table) as well as at location 57-4015 and did not change substantially with depth (0.1 mg/kg to 3.6 mg/kg) at locations 57-4014, 57-4017, 57-4019, and 57-4021. The concentrations at depth at these four locations were less than or equivalent to the maximum Qbt 2,3,4 background concentration (15.5 mg/kg) and the residential and industrial SSLs were approximately 26 times and 52 times the maximum concentration at these locations. Concentrations decreased downgradient. The lateral extent of lead is defined, and further sampling for vertical extent is not warranted.

Mercury was detected above the soil and Qbt 2,3,4 BVs in two soil samples and two tuff samples with a maximum concentration of 20.6 mg/kg. Concentrations decreased with depth at locations 57-4014 and 57-4015 and decreased downgradient. The lateral and vertical extent of mercury are defined.

Perchlorate was detected in six soil samples and two tuff samples with a maximum concentration of 0.00159 mg/kg. Concentrations were below the estimated DLs and decreased with depth at locations 57-4011 (Appendix E, Excavated Samples Table), 57-4012, 57-4013, 57-4015, 57-4018, and 57-4020 and did not change substantially with depth (0.000954 mg/kg) at location 57-4016. Concentrations decreased downgradient. The lateral and vertical extent of perchlorate are defined.

Selenium was not detected above the Qbt 2,3,4 BV but had DLs (0.917 mg/kg to 1.08 mg/kg) above the BV in 14 samples. Because selenium was not detected in any samples and the residential SSL was approximately 362 times the maximum DL, further sampling for extent of selenium is not warranted.

Silver was detected above the soil BV in two samples with a maximum concentration of 15.2 mg/kg. Concentrations decreased with depth and decreased downgradient. The lateral and vertical extent of silver are defined.

Zinc was detected above the soil and Qbt 2,3,4 BVs in five soil samples and six tuff samples with a maximum concentration of 113 mg/kg. Concentrations decreased with depth at locations 57-4012, 57-4015, 57-4018, and 57-4021 and decreased downgradient. Concentrations increased slightly with depth (approximately 14 mg/kg to 24 mg/kg) at locations 57-4013, 57-4014, and 57-4017 with the deepest concentrations at locations 57-4013 and 57-4017 below or equivalent to the maximum Qbt 2,3,4 background concentration (65.6 mg/kg). The residential SSL was approximately 320 times the maximum concentration at these three locations. The lateral extent of zinc is defined, and further sampling for vertical extent is not warranted.

**Organic Chemicals**

Organic COPCs at AOC 57-007 include benzoic acid; bis(2-ethylhexyl)phthalate; butylbenzylphthalate; 1,4-dichlorobenzene; fluoranthene; methylene chloride; phenanthrene; and trichloroethene.

Benzoic acid was detected in three samples with a maximum concentration of 2.83 mg/kg. Concentrations decreased with depth and decreased downgradient. The lateral and vertical extent of benzoic acid are defined.

Bis(2-ethylhexyl)phthalate and butylbenzylphthalate were detected in one sample at concentrations of 0.13 mg/kg and 0.339 mg/kg, respectively. Concentrations were below the EQLs, decreased with depth, and decreased downgradient. The lateral and vertical extent of bis(2-ethylhexyl)phthalate and butylbenzylphthalate are defined.

Dichlorobenzene[1,4-] and methylene chloride were detected in three and two samples, respectively, with maximum concentrations of 0.00043 mg/kg and 0.00299 mg/kg. Concentrations were below the EQLs, decreased with depth, and decreased downgradient. The lateral and vertical extent of 1,4-dichlorobenzene and methylene chloride are defined.

Fluoranthene and phenanthrene were detected in one or two samples with maximum concentrations of 0.0145 mg/kg and 0.0134 mg/kg, respectively. Concentrations were below the EQLs, decreased with depth at all locations, and decreased downgradient. The lateral and vertical extent of fluoranthene and phenanthrene are defined.

Trichloroethene was detected in two samples with a maximum concentration of 0.00294 mg/kg. Concentrations decreased with depth or did not change substantially downgradient (0.00186 mg/kg). The residential SSL was approximately 2303 times the maximum concentration. The vertical extent of trichloroethene is defined, and further sampling for lateral extent is not warranted.

**Radionuclides**

No radionuclide COPCs were identified at AOC 57-007.

### 6.3.5 Summary of Human Health Risk Screening

**Industrial Scenario**

Carcinogenic COPCs were not identified in the 0.0–1.0-ft depth interval. The HI for the industrial scenario is 0.001, which is less than the NMED target HI of 1.

**Residential Scenario**

The total excess cancer risk for the residential scenario is $7 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$. The HI for the residential scenario is 0.3, which is less than the NMED target HI of 1.

Based on the risk-screening assessment results, no potential unacceptable risks or doses exist for the industrial and residential scenarios at AOC 57-007.

### 6.3.6 Summary of Ecological Risk Screening

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations, LOAEL analyses, and chemicals of potential ecological concern (COPECs) without ESLs, no potential ecological risks to the earthworm, plant, American robin, American kestrel, deer mouse, montane shrew, desert cottontail, and red fox exist at AOC 57-007.

## 7.0 CONCLUSIONS

### 7.1 Nature and Extent of Contamination

Based on the evaluation of the data, the nature and extent of contamination have been defined and/or no further sampling for extent is warranted for the sites investigated.

#### 7.1.1 TA-57 Aggregate Area

The nature and extent of contamination have been defined, and/or no further sampling for extent is warranted for the following sites in TA-57:

- AOC 57-006, Former Waste Storage Drum
- AOC 57-007, Leach Field

### 7.2 Summary of Risk-Screening Assessments

AOCs 57-006 and 57-007 were evaluated for potential risk by human health and ecological risk-screening assessments.

#### 7.2.1 Human Health Risk-Screening Assessments

The human health risk-screening assessments are presented in Appendix G, section G-4.0.

The industrial scenario was not evaluated AOC 57-006 because samples were not collected from the 0.0–1.0-ft depth interval. The human health risk-screening assessments found no unacceptable risks under the industrial scenario at AOC 57-007 and found no unacceptable risks under the residential scenario at both AOCs. The total excess cancer risks were less than the NMED target risk level of $1 \times 10^{-5}$ and the HIs were less than the NMED target HI of 1.

#### 7.2.2 Ecological Risk-Screening Assessment

The ecological risk-screening assessments are presented in Appendix G, section G-5.0.

Ecological risks were evaluated for both sites based on comparisons to minimum ESLs, HI analyses, potential effects to populations, and LOAEL analyses. These lines of evidence and the analysis of COPECs with no ESLs support the conclusion that no potential ecological risk exists at these sites.

## 8.0 RECOMMENDATIONS

The determination of site status is based on the results of the risk-screening assessments and the nature and extent evaluation. Depending upon the decision scenario used, the sites are recommended as corrective actions complete either with or without controls or for additional action. The residential scenario is the only scenario under which corrective action complete without controls is applicable; that is, no additional corrective actions or conditions are necessary. The other decision scenarios (industrial, construction worker, and recreational) result in corrective action complete with controls; that is, some type of institutional controls must be in place to ensure land use remains consistent with site cleanup levels. The current and reasonably foreseeable future land use for the TA-57 Aggregate Area is industrial.

### 8.1 Additional Field Characterization Activities

Additional sampling to define the nature and extent of contamination is not warranted for AOCs 57-006 and 57-007.

### 8.2 Recommendations for Corrective Actions Complete

AOCs 57-006 and 57-007 do not pose a potential unacceptable risk or dose under the industrial and residential scenarios and have no potential ecological risks to any receptor, and the nature and extent of contamination are defined and/or no further sampling for extent is warranted. At these sites, the Laboratory recommends no further investigation or remediation activities, and both sites are appropriate for corrective actions complete without controls.

## 9.0 REFERENCES AND MAP DATA SOURCES

### 9.1 References

*The following list includes all documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the ESH Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

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## 9.2 Map Data Sources

Data sources used in original figures created for this report are described below and identified by legend title.

| Legend Item | Data Source |
|---|---|
| LANL Technical Areas | Technical Area Boundaries; Los Alamos National Laboratory, Site Planning & Project Initiation Group, Infrastructure Planning Office; September 2007; as published 04 December 2008. |
| Paved roads | Paved Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| Dirt roads | Dirt Road Arcs; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| Drainages | WQH Drainage Arcs; Los Alamos National Laboratory, ENV Water Quality and Hydrology Group; 1:24,000 Scale Data; 03 June 2003. |
| LANL AOC boundaries | Areas of Concern; Los Alamos National Laboratory, Waste and Environmental Services Division, Environmental Data and Analysis Group, EP2009-0137; 1:2,500 Scale Data; 25 January 2010. |
| LANL structures | Structures; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL fence lines | Security and Industrial Fences and Gates; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL communications lines | Communication Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 08 August 2002; as published 28 May 2009. |
| LANL electric lines | Primary Electric Grid; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL gas lines | Primary Gas Distribution Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL sewer lines | Sewer Line System; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| LANL water lines | Water Lines; Los Alamos National Laboratory, KSL Site Support Services, Planning, Locating and Mapping Section; 06 January 2004; as published 28 May 2009. |
| Contours | Hypsography, 2, 10, 20, and 100 Foot Contour Interval; Los Alamos National Laboratory, ENV Environmental Remediation and Surveillance Program; 1991. |

# Appendix B

*Field Methods*

## B-1.0 INTRODUCTION

This appendix summarizes the field methods implemented during the 2014 investigation at Technical Area 57 (TA-57) Aggregate Area, located at Fenton Hill, which lies on the western side of the Jemez Mountains, approximately 12 mi west of Los Alamos National Laboratory (LANL or the Laboratory). Table B-1.0-1 provides a summary of field investigation methods and the following sections provide more detailed descriptions of these methods. All activities were conducted in accordance with approved subcontractor procedures technically equivalent to Laboratory standard operating procedures (SOPs) listed in Table B-1.0-2 and available at http://www.lanl.gov/community-environment/environmental-stewardship/plans-procedures.php.

## B-2.0 EXPLORATORY DRILLING CHARACTERIZATION

No exploratory drilling characterization was conducted during the 2014 investigation.

## B-3.0 FIELD-SCREENING METHODS

This section summarizes the field-screening methods used during the investigation activities. Field screening for organic vapors and radioactivity was performed on every sample submitted to the Sample Management Office (SMO).

### B-3.1 Field Screening for Organic Vapors

Field screening for organic vapors was conducted for all samples using an IonScience PhoCheck+ photoionization detector (PID) equipped with an 11.7-electronvolt lamp. Screening was performed in accordance with the manufacturer's specifications and SOP-06.33, Headspace Vapor Screening with a Photoionization Detector. Screening measurements were recorded on the sample collection logs (SCLs) and chain-of-custody (COC) forms, provided on CD in Appendix E. The screening results are presented in Table 3.2-2 of the investigation report.

### B-3.2 Field Screening for Radioactivity

All samples collected were field screened for radioactivity, targeting alpha and beta/gamma emitters. A Laboratory radiological control technician (RCT) conducted radiological screening using an Eberline E-600 radiation meter with an SHP-380AB alpha/beta scintillation detector held within 1 in. of the sample. The Eberline E-600 with attachment SHP-380AB consists of a dual phosphor plate covered by two Mylar windows housed in a light-excluding metal body. The phosphor plate is a plastic scintillator used to detect beta and gamma emissions and is thinly coated with zinc sulfide to detect alpha emissions. The operational range varies from trace emissions to 1 million disintegrations per minute. Screening measurements were recorded on the SCLs and COC forms and are provided on CD in Appendix E. The screening results are presented in Table 3.2-2 of the investigation report.

## B-4.0 FIELD INSTRUMENT CALIBRATION

Instrument calibration and/or function check was completed daily. Several environmental factors affected the instruments' integrity, including air temperature, atmospheric pressure, wind speed, and humidity. Calibration of the PID was conducted by the site environmental safety and health representative.

Calibration of the Eberline E-600 was conducted by the RCT. All calibrations were performed according to the manufacturer's specifications and requirements

### B-4.1 IonScience PhoCheck+PID Instrument Calibration

The IonScience PhoCheck+ PID was calibrated both to ambient air and a standard reference gas (100 ppm isobutylene). The ambient-air calibration determined the zero point of the instrument sensor calibration curve in ambient air. Calibration with the standard reference gas determined a second point of the sensor calibration curve. Each calibration was within 3% of 100 ppm isobutylene, qualifying the instrument for use.

The following calibration information was recorded daily on operational calibration logs:

- instrument identification number
- final span settings
- date and time
- concentration and type of calibration gas used (isobutylene at 100 ppm)
- name of the personnel performing the calibration

All daily calibration procedures for the IonScience PhoCheck+ met the manufacturer's specifications for standard reference gas calibration.

### B-4.2 Eberline E-600 Instrument Calibration

The Eberline E-600 was calibrated daily by the RCT before local background levels for radioactivity were measured. The instrument was calibrated using plutonium-239 and chloride-36 sources for alpha and beta emissions, respectively. The following five checks were performed as part of the calibration procedures:

- calibration date
- physical damage
- battery
- response to a source of radioactivity
- background

All calibrations performed for the Eberline E-600 met the manufacturer's specifications and the applicable radiation detection instrument manual.

## B-5.0 SURFACE AND SUBSURFACE SAMPLING

This section summarizes the methods used for collecting surface and subsurface samples, including soil, fill, and tuff, according to the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936).

### B-5.1 Surface Sampling Methods

Surface samples were collected using either the hand-auger or spade-and-scoop methods in accordance with approved subcontractor procedures technically equivalent to SOP-06.10, Hand Auger and Thin-Wall Tube Sampler, or SOP-06.09, Spade and Scoop Method for the Collection of Soil Samples. A hand auger or spade and scoop were used to collect material in approximately 6-in. increments. Samples for volatile organic compound (VOC) analysis were collected immediately to minimize the loss of subsurface VOCs during the sample collection process. Containers for VOC samples were filled as completely as possible, leaving no or minimal headspace, and sealed with a Teflon-lined cap. Table B-1.0-1 provides additional details on the collection of samples for VOC analysis. The description provided is specific to the sampling method rather than to the media. The remaining sample material was placed in a stainless-steel bowl with a stainless-steel scoop, after which it was transferred to sterile sample collection jars. Samples were preserved using coolers with blue ice to maintain the required temperature in accordance with an approved subcontractor procedure technically equivalent to SOP-5056, Sample Containers and Preservation.

Samples were appropriately labeled, sealed with custody seals, and documented before they were transported to the SMO. Samples were managed in accordance with an approved subcontractor procedure technically equivalent to SOP-5057, Handling, Packaging, and Transporting Field Samples, and WES-EDA-QP-219, Sample Control and Field Documentation.

Sample collection tools were decontaminated (see section B-5.7) immediately before and after each sample was collected in accordance with a subcontractor procedure technically equivalent to SOP-5061, Field Decontamination of Equipment.

### B-5.2 Subsurface Tuff Sampling Methods

Subsurface samples were collected in accordance with an approved subcontractor procedure technically equivalent to SOP-06.10, Hand Auger and Thin-Wall Tube Sampler.

Subsurface samples were collected using the hand auger method. Samples for VOC analysis were collected immediately to minimize the loss of subsurface VOCs during the sample collection process. Containers for VOC samples were filled as completely as possible, leaving no or minimal headspace, and sealed with a Teflon-lined cap. Table B-1.0-1 provides additional details on collection of samples for VOC analysis. The description provided is specific to the sampling method rather than to the media. The remaining sample material was placed in a stainless-steel bowl with a stainless-steel scoop, after which it was transferred to sterile sample collection jars or bags. Samples were preserved using coolers to maintain the required temperature and chemical preservative, such as nitric acid, in accordance with an approved subcontractor procedure technically equivalent to SOP-5056, Sample Containers and Preservation.

Samples were appropriately labeled, sealed with custody seals, and documented before they were transported to the SMO. Samples were managed in accordance with an approved subcontractor procedure technically equivalent to SOP-5057, Handling, Packaging, and Transporting Field Samples, and WES-EDA-QP-219, Sample Control and Field Documentation.

Sample collection tools were decontaminated (see section B-5.7) immediately before each sample was collected in accordance with a subcontractor procedure technically equivalent to SOP-5061, Field Decontamination of Equipment.

### B-5.3 Quality Control Samples

Quality control (QC) samples were collected in accordance with an approved subcontractor procedure technically equivalent to SOP-5059, Field Quality Control Samples. QC samples included field duplicates, field rinsate blanks, and field trip blanks. Field duplicate samples were collected from the same material as an investigation sample and submitted for the same analyses. Field duplicate samples were collected at a frequency of at least 1 duplicate sample for every 10 samples.

Field rinsate blanks were collected to evaluate field decontamination procedures. Rinsate blanks were collected by rinsing sampling equipment (i.e., hand auger buckets, sampling bowls and spoons), after decontamination, with deionized water. The rinsate water was collected in a sample container and submitted to the SMO. Field rinsate blank samples were analyzed for inorganic chemicals (metals) and were collected from sampling equipment at a frequency of at least 1 rinsate sample for every 10 solid samples.

Field trip blanks were provided by SMO at a frequency of 1 per day at the time samples were collected for VOC analysis. Trip blanks consisted of containers of certified clean sand and kept with the other sample containers during the sampling process and during transportation to the SMO and the off-site analytical laboratory.

### B-5.4 Sample Documentation and Handling

Field personnel completed an SCL and COC form for each sample. Sample containers were sealed with signed custody seals and placed in coolers at approximately 4°C. Samples were handled in accordance with approved subcontractor procedures technically equivalent to SOP-5057, Handling, Packaging, and Transporting Field Samples, and SOP-5056, Sample Containers and Preservation. Swipe samples were collected from the exterior of sample containers and analyzed by the RCT before the sample containers were removed from the site. Samples were transported to the SMO for processing and shipment to off-site contract analytical laboratories. The SMO personnel reviewed and approved the SCLs and COC forms and accepted custody of the samples.

### B-5.5 Decontamination of Sampling Equipment

The hand augers and all other sampling equipment that came (or could have come) in contact with sample material were decontaminated immediately before and after each sample was collected. Decontamination included wiping the equipment with Fantastik and paper towels. Decontamination activities were performed in accordance with an approved subcontractor procedure technically equivalent to SOP-5061, Field Decontamination of Equipment.

### B-5.6 Site Demobilization and Restoration

All field equipment was demobilized from the site on October 16, 2014. All excavated areas (see section B-6.0, Soil Removal) were reseeded with an approved native grass mix and best management practices (BMPs) were installed to prevent runoff.

## B-6.0 SOIL REMOVAL

Arsenic-contaminated soil with concentrations above the residential arsenic soil screening level was removed using hand tools, including shovels and picks. A 2-ft radius was removed around locations 57-4011 and 57-4020 to depths of 2.0 ft below ground surface (bgs) and 2.5 ft bgs, respectively.

Confirmation samples were not necessary because samples collected at depth at both locations defined the depth of the soil removal. The excavated material was placed in three 55-gal. drums and characterized for waste disposal by direct sampling of the containerized soil. The excavations were backfilled with clean fill material, reseeded using an approved native seed mix, and BMPs were installed to prevent runoff. The excavated soil was managed as investigation-derived waste (IDW), as described in Appendix C.

## B-7.0 GEODETIC SURVEYING

Geodetic surveys of all sample locations were performed using a Trimble RTK 5700 differential global positioning system (DGPS) referenced from published and monumented external Laboratory survey control points in the vicinity. All sampling locations were surveyed in accordance with an approved subcontractor procedure technically equivalent to SOP-5028, Coordinating and Evaluating Geodetic Surveys. Horizontal accuracy of the monumented control points is within 0.1 ft. The DGPS instrument referenced from Laboratory control points is accurate within 0.2 ft. The surveyed coordinates are presented in Table 3.2-1 of the investigation report.

## B-8.0 INVESTIGATION-DERIVED WASTE STORAGE AND DISPOSAL

All IDW generated during the field investigation was managed in accordance with SOP-10021, Characterization and Management of Environmental Program Waste. This procedure incorporates the requirements of all applicable U.S. Environmental Protection Agency (EPA) and New Mexico Environment Department (NMED) regulations, U.S. Department of Energy orders, and Laboratory implementation requirements. IDW was also managed in accordance with the approved waste characterization strategy form and the IDW management appendix of the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). Details of IDW management for the TA-57 Aggregate Area investigation are presented in Appendix C.

## B-9.0 DEVIATIONS FROM THE WORK PLAN

Several proposed sampling locations identified in the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936) were moved as a result of site conditions encountered during implementation of the field activities at Area of Concern (AOC) 57-007. These locations were moved because they were positioned atop, or next to, underground utilities. When locations were moved, the new locations were sited as close as possible to the planned locations. Additional deviations to the approved work plan scope are discussed below:

- The investigation work plan stated hollow-stem augers would be used to collect subsurface samples where hand-augering was impractical because of the depth of the material being sampled. All samples were collected using hand-auger and spade-and-scoop methods.
- The investigation work plan proposed collecting samples from ~~0.0–1.0 ft~~ three intervals below the drainline at AOC 57-007: 0.0–1.0 ft below the drainline; 1 ft above tuff; and 2.0–3.0 ft into tuff. Because the bottom of the drainline was determined to be 1 ft bgs and the top of tuff 2 ft bgs, the first two intervals were both 1.0–2.0 ft bgs. Rather than sample only two depths (1.0–2.0 ft bgs and 4.0–5.0 ft bgs), the interval 0.0–1.0 ft bgs was also sampled to encompass the depth where the former drainline was located. ~~The drainline was not located and samples were collected from 0.0–1.0 ft bgs at locations 57-4011, 57-4012, and 57-4013.~~

- Location 57-4012 was moved 5 ft downslope/downgradient of marked utility lines.
- Location 57-4015 was moved 6 ft northwest of marked utility and remained within the leach field.
- The investigation work plan proposed collecting samples at 0.0−1.0 below the leach field. However, the leach field was not present at locations 57-4016, 57-4017, and 57-4018 and samples were collected from 0.0−1.0 ft bgs. To be consistent with the sampling depth intervals where the leach field was present, additional samples were collected from 2.5−3.5 ft bgs at locations 57-4016, 57-4017, and 57-4018. This depth interval was selected because it was equivalent to 0.0−1.0 ft below the visible leach field at sampling location 57-4015.
- The investigation work plan proposed collecting samples at locations 7-10 and 7-11; however, to avoid disturbance to undeveloped core habitat for the Jemez Mountain salamander, these two locations were moved to new locations 57-4019 and 57-4021, respectively. These locations are shown in the map presented in Attachment G-4 of this report.
- At location 57-4021, a sample was inadvertently collected from 1.0−2.0 ft into tuff instead of 2.0−3.0 ft into tuff.
- Arsenic-contaminated soil was removed at locations 57-4011 and 57-4020 within AOC 57-007. A 2-ft radius was removed around locations 57-4011 and 57-4020 to a depth of 2.0 ft and 2.5 ft bgs, respectively.
- Additional samples were collected at AOC 57-007. Four samples were collected from locations 57-4026 and 57-4027 situated southwest and downgradient of location 57-4011. At each location, samples were collected from 1.0 ft above tuff, and 2.0−3.0 ft into tuff to define the lateral extent of arsenic.

## B-10.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the ESH Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

LANL (Los Alamos National Laboratory), April 2012. "Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill)," Los Alamos National Laboratory document LA-UR-12-20545, Los Alamos, New Mexico. (LANL 2012, 214550)

NMED (New Mexico Environment Department), July 11, 2012. "Approval with Modifications, Investigation Work Plan for Technical Area 57 Aggregate Area (Fenton Hill)," New Mexico Environment Department letter to P. Maggiore (DOE-LASO) and M.J. Graham (LANL) from J.E. Kieling (NMED-HWB), Santa Fe, New Mexico. (NMED 2012, 520936)

**Table B-1.0-1**
**Brief Description of Field Investigation Methods**

| Method | Summary |
|---|---|
| Spade and Scoop Collection of Soil Samples | This method is typically used to collect shallow (i.e., approximately 0.0–1.0 ft.) soil samples. The spade-and-scoop method involves digging a hole to the desired depth, as prescribed in the work plan, and collecting a discrete grab sample. The sample is typically placed in a clean stainless-steel bowl for transfer into various sample containers. |
| Hand Auger Sampling | This method is typically used for sampling soil at depths of less than 10.0–15.0 ft but may in some cases be used to collect samples of weathered or nonwelded tuff. The method involves hand-turning a stainless-steel bucket auger (typically 3–4 in. inside diameter), creating a vertical hole that can be advanced to the desired sampling depth. When the desired depth was reached during the investigation, the auger was decontaminated before the hole was advanced through the sampling depth. The sample material was transferred from the auger bucket to a stainless-steel sampling bowl before the various required sample containers were filled. |
| Headspace Vapor Screening | Individual soil, rock, or sediment samples were field-screened for organic vapors by placing a portion of the sample in a plastic sample bag or in a glass container with a foil-sealed cover. The container was sealed and gently shaken and allowed to equilibrate for 5 min. The sample was then screened by inserting a PID probe into the container and measuring and recording any detected vapors. |
| Handling, Packaging, and Shipping of Samples | Field team members sealed and labeled samples before packing them to ensure the sample containers and the containers used for transport were free of external contamination.<br>Field team members packaged all samples to minimize the possibility of breakage during transport.<br>After all environmental samples were collected, packaged, and preserved, a field team member transported them to the SMO. The SMO arranged to ship the samples to analytical laboratories. |
| Sample Control and Field Documentation | The collection, screening, and transport of samples were documented on standard forms generated by the SMO. These included SCLs, COC forms, and sample container labels. SCLs were completed at the time of sample collection, and the logs were signed by the sampler and a reviewer who verified the logs for completeness and accuracy. Corresponding labels were initialed and applied to each sample container, and custody seals were placed around each sample container. COC forms were completed and signed to verify that the samples were not left unattended. |
| Field Quality Control Samples | Field QC samples were collected as follows:<br>*Field Duplicates*: At a frequency 10%; collected at the same time as a regular sample and submitted for the same analyses.<br>*Rinsate Blank*: At a frequency of 10%; collected by rinsing sampling equipment with deionized water that was collected in a sample container and submitted for laboratory analysis.<br>*Trip Blanks*: Required for all field events that include the collection of samples for VOC analysis. Trip blanks containers of certified clean sand were opened and kept with the other sample containers during the sampling process. |
| Field Decontamination of Remediation and Sampling Equipment | Dry decontamination was used to minimize the generation of liquid waste. Dry decontamination included the use of a wire brush or other tool to remove soil or other material adhering to the sampling equipment, followed by use of a commercial cleaning agent (nonacid, waxless cleaners) and paper wipes. |

**Table B-1.0-1 (continued)**

| Method | Summary |
|---|---|
| Containers and Preservation of Samples | Specific requirements/processes for sample containers, preservation techniques, and holding times are based on EPA guidance for environmental sampling, preservation, and quality assurance. Specific requirements for each sample were printed on the SCL provided by the SMO (size and type of container [e.g., glass, amber glass, and polyethylene]). All samples were preserved by placing them with ice in insulated containers to maintain a temperature of 4°C. |
| Coordinating and Evaluating Geodetic Surveys | Geodetic surveys focused on obtaining survey data of acceptable quality to use during project investigations. Geodetic surveys were conducted with a Trimble 5700 DGPS. The survey data conformed to Laboratory Information Architecture project standards IA-CB02, GIS Horizontal Spatial Reference System, and IA-D802, Geospatial Positioning Accuracy Standard for A/E/C/ and Facility Management. All coordinates were expressed as State Plain Coordinate System 83, NM Central, U.S. feet. All elevation data were reported relative to the National Geodetic Vertical Datum of 1983. |
| Management of Environmental Restoration Project Waste, Waste Characterization | IDW is managed, characterized, and stored in accordance with an approved waste characterization strategy form that documents site history, field activities, and characterization approach for each waste stream managed. Waste characterization complied with on- or off-site waste acceptance criteria. All stored IDW was marked with appropriate signage and labels and contained within an area of contamination. A waste storage area was established before waste was generated. Waste storage areas were located in controlled areas of the Laboratory to prevent unauthorized personnel from inadvertently adding or managing wastes. Each container of waste generated was individually labeled with waste classification, item identification number, and radioactivity (if applicable), immediately following containerization. All waste was segregated by classification and compatibility to prevent cross-contamination. Management of IDW is described in Appendix C. |

**Table B-1.0-2**
**SOPs Used for Investigation Activities Conducted at TA-57 Aggregate Area**

| |
|---|
| P101-17, R1, Excavation/Fill/Soil Disturbance Permit Process |
| P101-18, R2, Procedure for Pause/Stop Work |
| P315, R3, Conduct of Operations Manual |
| P409, R4, Waste Management |
| SOP-5181, R1, Notebook and Logbook Documentation for Environmental Directorate Technical and Field Activities |
| SOP-06.09, Spade and Scoop Method for the Collection of Soil Samples |
| SOP-06.10, Hand Auger and Thin-Wall Tube Sampler |
| SOP-06.33, Headspace Vapor Screening with a Photo Ionization Detector |
| SOP-5028, Coordinating and Evaluating Geodetic Surveys |
| SOP-5056, Sample Containers and Preservation |
| SOP-5057, Handling, Packaging, and Transporting Field Samples |
| WES-EDA-QP-219, Sample Control and Field Documentation |
| SOP-5059, Field Quality Control Samples |
| SOP-5061, Field Decontamination of Equipment |
| EP-DIR-SOP-10021, R0, Characterization and Management of Environmental Program Waste |

Note: Procedures used were approved subcontractor procedures technically equivalent to the procedures listed in the table.

# Appendix G

*Risk Assessments*

## CONTENTS

**G-1.0 INTRODUCTION ..... G-1**

**G-2.0 BACKGROUND ..... G-1**
G-2.1 Site Descriptions and Operational History ..... G-1
G-2.1.1 AOC 57-006 ..... G-1
G-2.1.2 AOC 57-007 ..... G-1
G-2.2 Investigation Sampling ..... G-1
G-2.3 Determination of COPCs ..... G-2

**G-3.0 CONCEPTUAL SITE MODEL ..... G-2**
G-3.1 Receptors and Exposure Pathways ..... G-2
G-3.2 Environmental Fate and Transport ..... G-3
G-3.2.1 Inorganic Chemicals ..... G-4
G-3.2.2 Organic Chemicals ..... G-5
G-3.3 Exposure Point Concentration Calculations ..... G-6

**G-4.0 HUMAN HEALTH RISK SCREENING ASSESSMENT RESULTS ..... G-7**
G-4.1 Human Health SSLs ..... G-7
G-4.2 Results of Human Health Screening Evaluation ..... G-7
G-4.2.1 AOC 57-006 ..... G-7
G-4.2.2 AOC 57-007 ..... G-7
G-4.3 Vapor-Intrusion Pathway ..... G-8
G-4.3.1 AOC 57-006 ..... G-8
G-4.3.2 AOC 57-007 ..... G-8
G-4.4 Uncertainty Analysis ..... G-9
G-4.4.1 Data-Evaluation and COPC-Identification Process ..... G-9
G-4.4.2 Exposure Evaluation ..... G-9
G-4.4.3 Toxicity Evaluation ..... G-10
G-4.4.4 Additive Approach ..... G-11
G-4.5 Interpretation of Human Health Risk Screening Results ..... G-11
G-4.5.1 AOC 57-006 ..... G-11
G-4.5.2 AOC 57-007 ..... G-11

**G-5.0 ECOLOGICAL RISK-SCREENING EVALUATIONS ..... G-11**
G-5.1 Introduction ..... G-11
G-5.2 Scoping Evaluation ..... G-12
G-5.3 Assessment Endpoints ..... G-13
G-5.4 Ecological Risk Screening Evaluation ..... G-13
G-5.4.1 AOC 57-006 ..... G-14
G-5.4.2 AOC 57-007 ..... G-14
G-5.5 Uncertainty Analysis ..... G-14
G-5.5.1 Chemical Form ..... G-14
G-5.5.2 Exposure Assumptions ..... G-15
G-5.5.3 Toxicity Values ..... G-15
G-5.5.4 Population Area Use Factors ..... G-15
G-5.5.5 LOAEL Analysis ..... G-16
G-5.5.6 Site Discussions ..... G-16
G-5.5.7 Chemicals without ESLs ..... G-17

G-5.6 Interpretation of Ecological Risk Screening Results ..... G-17
G-5.6.1 Receptor Lines of Evidence ..... G-17
G-5.6.2 COPECs with No ESLs ..... G-20
G-5.6.3 Summary ..... G-20

**G-6.0 CONCLUSIONS ..... G-20**
G-6.1 Human Health Risk ..... G-20
G-6.2 Ecological Risk ..... G-20

**G-7.0 REFERENCES ..... G-20**

**Figure**

Figure G-3.1-1 Conceptual site model for the TA-57 Aggregate Area AOCs ..... G-23

**Tables**

Table G-2.3-1 EPCs at AOC 57-006 for the Residential Scenario ..... G-25
Table G-2.3-2 EPCs at AOC 57-006 for Ecological Risk ..... G-25
Table G-2.3-3 EPCs at AOC 57-007 for the Industrial Scenario ..... G-26
Table G-2.3-4 EPCs at AOC 57-007 for the Residential Scenario ..... G-27
Table G-2.3-5 EPCs at AOC 57-007 for Ecological Risk ..... G-28
Table G-3.2-1 Physical and Chemical Properties of Inorganic COPCs for the TA-57 Aggregate Area ..... G-29
Table G-3.2-2 Physical and Chemical Properties of Organic COPCs for the TA-57 Aggregate Area ... G-29
Table G-4.1-1 Exposure Parameter Values Used to Calculate Chemical SSLs for the Industrial and Residential Scenarios ..... G-30
Table G-4.2-1 Residential Carcinogenic Screening Evaluation for AOC 57-006 ..... G-31
Table G-4.2-2 Residential Noncarcinogenic Screening Evaluation for AOC 57-006 ..... G-31
Table G-4.2-3 Industrial Noncarcinogenic Screening Evaluation for AOC 57-007 ..... G-31
Table G-4.2-4 Residential Carcinogenic Screening Evaluation for AOC 57-007 ..... G-32
Table G-4.2-5 Residential Noncarcinogenic Screening Evaluation for AOC 57-007 ..... G-32
Table G-4.3-1 Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 57-006 ..... G-33
Table G-4.3-2 Residential Carcinogenic Screening of Vapor Intrusion for AOC 57-007 ..... G-33
Table G-4.3-3 Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 57-007 ..... G-33
Table G-5.4-1 ESLs for Terrestrial Receptors ..... G-34
Table G-5.4-2 Minimum ESL Comparison for AOC 57-006 ..... G-35
Table G-5.4-3 HI Analysis for AOC 57-006 ..... G-36
Table G-5.4-4 Minimum ESL Comparison for AOC 57-007 ..... G-37
Table G-5.4-5 HI Analysis for AOC 57-007 ..... G-38
Table G-5.5-1 PAUFs for Ecological Receptors for AOC 57-006 ..... G-39
Table G-5.5-2 Adjusted HIs at AOC 57-006 ..... G-40
Table G-5.5-3 PAUFs for Ecological Receptors for AOC 57-007 ..... G-41
Table G-5.5-4 Adjusted HIs for AOC 57-007 ..... G-42

Table G-5.5-5 LOAEL-Based ESLs for Terrestrial Receptors ..... G-43
Table G-5.5-6 HI Analysis Using LOAEL-Based ESLs at AOC 57-007 ..... G-43

**Attachments**

Attachment G-1 ProUCL Files (on CD included with this document)

Attachment G-2 Vapor Intrusion Model Spreadsheets (on CD included with this document)

Attachment G-3 Ecological Scoping Checklist

Attachment G-4 Jemez Mountain Salamander Report

## G-1.0 INTRODUCTION

This appendix presents the results of the human health and ecological risk-screening assessments conducted in support of the environmental characterization of two sites within the Technical Area 57 (TA-57) Aggregate Area. The areas of concern (AOCs) are located at TA-57, which is west of the main portion of Los Alamos National Laboratory (LANL or the Laboratory) (Figure 1.1-1 of the investigation report). The evaluation of potential risks at the two AOCs is based on decision-level data from the 2014 investigations.

## G-2.0 BACKGROUND

Brief descriptions of the AOCs assessed for potential risks are presented below.

### G-2.1 Site Descriptions and Operational History

TA-57 was established in 1974 to support the Laboratory's Hot Dry Rock (HDR) program. HDR was an experimental geothermal energy program designed to test the feasibility of extracting heat from deep geologic units near the Valles Caldera. The first location chosen for HDR was in Barley Canyon north of the current TA-57 site. After one test well had been drilled, this location was abandoned because of poor winter access and topographic limitations. Operations were moved to the current TA-57 location, which offered a large flat area with easier access. Operations at the TA-57 site began in 1974.

#### G-2.1.1 AOC 57-006

AOC 57-006 is the former location of a plastic-lined 55-gal. drum that was buried in the ground at TA-57 beneath a trailer (structure 57-23) that served as an analytical chemistry laboratory. The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer was used to dispose of wastewater associated with chemical analyses. The sink drained to a leach field (AOC 57-007) near the trailer. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to the polyethylene drum. When the drum was full, its contents were transported to the Laboratory for disposal. In 1994, the drum was removed as part of a voluntary corrective action (VCA). The chemistry trailer was removed from the site in March 1994.

#### G-2.1.2 AOC 57-007

AOC 57-007 is a leach field at TA-57 that served a former trailer (structure 57-23) used as an analytical chemistry laboratory. The chemistry trailer was used from about 1976 to 1989 to provide real-time analytical services for the geothermal project. A sink in the trailer drained to the leach field and was used to dispose of wastewater associated with chemical analyses. Chemicals that could not be discharged to the leach field because of their toxicity were poured into a special drain connected to a polyethylene-lined 55-gal. drum (AOC 57-006). The chemistry trailer was removed from the site in March 1994.

### G-2.2 Investigation Sampling

The data sets used to identify chemicals of potential concern (COPCs) and evaluate potential risks to human health and the environment for the sites consist of all validated data compiled from the 2014

investigations. Only data determined to be decision-level following the data-quality assessment (Appendix D) are included in the data sets evaluated in this appendix.

### G-2.3 Determination of COPCs

Section 5 of the investigation report summarizes the COPC selection process. COPCs were retained only if they were detected above background (inorganic chemicals and radionuclides), had detection limits greater than background values (BVs) (inorganic chemicals), and were detected (organic chemicals and inorganic chemicals with no BVs). The industrial scenario utilizes data from samples collected from 0.0–1.0 ft below ground surface (bgs). The ecological risk screening utilizes data from samples collected from 0.0–5.0 ft bgs. The residential scenario utilizes data from samples collected from 0.0–10.0 ft bgs. However, sampling depths often overlapped because of multiple investigations; therefore, all samples with a starting depth less than the lower bound of the interval for each scenario were included in the risk-screening assessments for a given scenario.

Tables G-2.3-1 to G-2.3-5 summarize the COPCs evaluated for potential risk for the sites. Some of the COPCs identified by the data review may not be evaluated for potential risk under one or more scenarios because they were not COPCs within the specified depth intervals associated with a given scenario.

## G-3.0 CONCEPTUAL SITE MODEL

The primary mechanisms of release are related to historical contaminant sources described in detail in the historical investigation report for the TA-57 Aggregate Area (LANL 2012, 214549) and summarized in section 2.3 of the approved investigation work plan (LANL 2012, 214550; NMED 2012, 520936). Releases at the sites may have occurred as a result of subsurface leaks or effluent discharges. Previous sampling results indicated contamination from inorganic chemicals (LANL 2012, 214549).

### G-3.1 Receptors and Exposure Pathways

The primary exposure pathway for human receptors is surface soil and subsurface soil/tuff that may be brought to the surface through intrusive activities. Migration of contamination to groundwater through the vadose zone is unlikely given the depth to groundwater (greater than 1000 ft bgs). Human receptors (industrial worker and resident) may be exposed through direct contact with soil or suspended particulates by ingestion, inhalation, dermal contact, and external irradiation pathways. Direct contact exposure pathways from subsurface contamination to human receptors are complete for the resident. The beef ingestion pathway is not complete because the sites are less than 2 acres in size. In addition, the area encompassing TA-57 is behind a locked fence, thereby prohibiting access by cattle. The exposure pathways for subsurface soil are the same as those for surface soil. Sources, exposure pathways, and receptors are shown in the conceptual site model (CSM) (Figure G-3.1-1).

The sites in the TA-57 Aggregate Area are industrial areas on U.S. Forest Service land used by the U.S. Department of Energy (DOE) pursuant to agreements with the Forest Service. The AOCs provide potential habitat and exposure pathways are complete to surface soil and tuff for ecological receptors. Weathering of tuff is the only viable natural process that may result in the exposure of receptors to COPCs in tuff. However, because of the slow rate of weathering expected for tuff, exposure to COPCs in tuff is negligible, although it is included in the assessments. Exposure pathways to subsurface contamination below 5.0 ft are not complete unless contaminated soil or tuff were excavated and brought to the surface. The potential pathways are root uptake by plants, inhalation of vapors (burrowing animals only), inhalation of dust, dermal contact, incidental ingestion of soil, external irradiation, and food web

transport. Pathways from subsurface releases may be complete for plants. Surface water exposure was not evaluated because of the lack of surface water features. Sources, exposure pathways, and receptors are presented in the CSM (Figure G-3.1-1).

### G-3.2 Environmental Fate and Transport

The evaluation of environmental fate addresses the chemical processes affecting the persistence of chemicals in the environment and the evaluation of transport addresses the physical processes affecting mobility along a migration pathway. Migration into soil and tuff depends on precipitation or snowmelt, soil moisture content, depth of soil, soil hydraulic properties, and properties of the COPCs. Migration into and through tuff also depends on the unsaturated flow properties of the tuff and the presence of joints and fractures.

The most important factor with respect to the potential for COPCs to migrate to groundwater is the presence of saturated conditions. Downward migration in the vadose zone is also limited by a lack of hydrostatic pressure as well as the lack of a source for the continued release of contamination. Without sufficient moisture and a source, little or no potential migration of materials through the vadose zone to groundwater occurs.

Contamination at depth is addressed in the discussion of nature and extent in the investigation report. Results from the deepest samples collected at most sites showed either no detected concentrations of COPCs or low- to trace-level concentrations of only a few inorganic, radionuclide, and/or organic COPCs in tuff. The limited extent of contamination is related to the absence of the key factors that facilitate migration, as discussed above. Given how long the contamination has been present in the subsurface, the physical and chemicals properties of the COPCs, and the lack of saturated conditions, the potential for contaminant migration to groundwater is very low.

The New Mexico Environment Department (NMED) guidance (NMED 2014, 600115) contains screening levels that consider the potential for contaminants in soil to result in groundwater contamination. These screening levels consider equilibrium partitioning of contaminants among solid, aqueous, and vapor phases and account for dilution and attenuation in groundwater through the use of dilution attenuation factors (DAFs). These DAF soil screening levels (SSLs) may be used to identify chemical concentrations in soil that have the potential to contaminate groundwater (EPA 1996, 059902). Screening contaminant concentrations in soil against these DAF SSLs does not, however, provide an indication of the potential for contaminants to migrate to groundwater. The assumptions used in the development of these DAF SSLs include an assumption of uniform contaminant concentrations from the contaminant source to the water table (i.e., it is assumed migration to groundwater has already occurred). Furthermore, this assumption is inappropriate for the sites where sampling has shown that contamination is vertically bounded near the surface and the distance from the surface to the water table is large. For these reasons, screening of contaminant concentrations in soil against the DAF SSLs was not performed.

The relevant release and transport processes of the COPCs are a function of chemical-specific properties that include the relationship between the physical form of the constituents and the nature of the constituent transport processes in the environment. Specific properties include the degree of saturation and the potential for ion exchange (barium and other inorganic chemicals) or sorption and the potential for natural bioremediation. The transport of volatile organic compounds (VOCs) occurs primarily in the vapor phase by diffusion or advection in subsurface air.

Current potential transport mechanisms that may lead to exposure include:

- dissolution and/or particulate transport of surface contaminants during precipitation and runoff events,
- airborne transport of contaminated surface soil,
- continued dissolution and advective/dispersive transport of chemical contaminants contained in subsurface soil and tuff as a result of past operations,
- disturbance of contaminants in shallow soil and subsurface tuff by Laboratory operations, and
- disturbance and uptake of contaminants in shallow soil by plants and animals.

Contaminant distributions at the sites indicate that after the initial deposition of contaminants from operational activities and historical remediation efforts, elevated levels of COPCs tend to remain concentrated in the vicinity of the original release points. The primary potential release and transport mechanisms identified for the AOCs include direct discharge; precipitation, sorption, and mechanical transport; dissolution and advective transport in water; and volatilization, diffusion, and dispersion. Less significant transport mechanisms include wind entrainment and, given the asphalt pavement covering most sites, dispersal of surface soil and uptake of contaminants from soil and water by biota.

Gas or vapor-phase contaminants such as VOCs are likely to volatilize to the atmosphere from near-surface soil and sediment and/or migrate by diffusion through air-filled pores in the vadose zone. Migration of vapor-phase contaminants from tuff into ambient air may occur by diffusion or advection driven by barometric pressure changes.

### G-3.2.1 Inorganic Chemicals

In general, and particularly in a semiarid climate, inorganic chemicals are not highly soluble or mobile in the environment, although there are exceptions. The physical and chemical factors that determine the distribution of inorganic COPCs within the soil and tuff are the soil-water partition coefficient ($K_d$) of the inorganic chemicals, the pH of the soil, soil characteristics (such as sand or clay content), and the redox potential (Eh). The interaction of these factors is complex, but the $K_d$ values provide a general assessment of the potential for migration through the subsurface; chemicals with higher $K_d$ values are less likely to be mobile than those with lower ones. Chemicals with $K_d$ values greater than 40 are very unlikely to migrate through soil towards the water table (Kincaid et al. 1998, 093270). Table G-3.2-1 presents the $K_d$ values and water solubility for the inorganic COPCs at the AOCs. Based on this criterion, the following COPCs have a low potential to mobilize and migrate through soil and the vadose zone: antimony, barium, chromium, lead, mercury, and zinc. The $K_d$ values for arsenic, cyanide, perchlorate, selenium, and silver are less than 40 and may indicate a greater potential to mobilize and migrate through soil and the vadose zone beneath the sites.

It is important to note that other factors besides the $K_d$ values (e.g., speciation in soil, oxidation-reduction potential, pH, and soil mineralogy) also play significant roles in the likelihood that inorganic chemicals will migrate. The COPCs with $K_d$ values less than 40 are discussed further below. Information about the fate and transport properties of inorganic chemicals was obtained from individual chemical profiles published by the Agency for Toxic Substances and Disease Registry (ATSDR 1997, 056531, and http://www.atsdr.cdc.gov/toxpro2).

Arsenic may undergo a variety of reactions, including oxidation-reduction reactions, ligand exchange, precipitation, and biotransformation. Arsenic forms insoluble complexes with iron, aluminum, and magnesium oxides found in soil and in this form, arsenic is relatively immobile. However, under low pH

and reducing conditions, arsenic can become soluble and may potentially leach into groundwater or result in runoff of arsenic into surface waters. Arsenic is expected to have low mobility under the environmental conditions (neutral to alkaline soil pH and oxidizing near-surface conditions) present at the sites.

Copper movement in soil is determined by physical and chemical interactions with the soil components. Most copper deposited in soil will be strongly adsorbed and remains in the upper few centimeters of soil. Copper will adsorb to organic matter, carbonate minerals, clay minerals, or hydrous iron, and manganese oxides. In most temperate soil, pH, organic matter, and ionic strength of the soil solutions are the key factors affecting adsorption. Soil in the area is alkaline to neutral, so the leaching of copper is not a concern at this site. Copper binds to soil much more strongly than other divalent cations, and the distribution of copper in the soil solution is less affected by pH than other metals. Copper is expected to be bound to the soil and move in the system by way of transport of soil particles by water as opposed to movement as dissolved species.

Cyanide tends to adsorb onto various natural media, including clay and sediment; however, sorption is insignificant relative to the potential for cyanide to volatilize and/or biodegrade. At soil surfaces, volatilization of hydrogen cyanide is a significant mechanism for cyanide loss. Cyanide at low concentrations in subsurface soil is likely to biodegrade under both aerobic and anaerobic conditions. Cyanide is present at the site in trace to low levels and is not expected to be mobile.

Perchlorate is somewhat soluble in water and may migrate with water molecules in saturated soil. As noted above, the subsurface material beneath the sites has low moisture content, which inhibits the mobility of nitrate and perchlorate as well as most other inorganic chemicals.

Selenium is not often found in the environment in its elemental form but is usually combined with sulfide minerals or with silver, copper, lead, and nickel minerals. In soil, pH and Eh are determining factors in the transport and partitioning of selenium. In soil with a pH of greater than 7.5, selenates, which have high solubility and a low tendency to adsorb onto soil particles, are the major selenium species and are very mobile.

Natural processes, such as the weathering of rock and the erosion of soil release silver to air and water. Silver sorbs onto soil and sediment and tends to form complexes with inorganic chemicals and humic substances in soil. Organic matter complexes with silver and reduces its mobility. Silver compounds tend to leach from well-drained soil so that it may potentially migrate into the subsurface. Site conditions are neutral to slightly alkaline and silver is not expected to be mobile.

### G-3.2.2 Organic Chemicals

Table G-3.2-2 presents the physical and chemical properties (organic carbon-water partition coefficient [$K_{oc}$], logarithm to the base 10 octanol-water partition coefficient [log $K_{ow}$], water solubility, and vapor pressure) of the organic COPCs identified for the sites. The physical and chemical properties of organic chemicals are important when evaluating their fate and transport. The following discussion about the physiochemical properties of organic COPCs is presented to illustrate some aspects of the fate and transport tendencies of the COPCs. The information is summarized from Ney (1995, 058210).

Water solubility is perhaps the most important chemical characteristic used to assess mobility of organic chemicals. The higher the water solubility of a chemical, the more likely it is to be mobile and the less likely it is to accumulate, bioaccumulate, volatilize, or persist in the environment. A highly soluble chemical (water solubility greater than 1000 mg/L) is prone to biodegradation and metabolism that may detoxify the parent chemical. Benzoic acid, methylene chloride, and trichloroethene have water solubilities greater than 1000 mg/L.

The lower the water solubility of a chemical, especially below 10 mg/L, the more likely it will be immobilized by adsorption. Chemicals with lower water solubilities are likely to accumulate or bioaccumulate and persist in the environment, to be slightly prone to biodegradation, and may be metabolized in plants and animals. The COPCs identified as having water solubilities less than 10 mg/L include bis(2-ethylhexyl)phthalate, butylbenzylphthalate, and the polycyclic aromatic hydrocarbons (PAHs).

Vapor pressure is a chemical characteristic used to evaluate the tendency of organic chemicals to volatize. Chemicals with vapor pressure greater than 0.01 mmHg are likely to volatilize and, therefore, concentrations at the site are reduced over time; vapors of these chemicals are more likely to travel toward the atmosphere and not migrate towards groundwater. Dichlorobenzene[1,4-], methylene chloride, and trichloroethene have vapor pressures greater than 0.01 mmHg.

Chemicals with vapor pressures less than 0.000001 mmHg are less likely to volatilize and, therefore, tend to remain immobile. Bis(2-ethylhexyl)phthalate has a vapor pressure less than 0.000001 mmHg.

The $K_{ow}$ is an indicator of a chemical's potential to bioaccumulate or bioconcentrate in the fatty tissues of living organisms. The unitless $K_{ow}$ value is an indicator of water solubility, mobility, sorption and bioaccumulation. The higher the $K_{ow}$ above 1000, the greater the affinity the chemical has for bioaccumulation/bioconcentration in the food chain, the greater the potential for sorption in the soil, and the lower the mobility (Ney 1995, 058210). The PAHs, phthalates, and 1,4-dichlorobenzene have a $K_{ow}$ greater than 1000. A $K_{ow}$ of less than 500 indicates high water solubility, mobility, little to no affinity for bioaccumulation, and degradability by microbes, plants, and animals. Benzoic acid, methylene chloride, and trichloroethene have a $K_{ow}$ much less than 500.

The $K_{oc}$ measures the tendency of a chemical to adsorb to organic carbon in soil. $K_{oc}$ values above 500 $cm^3/g$ indicate a strong tendency to adsorb to soil, leading to low mobility (NMED 2014, 600115). Bis(2-ethylhexyl)phthalate, butylbenzylphthalate, and the PAHs have $K_{oc}$ values above 500 $cm^3/g$, indicating a very low potential to migrate toward groundwater. The organic COPCs with $K_{oc}$ values less than 500 $cm^3/g$ include benzoic acid, 1,4-dichlorobenzene, methylene chloride, and trichloroethene.

### G-3.3 Exposure Point Concentration Calculations

The exposure point concentrations (EPCs) represent upper bound concentrations of COPCs. For comparison to risk-screening levels, the upper confidence limit (UCL) of the arithmetic mean was calculated when possible and used as the EPC. The UCLs were calculated using all available decision-level data within the depth range of interest. If an appropriate UCL of the mean could not be calculated or if the UCL exceeded the maximum concentration, the maximum detected concentration of the COPC was used as the EPC (maximum detection limits were used as the EPCs for some inorganic COPCs). The summary statistics, including the EPC for each COPC for the human health and the ecological risk-screening assessments and the distribution used for the calculation, are presented in Tables G-2.3-1 to G-2.3-5.

Calculation of UCLs of the mean concentrations was done using the EPA ProUCL 5.0.00 software (EPA 2013, 251074), which is based on EPA guidance (EPA 2002, 085640). The ProUCL program calculates 95%, 97.5%, and 99% UCLs and recommends a distribution and UCL. The 95% UCL for the recommended calculation method was used as the EPC. The ProUCL software performs distributional tests on the data set for each COPC and calculates the most appropriate UCL based on the distribution of the data set. Environmental data may have a normal, lognormal, or gamma distribution but are often nonparametric (no definable shape to the distribution). The ProUCL documentation strongly recommends against using the maximum detected concentration for the EPC. The maximum detected concentration

was used to represent the EPC for COPCs only when there were too few detects to calculate a UCL. Input and output data files for ProUCL calculations are provided on CD as Attachment G-1.

## G-4.0 HUMAN HEALTH RISK SCREENING ASSESSMENT RESULTS

The human health risk-screening assessments were conducted for each of the sites included in this report. All sites were screened for the residential scenarios using data from 0.0–10.0 ft bgs. Sites were also screened for the industrial scenario using data from 0.0–1.0 ft bgs, where available. The human health risk-screening assessments compare either the 95% UCL of the mean concentration, the maximum detected concentration, or the maximum detection limit of each COPC with SSLs for chemicals.

### G-4.1 Human Health SSLs

Human health risk-screening assessments for chemicals were conducted using SSLs for the industrial and residential scenarios obtained from NMED guidance (NMED 2014, 600115). The NMED SSLs are based on a target noncarcinogenic hazard quotient (HQ) of 1 and a target cancer risk of $1 \times 10^{-5}$ (NMED 2014, 600115). If SSLs were not available from NMED guidance, values from the EPA regional screening tables (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm) were used. The EPA SSLs for carcinogens were multiplied by 10 to adjust from a $10^{-6}$ cancer risk level to the NMED target cancer risk level of $10^{-5}$. Exposure parameters used to calculate the industrial and residential SSLs are presented in Table G-4.1-1.

### G-4.2 Results of Human Health Screening Evaluation

The EPC of each COPC in soil was compared with the SSLs for the industrial and residential scenarios. For carcinogenic chemicals, the EPCs were divided by the SSL and multiplied by $1 \times 10^{-5}$. The sum of the carcinogenic risks was compared with the NMED target cancer risk level of $1 \times 10^{-5}$. For noncarcinogenic chemicals, an HQ was generated for each COPC by dividing the EPC by the SSL. The HQs were summed to generate a hazard index (HI). The HI was compared with the NMED target HI of 1. The results are presented in Tables G-4.2-1 to G-4.2-5 and are described below for each AOC evaluated.

#### G-4.2.1 AOC 57-006

The samples at AOC 57-006 were collected from depths greater than 0.0−1.0 ft bgs; therefore, no complete exposure pathways exist for the industrial scenario.

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-1 and G-4.2-2. The total excess cancer risk for the residential scenario is $6 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$ (NMED 2014, 600115). The residential HI is 0.05, which is less than the NMED target HI of 1 (NMED 2014, 600115).

#### G-4.2.2 AOC 57-007

The results of the risk-screening assessment for the industrial scenario are presented in Table G-4.2-3. No carcinogen COPCs were identified in the 0.0−1.0 ft bgs depth interval. The industrial HI is 0.001, which is less than the NMED target HI of 1 (NMED 2014, 600115).

The results of the risk-screening assessment for the residential scenario are presented in Tables G-4.2-4 and G-4.2-5. The total excess cancer risk for the residential scenario is $7 \times 10^{-6}$, which is less than the

NMED target risk level of $1 \times 10^{-5}$ (NMED 2014, 600115). The residential HI is 0.3, which is less than the NMED target HI of 1 (NMED 2014, 600115).

### G-4.3 Vapor-Intrusion Pathway

NMED guidance (NMED 2014, 600115) requires an evaluation of the vapor-intrusion pathway. The evaluation can be qualitative for a potentially complete pathway if the following criteria are met:

- VOCs are minimally detected,
- concentrations are below NMED's vapor-intrusion screening levels for soil-gas and/or groundwater,
- there is no suspected source(s) for VOCs, and
- concentrations are decreasing with depth (for soil).

Because only bulk soil data are available for the two AOCs, the vapor-intrusion screening levels are not applicable for the evaluation. Residential soil screening values were calculated using the Johnson and Ettinger model (http://www.epa.gov/swerrims/riskassessment/airmodel/johnson_ettinger.htm) for subsurface vapor intrusion into buildings (EPA 2002, 094114). The advanced soil model was used to calculate risk-based soil concentrations for VOCs. The maximum detected concentration of each VOC COPC was compared with the risk-based concentration generated by the model for each site. The model inputs and risk-based concentrations generated are provided in Attachment G-2 on CD. HQs and HIs were calculated for noncarcinogenic COPCs and total excess cancer risks for carcinogenic COPCs. The NMED target risk level of $1 \times 10^{-5}$ and NMED target HI of 1 were applied.

The vapor-intrusion pathway was qualitatively evaluated as part of the residential scenario for each AOC.

#### G-4.3.1 AOC 57-006

There is no source for VOCs at AOC 57-006. The waste collection drum was removed as part of a VCA in 1994 (LANL 1995, 054336). Therefore, the potential source of the VOCs was removed approximately 20 yr ago. In addition, no buildings are currently on or near the site, and the Laboratory, DOE, or the Forest Service has no plans to put another trailer, structure, or building of any kind at this site.

VOCs were minimally detected at this AOC. Methylene chloride and trichloroethene were each detected in two samples at concentrations below the estimated quantitation limits (EQLs). In addition, concentrations decreased with depth at all locations. The screening of the bulk soil data using the Johnson and Ettinger model, as presented below, indicates the soil has not been impacted. The vapor-intrusion pathway is therefore potentially complete based on NMED guidance (NMED 2014, 600115) and no additional evaluation is necessary.

The results of the residential vapor-intrusion screening assessments are presented in Table G-4.3-1. The HI is approximately 0.004, which is less than the NMED target HI of 1 (NMED 2014, 600115). These results do not change the HI and cancer risk calculated as a result of exposure to soil, as presented in section G-4.2.

#### G-4.3.2 AOC 57-007

There is no source for VOCs at AOC 57-007. The chemistry trailer was used until 1989 and was removed from the site in March 1994. In addition, no buildings are currently on or near the site, and the Laboratory,

DOE, or the Forest Service has no plans to put another trailer, structure, or building of any kind at this site.

VOCs were minimally detected at this AOC. Dichlorobenzene[1,4-] was detected in three samples, and methylene chloride and trichloroethene were each detected in two samples. Concentrations were below or slightly above the EQLs and decreased with depth at all locations. The screening of the bulk soil data using the Johnson and Ettinger model, as presented below, indicates the soil has not been impacted. The vapor-intrusion pathway is therefore potentially complete based on NMED guidance (NMED 2014, 600115) and no additional evaluation is necessary.

The results of the residential vapor-intrusion screening assessments are presented in Tables G-4.3-2 and G-4.3-3. The total excess cancer risk is approximately $2 \times 10^{-8}$, which is less than the NMED target cancer risk level of $1 \times 10^{-5}$ (NMED 2014, 600115). The HI is approximately 0.004, which is less than the NMED target HI of 1 (NMED 2014, 600115). These results do not change the HI and cancer risk calculated as a result of exposure to soil, as presented in section G-4.2.

## G-4.4 Uncertainty Analysis

The human health risk-screening evaluations are subject to varying degrees and types of uncertainty. Aspects of data evaluation and COPC identification, exposure evaluation, toxicity evaluation, and the additive approach all contribute to uncertainties in the risk-evaluation process.

### G-4.4.1 Data-Evaluation and COPC-Identification Process

A primary uncertainty associated with the COPC-identification process is the possibility that a chemical may be inappropriately identified as a COPC when it is actually not a COPC or that a chemical may not be identified as a COPC when it actually should be identified as a COPC. All detected organic chemicals were retained for analysis. Inorganic chemicals were appropriately identified as COPCs because those either detected or with detection limits above background were retained for further analysis. However, background concentrations may not be representative of certain subunits of the Bandelier Tuff (e.g., fractured, clay-rich material) because such samples are not included in the background dataset.

Other uncertainties may include errors in sampling, laboratory analysis, and data analysis. However, because concentrations used in the risk-screening evaluations include those detected below EQLs and nondetects above BVs, data evaluation uncertainties are expected to have little effect on the risk-screening results.

### G-4.4.2 Exposure Evaluation

The current and reasonably foreseeable future land use is industrial. To the degree actual activity patterns are not represented by those activities assumed by the industrial scenario, uncertainties are introduced in the assessment, and the evaluation presented in this assessment overestimates potential risk. An individual may be subject to exposures in a different manner than the exposure assumptions used to derive the industrial SSLs. For the sites evaluated, individuals might not be on-site at present or in the future for that frequency and duration. The industrial assumptions for the SSLs are that the potentially exposed individual is outside on-site for 8 h/d, 225 d/yr, and 25 yr (NMED 2014, 600115). The residential SSLs are based on exposure of 24 h/d, 350 d/yr, and 30 yr (NMED 2014, 600115). As a result, the industrial and residential scenarios evaluated at these sites likely overestimate the exposure and risk.

A number of assumptions are made relative to exposure pathways, including input parameters, completeness of a given pathway, the contaminated media to which an individual may be exposed, and intake rates for different routes of exposure. In the absence of site-specific data, the exposure assumptions used were consistent with default values (NMED 2014, 600115). When several upper-bound values (as are found in NMED 2014, 600115) are combined to estimate exposure for any one pathway, the resulting risk estimate can exceed the 99th percentile and, therefore, can exceed the range of risk that may be reasonably expected. Also, the assumption that residual concentrations of chemicals in the tuff are available and result in exposure in the same manner as if they were in soil overestimates the potential exposure and risk to receptors.

Uncertainty is introduced in the concentration aggregation of data for estimating the EPCs at a site. Risk from a single location or area with relatively high COPC concentrations may be underestimated by using a representative site-wide value. The use of a UCL is intended to provide a protective upper-bound (i.e., conservative) COPC concentration and is assumed to be representative of the average exposure to a COPC across the entire site. Potential risk and exposure from a single location or area with relatively high COPC concentrations may be overestimated if a representative site-wide value is used. The use of the maximum detected concentration for the EPC overestimates the exposure to contamination because receptors are not consistently exposed to the maximum detected concentration across the site. In addition, the maximum detection limit was used as the EPC for some inorganic COPCs with elevated detection limits above BVs.

### G-4.4.3 Toxicity Evaluation

The primary uncertainty associated with the SSLs is related to the derivation of toxicity values used in their calculation. Toxicity values (reference doses [RfDs] and slope factors [SFs]) were used to derive the SSLs used in this risk-screening evaluation (NMED 2014, 600115). Uncertainties were identified in four areas with respect to the toxicity values: (1) extrapolation from other animals to humans, (2) interindividual variability in the human population, (3) the derivation of RfDs and SFs, and (4) the chemical form of the COPC. No surrogates were used to establish toxicity values in the risk assessments.

*Extrapolation from Animals to Humans.* The SFs and RfDs are often determined by extrapolation from animal data to humans, which may result in uncertainties in toxicity values because differences exist in chemical absorption, metabolism, excretion, and toxic responses between animals and humans. Differences in body weight, surface area, and pharmacokinetic relationships between animals and humans are taken into account to address these uncertainties in the dose-response relationship. However, conservatism is usually incorporated in each of these steps, resulting in the overestimation of potential risk.

*Individual Variability in the Human Population.* For noncarcinogenic effects, the degree of variability in human physical characteristics is important both in determining the risks that can be expected at low exposures and in defining the no observed adverse effect level (NOAEL). The NOAEL uncertainty factor approach incorporates a 10-fold factor to reflect individual variability within the human population that can contribute to uncertainty in the risk evaluation; this factor of 10 is generally considered to result in a conservative estimate of risk to noncarcinogenic COPCs.

*Derivation of RfDs and SFs.* The RfDs and SFs for different chemicals are derived from experiments conducted by different laboratories that may have different accuracy and precision that could lead to an over- or underestimation of the risk. The uncertainty associated with the toxicity factors for noncarcinogens is measured by the uncertainty factor, the modifying factor, and the confidence level. For

carcinogens, the weight of evidence classification indicates the likelihood that a contaminant is a human carcinogen. Toxicity values with high uncertainties may change as new information is evaluated.

*Chemical Form of the COPC.* COPCs may be bound to the environment matrix and not available for absorption into the human body. However, it is assumed that the COPCs are bioavailable. This assumption can lead to an overestimation of the total risk.

#### G-4.4.4 Additive Approach

For noncarcinogens, the effects of exposure to multiple chemicals are generally not known, and possible interactions could be synergistic or antagonistic, resulting in either an overestimation or underestimation of the potential risk. Additionally, RfDs used in the risk calculations typically are not based on the same endpoints with respect to severity, effects, or target organs. Therefore, the potential for noncarcinogenic effects may be overestimated for individual COPCs that act by different mechanisms and on different target organs but are addressed additively.

### G-4.5 Interpretation of Human Health Risk Screening Results

#### G-4.5.1 AOC 57-006

**Industrial Scenario**

Samples were not collected from 0.0−1.0 ft bgs. Therefore, the industrial scenario was not evaluated.

**Residential Scenario**

The total excess cancer risk for the residential scenario is $6 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$. The residential HI is 0.05, which is less than the NMED target HI of 1.

#### G-4.5.2 AOC 57-007

**Industrial Scenario**

No carcinogen COPCs were identified in the depth interval of 0.0−1.0 ft bgs. The HI for the industrial scenario is 0.001, which is less than the NMED target HI of 1.

**Residential Scenario**

The total excess cancer risk for the residential scenario is $7 \times 10^{-6}$, which is less than the NMED target risk level of $1 \times 10^{-5}$. The residential HI is 0.3, which is less than the NMED target HI of 1.

## G-5.0 ECOLOGICAL RISK-SCREENING EVALUATIONS

### G-5.1 Introduction

The approach for conducting ecological evaluations is described in the “Screening Level Ecological Risk Assessment Methods, Revision 3” (LANL 2012, 226715). The evaluation consists of four parts: a scoping evaluation, a screening evaluation, an uncertainty analysis, and an interpretation of the results.

### G-5.2 Scoping Evaluation

The scoping evaluation establishes the breadth and focus of the screening evaluation. The ecological scoping checklist (Attachment G-3) is a useful tool for organizing existing ecological information. The information was used to determine whether ecological receptors might be affected, identify the types of receptors that might be present, and develop the ecological conceptual site model for the sites (Attachment G-3). Most of the area on the mesa top is developed and typically provides minimal potential habitat for ecological receptors. The quality of the habitat varies and, in some cases, includes native grasses, forbs, and trees that can be suitable habitat for ecological receptors.

The scoping evaluation indicated that terrestrial receptors were appropriate for evaluating the concentrations of COPCs in soil and tuff. Exposure is assessed across a site to a depth of 0.0–5.0 ft bgs. Aquatic receptors were not evaluated because no aquatic communities and no aquatic habitat or perennial source of water exist at any of the sites. The depth of the regional aquifer (greater than 1000 ft bgs) and the semiarid climate limit transport to groundwater. The potential exposure pathways for terrestrial receptors in soil and tuff are root uptake, inhalation, soil ingestion, dermal contact, and food web transport (Attachment G-3). The weathering of tuff is the only viable natural process that may result in the exposure of receptors to contaminants in tuff. Because of the slow rate of weathering expected for tuff, exposure in tuff is negligible, although it is included in the assessment. Plant exposure in tuff is largely limited to fractures near the surface, which does not produce sufficient biomass to support an herbivore population. Consequently, the contaminants in tuff are unavailable to receptors.

The potential risk was evaluated in the risk-screening assessments for the following ecological receptors representing several trophic levels:

- a plant
- soil dwelling invertebrates (represented by the earthworm)
- the deer mouse (mammalian omnivore)
- the montane shrew (mammalian insectivore)
- desert cottontail (mammalian herbivore)
- red fox (mammalian carnivore)
- American robin (avian insectivore, avian omnivore, and avian herbivore)
- American kestrel (avian insectivore and avian carnivore)

The rationale for using these receptors is presented in “Screening Level Ecological Risk Evaluation Methods, Revision 3” (LANL 2012, 226715). The Mexican spotted owl does not nest or forage in the Fenton Hill area. The Jemez Mountain salamander (JMS) is the only threatened and endangered [T&E] species known to occur in the Fenton Hill area (Attachment G-4). The entire footprint of TA-57 is comprised of either developed or undeveloped core habitat for the JMS as defined by the Laboratory’s Habitat Management Plan (ENV Division Resources Management Team 2014, 600084). The previously disturbed footprint at TA-57 is developed core habitat and the undeveloped tree covered areas are undeveloped core habitat. Both AOCs 57-006 and 57-007 and their sampling locations are within developed core habitat for JMS.

Surveys for the JMS at TA-57 have been conducted by Federal- and State-permitted Laboratory biologists in 2012, 2013, and 2014 during the monsoon season, and no JMSs were observed. Historical surveys were completed at the site on June 23, 1985, and no JMSs were found. The nearest JMS observation to TA-57 is 0.75 mi north-northeast in designated critical habitat on the east side of the

highway. In a 2-mi radius of TA-57, all of the positive observations of JMS occurred on undeveloped tree-covered slopes. The TA-57 complex is situated on a flat, open mesa top with very little change in elevation. The likelihood of JMS occurring on the sites is very low, and occurrence of a JMS in the developed core habitat areas would essentially be zero (Attachment G-4).

### G-5.3 Assessment Endpoints

An assessment endpoint is an explicit expression of the environmental value to be protected. These endpoints are ecologically relevant and help sustain the natural structure, function, and biodiversity of an ecosystem or its components (EPA 1998, 062809). In a screening-level evaluation, assessment endpoints are any adverse effects on ecological receptors, where receptors are populations and communities (EPA 1997, 059370). The purpose of the ecological screening evaluation is to protect populations and communities of biota rather than individual organisms, except for listed or candidate T&E species or treaty-protected species (EPA 1999, 070086) because populations of protected species tend to be small and the loss of an individual adversely affects the species as a whole (EPA 1997, 059370).

In accordance with this guidance, the Laboratory developed generic assessment endpoints (LANL 1999, 064137) to ensure that values at all levels of ecological organization are considered in the ecological screening process. These general assessment endpoints can be measured using impacts on reproduction, growth, and survival to represent categories of effects that may adversely impact populations. In addition, specific receptor species were chosen to represent each functional group. The receptor species were chosen because of their presence at the site, their sensitivity to the COPCs, and their potential for exposure to those COPCs. These categories of effects and the chosen receptor species were used to select the types of effects seen in toxicity studies considered in the development of the toxicity reference values (TRVs). Toxicity studies used in the development of TRVs included only studies in which the adverse effect evaluated affected reproduction, survival, and/or growth.

The selection of receptors and assessment endpoints is designed to be protective of both the representative species used as screening receptors and the other species within their feeding guilds and the overall food web for the terrestrial and aquatic ecosystems. Focusing the assessment endpoints on the general characteristics of species that affect populations (rather than the biochemical and behavioral changes that may affect only the studied species) also ensures the applicability to the ecosystem of concern.

### G-5.4 Ecological Risk Screening Evaluation

The ecological screening evaluation identifies chemicals of potential ecological concern (COPECs) and is based on the comparison of EPCs (95% UCLs, maximum detected concentrations, or maximum detection limits) to ecological screening levels (ESLs). The EPCs used in the assessments for the sites are presented in Tables G-2.3-1 through Table G-2.3-5.

The ESLs were obtained from the ECORISK Database, Version 3.2 (LANL 2014, 262559) and are presented in Table G-5.4-1. The ESLs are based on similar species and are derived from experimentally determined NOAELs, lowest observed adverse effect levels (LOAELs), or doses determined lethal to 50% of the test population. Information relevant to the calculation of ESLs, including concentration equations, dose equations, bioconcentration factors, transfer factors, and TRVs, are presented in the ECORISK Database, Version 3.2 (LANL 2014, 262559).

The analysis begins with a comparison of the minimum ESL for a given COPC to the EPC. The HQ is defined as the ratio of the EPC to the concentration that has been determined to be acceptable to a given

ecological receptor (i.e., the ESL). The higher the contaminant levels relative to the ESLs, the higher the potential risk to receptors; conversely, the higher the ESLs relative to the contaminant levels, the lower the potential risk to receptors. HQs greater than 0.3 are used to identify COPECs requiring additional evaluation (LANL 2012, 226715). Individual HQs for a receptor are summed to derive an HI; COPCs without ESLs are retained as COPECs and evaluated further in the uncertainty section. An HI greater than 1 indicates further assessment may be needed to ensure exposure to multiple COPECs at a site will not lead to potential adverse impacts to a given receptor population. The HQ and HI analysis is a conservative indication of potential adverse effects and is designed to minimize the potential of overlooking possible COPECs at the site.

#### G-5.4.1 AOC 57-006

The results of the minimum ESL comparisons are presented in Table G-5.4-2. Antimony and zinc are retained as COPECs because the HQs were greater than 0.3.

The HQs and HIs for each COPEC and receptor combination are presented in Table G-5.4-3. The HI analysis indicates that the robin (insectivore) and shrew have HIs equivalent to 1 (the shrew HI was 0.97). The COPECs and receptors are discussed in the uncertainty section.

#### G-5.4.2 AOC 57-007

The results of the minimum ESL comparisons are presented in Table G-5.4-4. Barium, chromium, copper, cyanide, lead, mercury, selenium, silver, zinc, benzoic acid, and bis(2-ethylhexyl)phthalate are retained as COPECs because the HQs were greater than 0.3.

Perchlorate does not have ESLs, is retained as a COPEC, and is discussed in the uncertainty section.

The HQs and HIs for each COPEC and receptor combination are presented in Table G-5.4-5. The HI analysis indicates that the kestel (both feeding guilds), robin (all feeding guilds), cottontail, shrew, deer mouse, earthworm, and plant have HIs greater than 1. The COPECs and receptors are discussed in the uncertainty section.

### G-5.5 Uncertainty Analysis

The uncertainty analysis describes the key sources of uncertainty related to the screening evaluations. This analysis can result in either adding or removing chemicals from the list of COPECs for sites. The following narrative contains a qualitative uncertainty analysis of the issues relevant to evaluating the potential ecological risk at the sites.

#### G-5.5.1 Chemical Form

The assumptions used in the ESL derivations were conservative and not necessarily representative of actual conditions. These assumptions include maximum chemical bioavailability, maximum receptor ingestion rates, minimum bodyweight, and additive effects of multiple COPECs. Most of these factors tend to result in conservative estimates of the ESLs, which may lead to an overestimation of the potential risk. The assumption of additive effects for multiple COPECs may result in an over- or underestimation of the potential risk to receptors.

The chemical form of the individual COPCs was not determined as part of the investigation, largely a limitation on analytical quantitation of individual chemical species. Toxicological data are typically based

on the most toxic and bioavailable chemical species not likely found in the environment. The inorganic, organic, and radionuclide COPECs are generally not 100% bioavailable to receptors in the natural environment because of the adsorption of chemical constituents to matrix surfaces (e.g., soil) or rapid oxidation or reduction changes that render harmful chemical forms unavailable to biotic processes. The ESLs were calculated to ensure a conservative indication of potential risk (LANL 2012, 226715), and the values were biased toward overestimating the potential risk to receptors.

#### G-5.5.2 Exposure Assumptions

The EPCs used in the calculations of HQs were the 95% UCL, the maximum detected concentration, or the maximum detection limit to a depth of 5.0 ft, thereby conservatively estimating the exposure to each COPC. As a result, the exposure of individuals within a population was evaluated using this specific concentration, which was assumed constant throughout the exposure area. The sampling also focused on areas of known contamination, and receptors were assumed to ingest 100% of their food and spend 100% of their time at the site. The assumptions made regarding exposure for terrestrial receptors results in an overestimation of the potential exposure and risk because COPECs varied across the site and were infrequently detected.

#### G-5.5.3 Toxicity Values

The HQs were calculated using ESLs, which are based on NOAELs as threshold effect levels; actual risk for a given COPEC/receptor combination occurs at a higher level, somewhere between the NOAEL-based threshold and the threshold based on the LOAEL. The use of NOAELs leads to an overestimation of potential risk to ecological receptors. ESLs are based on laboratory studies requiring extrapolation to wildlife receptors. Laboratory studies are typically based on “artificial” and maintained populations with genetically similar individuals and are limited to single chemical exposures in isolated and controlled conditions using a single exposure pathway. Wild species are concomitantly exposed to a variety of chemical and environmental stressors, potentially rendering them more susceptible to chemical stress. On the other hand, wild populations are likely more genetically diverse than laboratory populations, making wild populations, as a whole, less sensitive to chemical exposure than laboratory populations. The uncertainties associated with the ESLs may result in an under- or overestimation of potential risk.

#### G-5.5.4 Population Area Use Factors

EPA guidance is to manage the ecological risk to populations rather than to individuals, with the exception of T&E species (EPA 1999, 070086). One approach to address the potential effects on populations at sites is to estimate the spatial extent of the area inhabited by the local population that overlaps with the contaminated area. The population area for a receptor is based on the individual receptor home range (HR) and its dispersal distance. Bowman et al. (2002, 073475) estimate that the median dispersal distance for mammals is 7 times the linear dimension of the HR (i.e., the square root of the HR area). If only the dispersal distances for the mammals with HRs within the range of the screening receptors are used (Bowman et al. 2002, 073475), the median dispersal distance becomes 3.6 times the square root of the HR ($R^2$=0.91). If it is assumed that the receptors can disperse the same distance in any direction, the population area is circular and the dispersal distance is the radius of the circle. Therefore, the population area can be derived by $\pi(3.6\sqrt{HR})^2$ or approximately 40HR.

**AOC 57-006**

The area of AOC 57-006 is approximately 0.001 ha. The population area use factors (PAUFs) are estimated by dividing the site area by the population area of each receptor population (Table G-5.5-1). The HQs and HIs are recalculated using the PAUFs. The HIs for the plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The adjusted HIs for AOC 57-006 are less than 1 for all receptors. The plant had an unadjusted HI of 0.4 and the earthworm had an unadjusted HI of 0.5 (Table G-5.5-2).

**AOC 57-007**

The area of AOC 57-007 is approximately 0.03 ha. The PAUFs are estimated by dividing the site area by the population area of each receptor population (Table G-5.5-3). The HQs and HIs are recalculated using the PAUFs. The HIs for the plant and earthworm are not adjusted by PAUFs because these receptors do not have HRs.

The adjusted HIs for AOC 57-007 are less than 1 for all receptors. The plant had an unadjusted HI of 4 and the earthworm had an unadjusted HI of 82 (Table G-5.5-4).

### G-5.5.5 LOAEL Analysis

AOC 57-007 has HIs greater than 1 for one or more receptors. To address the HIs and reduce the associated uncertainty, analyses were conducted using ESLs calculated based on a LOAEL rather than a NOAEL. The LOAEL-based ESLs were calculated based on toxicity information in the ECORISK Database, Release 3.2 (LANL 2014, 262559) and are presented in Table G-5.4-5. The analyses address some of the uncertainties and conservativeness of the ESLs used in the initial screening assessments. HI analyses and adjusted HI analyses were conducted using the LOAEL-based ESLs.

### G-5.5.6 Site Discussions

**AOC 57-007**

The HI for AOC 57-007 is greater than 1 for the plant, with barium, selenium, and zinc being the primary COPECs. The HI analysis using LOAEL-based ESLs resulted in an HI of 0.9 for the plant (Table G-5.5-6).

The HI for AOC 57-007 is greater than 1 for the earthworm, with barium, mercury, and zinc being the primary COPECs. The HI analysis using LOAEL-based ESLs resulted in an HI of approximately 8 for the earthworm primarily from mercury (Table G-5.5-6). The mercury EPC for the 0.0–5.0 ft interval is 4.04 mg/kg. However, only four samples at two locations have mercury concentrations greater than the BV of 0.1 mg/kg. The locations are within the leach field and are in close proximity (less than 5 ft apart). In addition, two of the four samples in which mercury concentrations were above the BV were collected from Qbt3, which is a less bioavailable matrix compared with soil. The EPC without the two largest concentrations from soil (20.6 mg/kg and 4.2 mg/kg) is 0.21 mg/kg, which is less than the LOAEL-based-ESL and results in an HQ of 0.4. Thus, most of the site poses no potential risk to the earthworm, and the HI does not indicate potential risk to the soil invertebrate population beyond the small area and limited depth of the elevated mercury concentrations. In addition, field observations made during the site visit found no indication of adverse effects from COPECs on the terrestrial community (Attachment G-3). Field observations indicated the area in and around the site has moderate-to-high vegetative cover, which is evidence of recolonzation of these sites after their active use as industrial sites. Therefore, the HI does not indicate potential risk to the plants or soil invertebrates.

#### G-5.5.7 Chemicals without ESLs

One COPEC does not have ESLs for any receptor in version 3.2 of the ECORISK Database (LANL 2014, 262559). In an effort to address this uncertainty and to provide a quantitative assessment of potential ecological risk, several online toxicity databases searches were conducted to determine if any relevant toxicity information is available. The online searches of the following databases were conducted: EPA Ecotox Database, EPA Office of Pesticide Programs Aquatic Life Benchmarks, U.S. Army Corps of Engineers/EPA Environmental Residue-Effects, California Cal/Ecotox Database, Pesticide Action Network Pesticide Database, U.S. Army Wildlife Toxicity Assessment Program, U.S. Department of Agriculture Integrated Pesticide Management Database, American Bird Conservancy Pesticide Toxicity Database, and Oak Ridge National Laboratory Risk Assessment Information System. Some COPECs without ESLs do not have chemical-specific toxicity data or surrogate chemicals to be used in the screening assessments and cannot be assessed quantitatively for potential ecological risk. The COPEC in question was not detected at one site and infrequently detected at the other site.

Toxicity data are not available for perchlorate. For perchlorate, no surrogate or other toxicity information is available.

Perchlorate was not detected at AOC 57-006 and was detected in seven samples at AOC 57-007 from 0.0−5.0 ft with concentrations ranging from 0.000582 mg/kg to 0.00159 mg/kg. The NMED residential SSL for perchlorate is 54.8 mg/kg, indicating that potential toxicity is low. Because of the potential low toxicity and infrequent detection of perchlorate, it is eliminated as a COPEC.

### G-5.6 Interpretation of Ecological Risk Screening Results

#### G-5.6.1 Receptor Lines of Evidence

Based on the ecological risk-screening assessments, several COPECs (including COPECs without an ESL) were identified for the sites. Receptors were evaluated using several lines of evidence: minimum ESL comparisons, HI analyses, potential effects to populations, and LOAEL analyses.

**Plant**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the plant, were less than 0.3.
- The HI was less than 1 for the plant at AOC 57-006, and the HI was greater than 1 for the plant at AOC 57-007.
- The HI analysis using the LOAEL-based ESL resulted in an HI less than 1 for AOC 57-007.
- Field observations made during the site visit found no indication of adverse effects on the plant community from COPECs. In addition, these sites have moderate-to-high vegetative cover, which is evidence of recolonization of these sites since their active use as industrial sites.

These lines of evidence support the conclusion that no potential ecological risk to the plants exists at theTA-57 Aggregate Area sites.

**Earthworm (Invertebrate)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the earthworm, were less than 0.3.
- The HI was less than 1 for the earthworm at AOC 57-006, and the HI was greater than 1 for the earthworm at AOC 57-007.
- The HI analysis using the LOAEL-based ESL resulted in an HI greater than 1 for AOC 57-007.
- As discussed in section G-5.5.6, the potential risks to the earthworm are overestimated and/or are not representative of the site.

These lines of evidence support the conclusion that no potential ecological risk to the earthworm (soil invertebrate population) exists at the TA-57 Aggregate Area sites.

**Montane Shrew (Insectivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the shrew, were less than 0.3.
- The HI was less than 1 for the shrew at AOC 57-006, and the HI was greater than 1 for the shrew at AOC 57-007.
- The HI for AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the shrew's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risk to the montane shrew exists at the TA-57 Aggregate Area sites.

**Deer Mouse (Omnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the deer mouse, were less than 0.3.
- The HI was less than 1 for the deer mouse at AOC 57-006, and the HI was greater than 1 for the deer mouse at AOC 57-007.
- The HI for AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the deer mouse's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risk to the deer mouse exists at the TA-57 Aggregate Area sites.

**Desert Cottontail (Herbivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the cottontail, were less than 0.3.
- The HI was less than 1 for the cottontail at AOC 57-006, and the HI was greater than 1 for the cottontail at AOC 57-007.
- The HI for AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the cottontail's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risk to the cottontail exists at the TA-57 Aggregate Area sites.

**Red Fox (Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the fox, were less than 0.3.
- The HIs were less than 1 for the red fox at both sites.

These lines of evidence support the conclusion that no potential ecological risk to the fox exists at the TA-57 Aggregate Area sites.

**Robin (All Feeding Guilds)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the robin, were less than 0.3.
- The HI was less than 1 for the robin (herbivore and omnivore) and equivalent to 1 for the robin (insectivore) at AOC 57-006, and the HIs were greater than 1 for the robin (all feeding guilds) at AOC 57-007.
- The HIs were adjusted by the PAUF, which is the ratio of the site area to the robin's population area. The adjusted HIs were less than 1 at both sites.

These lines of evidence support the conclusion that no potential ecological risk to the robin (all feeding guilds) exists at the TA-57 Aggregate Area sites.

**Kestrel (Intermediate Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the kestrel (intermediate carnivore), were less than 0.3.
- The HI was less than 1 for the kestrel (intermediate carnivore) at AOC 57-006, and the HI was greater than 1 for the kestrel (intermediate carnivore) at AOC 57-007.
- The HI at AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the kestrel's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risk to the kestrel (intermediate carnivore) exists at the TA-57 Aggregate Area sites.

**Kestrel (Top Carnivore)**

- Initial screening using the minimum ESLs eliminated a number of COPECs because the HQs for all of the receptors, including the kestrel (top carnivore), were less than 0.3.
- The HI was less than 1 for the kestrel (top carnivore) at AOC 57-006, and the HI was greater than 1 for the kestrel (top carnivore) at AOC 57-007.
- The HI at AOC 57-007 was adjusted by the PAUF, which is the ratio of the site area to the kestrel's population area. The adjusted HI was less than 1.

These lines of evidence support the conclusion that no potential ecological risks to the kestrel (top carnivore) exist at the TA-57 Aggregate Area sites.

#### G-5.6.2 COPECs with No ESLs

The COPEC without ESLs was eliminated based on comparisons to human health SSLs and the frequency of detection.

#### G-5.6.3 Summary

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations, LOAEL analyses, and COPECs without ESLs no potential ecological risks to the ecological receptors exist at the TA-57 Aggregate Area sites.

## G-6.0 CONCLUSIONS

### G-6.1 Human Health Risk

AOC 57-006 was not evaluated for the industrial scenario because no samples were collected from the 0.0–1.0-ft depth interval. For AOC 57-007, no carcinogen COPCs were identified in the 0.0–1.0-ft depth interval and the industrial HI was less than 1. Therefore, the exposure and risk are not issues for a Laboratory worker. For the residential scenario, both sites had total excess cancer risks less than the $1 \times 10^{-5}$ target risk level and had HIs less than 1.

### G-6.2 Ecological Risk

Based on evaluations of the minimum ESLs, HI analyses, potential effects to populations, LOAEL analyses, and COPECs without ESLs, no potential ecological risks to the earthworm, plant, American robin, American kestrel, deer mouse, montane shrew, desert cottontail, and red fox exist for the TA-57 Aggregate Area sites.

## G-7.0 REFERENCES

*The following list includes all documents cited in this appendix. Parenthetical information following each reference provides the author(s), publication date, and ER ID or ESH ID. This information is also included in text citations. ER IDs were assigned by the Environmental Programs Directorate's Records Processing Facility (IDs through 599999), and ESH IDs are assigned by the Environment, Safety, and Health (ESH) Directorate (IDs 600000 and above). IDs are used to locate documents in the Laboratory's Electronic Document Management System and, where applicable, in the master reference set.*

*Copies of the master reference set are maintained at the New Mexico Environment Department Hazardous Waste Bureau and the ESH Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.*

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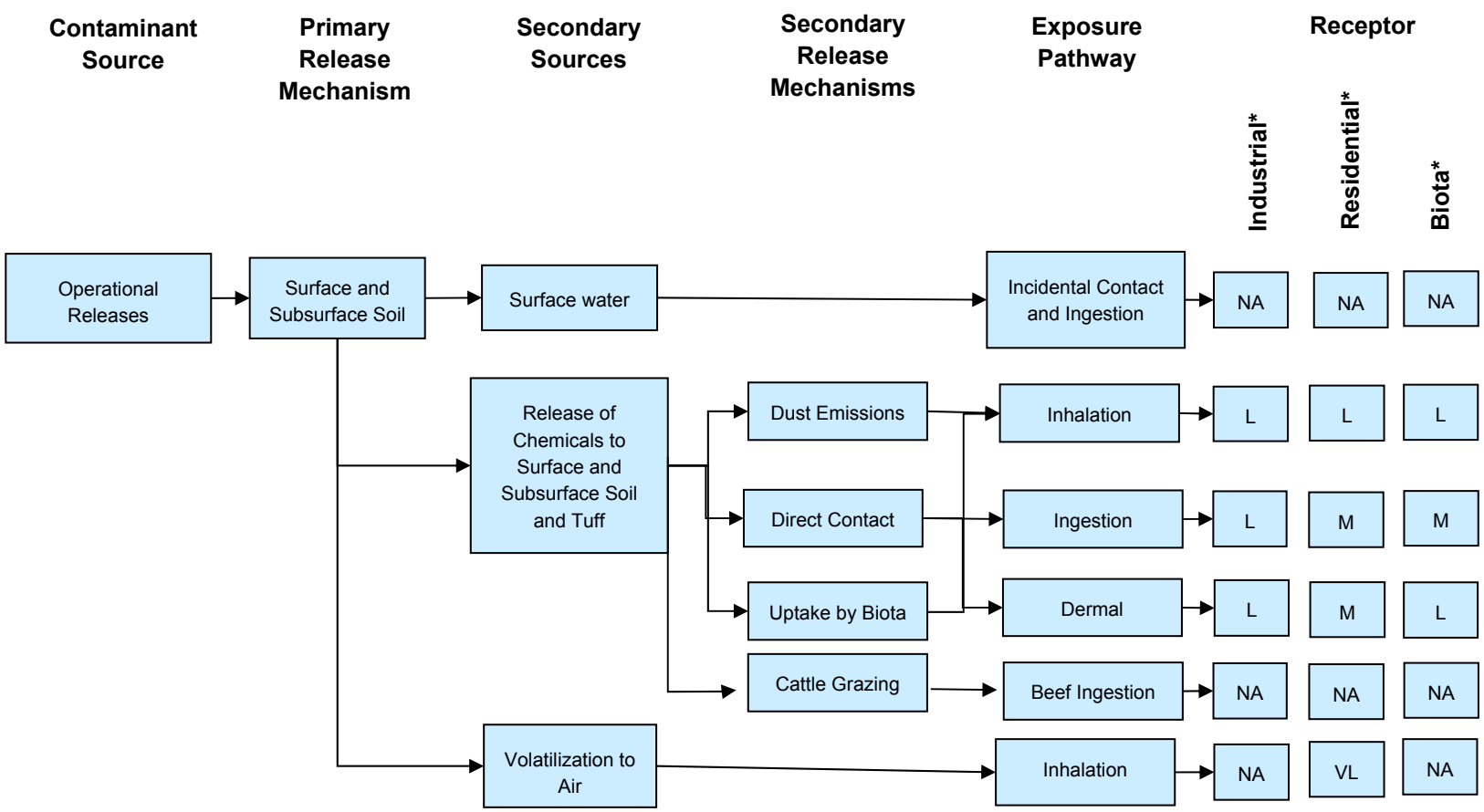


* VL = Very low, L = low, and M = moderate. Designations indicate the pathway is a potentially complete pathway and is evaluated in the risk assessments.
NA = Not applicable and indicates the pathway is incomplete and is not evaluated in the risk assessments.

**Figure G-3.1-1 Conceptual site model for the TA-57 Aggregate Area AOCs**

**Table G-2.3-1**
**EPCs at AOC 57-006 for the Residential Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 12 | 0 | 0.946(U) | 1.12(U) | n/a* | 1.12(U) | Maximum detection limit |
| Barium | 12 | 12 | 42.6 | 136 | Normal | 99.9 | 95% Student's-t |
| Chromium | 12 | 12 | 3.37 | 113 | Gamma | 58.6 | 95% Adjusted Gamma |
| Copper | 12 | 12 | 2.22 | 26 | Nonparametric | 13.5 | 95% Chebyshev (Mean, Sd) |
| Selenium | 12 | 2 | 0.347 | 1.11(U) | n/a | 0.358 | Maximum detected concentration |
| Zinc | 12 | 12 | 44.5 | 75.1 | Normal | 64 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 12 | 1 | 0.269 | 0.384(U) | n/a | 0.269 | Maximum detected concentration |
| Methylene Chloride | 12 | 2 | 0.00248 | 0.00576(U) | n/a | 0.0028 | Maximum detected concentration |
| Trichloroethene | 12 | 2 | 0.000539 | 0.00115(U) | n/a | 0.000726 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-2.3-2**
**EPCs at AOC 57-006 for Ecological Risk**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 4 | 0 | 1.06(U) | 1.1(U) | n/a* | 1.1(U) | Maximum detection limit |
| Zinc | 4 | 4 | 45.5 | 53.6 | n/a | 53.6 | Maximum detected concentration |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Methylene Chloride | 4 | 1 | 0.00248 | 0.00565(U) | n/a | 0.00248 | Maximum detected concentration |
| Trichloroethene | 4 | 1 | 0.000539 | 0.00113(U) | n/a | 0.000539 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-2.3-3**
**EPCs at AOC 57-007 for the Industrial Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 7 | 2 | 0.361 | 1.06(U) | n/a* | 0.488 | Maximum detected concentration |
| Perchlorate | 7 | 2 | 0.000786 | 0.00225(U) | n/a | 0.000841 | Maximum detected concentration |
| Zinc | 7 | 7 | 41.1 | 55.7 | n/a | 55.7 | Maximum detected concentration |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Fluoranthene | 7 | 1 | 0.0145 | 0.0373(U) | n/a | 0.0145 | Maximum detected concentration |
| Methylene Chloride | 7 | 1 | 0.00277 | 0.00561(U) | n/a | 0.00277 | Maximum detected concentration |
| Phenanthrene | 7 | 1 | 0.0134 | 0.0373(U) | n/a | 0.0134 | Maximum detected concentration |
| Trichloroethene | 7 | 2 | 0.00105(U) | 0.00294 | n/a | 0.00294 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-2.3-4**
**EPCs at AOC 57-007 for the Residential Scenario**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 33 | 7 | 0.361 | 1.15(U) | Normal | 0.474 | 95% KM (t) |
| Arsenic | 37 | 37 | 0.527 | 5.12 | Gamma | 1.95 | 95% Adjusted Gamma |
| Barium | 33 | 33 | 19.6 | 384 | Gamma | 102 | 95% Adjusted Gamma |
| Chromium | 33 | 33 | 2.92 | 68.3 | Nonparametric | 25.4 | 95% Chebyshev (Mean, Sd) |
| Copper | 33 | 33 | 1.28 | 65.1 | Nonparametric | 14.2 | 95% Chebyshev (Mean, Sd) |
| Cyanide (Total) | 33 | 4 | 0.085 | 0.73 | n/a* | 0.73 | Maximum detected concentration |
| Lead | 33 | 33 | 7.74 | 33.6 | Gamma | 13.5 | 95% Adjusted Gamma |
| Mercury | 33 | 33 | 0.00703 | 20.6 | Nonparametric | 3.56 | 95% Chebyshev (Mean, Sd) |
| Perchlorate | 33 | 8 | 0.000582 | 0.00225(U) | Normal | 0.00112 | 95% KM (t) |
| Selenium | 33 | 0 | 0.917(U) | 1.11(U) | n/a | 1.11 | Maximum detection limit |
| Silver | 33 | 16 | 0.105 | 15.2 | Nonparametric | 1.62 | 95% KM (BCA) |
| Zinc | 33 | 33 | 39 | 113 | Gamma | 58.6 | 95% Adjusted Gamma |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzoic Acid | 33 | 3 | 0.324 | 2.83 | n/a | 2.83 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 33 | 1 | 0.13 | 0.385(U) | n/a | 0.13 | Maximum detected concentration |
| Butylbenzylphthalate | 33 | 1 | 0.339 | 0.385(U) | n/a | 0.339 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 33 | 3 | 0.000357 | 0.00116(U) | n/a | 0.00043 | Maximum detected concentration |
| Fluoranthene | 33 | 2 | 0.013 | 0.0385(U) | n/a | 0.0145 | Maximum detected concentration |
| Methylene Chloride | 33 | 2 | 0.00277 | 0.00578(U) | n/a | 0.00299 | Maximum detected concentration |
| Phenanthrene | 33 | 1 | 0.0134 | 0.0385(U) | n/a | 0.0134 | Maximum detected concentration |
| Trichloroethene | 33 | 2 | 0.00103(U) | 0.00294 | n/a | 0.00294 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-2.3-5**
**EPCs at AOC 57-007 for Ecological Risk**

| COPC | Number of Analyses | Number of Detects | Minimum Concentration | Maximum Concentration | Distribution | EPC | EPC Method |
|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | |
| Antimony | 29 | 6 | 0.361 | 1.15(U) | Normal | 0.475 | 95% KM (t) |
| Arsenic | 31 | 31 | 0.527 | 3.85 | Normal | 1.80 | 95% Student's-t |
| Barium | 29 | 29 | 19.6 | 384 | Normal | 109.6 | 95% Student's-t |
| Chromium | 29 | 29 | 2.92 | 68.3 | Nonparametric | 23.1 | 95% Chebyshev (Mean, Sd) |
| Copper | 29 | 29 | 1.28 | 65.1 | Nonparametric | 15.7 | 95% Chebyshev (Mean, Sd) |
| Cyanide (Total) | 29 | 4 | 0.085 | 0.73 | n/a* | 0.73 | Maximum detected concentration |
| Lead | 29 | 29 | 7.74 | 33.6 | Gamma | 13.8 | 95% Adjusted Gamma |
| Mercury | 29 | 29 | 0.00703 | 20.6 | Nonparametric | 4.04 | 95% Chebyshev (Mean, Sd) |
| Selenium | 29 | 0 | 0.917(U) | 1.11(U) | n/a | 1.11(U) | Maximum detection limit |
| Silver | 29 | 16 | 0.105 | 15.2 | Nonparametric | 3.08 | 95% KM Chebyshev |
| Zinc | 29 | 29 | 39 | 113 | Normal | 59.5 | 95% Student's-t |
| **Organic Chemicals (mg/kg)** | | | | | | | |
| Benzoic Acid | 29 | 3 | 0.324 | 2.83 | n/a | 2.83 | Maximum detected concentration |
| Bis(2-ethylhexyl)phthalate | 29 | 1 | 0.13 | 0.385(U) | n/a | 0.13 | Maximum detected concentration |
| Butylbenzylphthalate | 29 | 1 | 0.339 | 0.385(U) | n/a | 0.339 | Maximum detected concentration |
| Dichlorobenzene[1,4-] | 29 | 3 | 0.000357 | 0.00116(U) | n/a | 0.00043 | Maximum detected concentration |
| Fluoranthene | 29 | 2 | 0.013 | 0.0385(U) | n/a | 0.0145 | Maximum detected concentration |
| Methylene Chloride | 29 | 2 | 0.00277 | 0.00578(U) | n/a | 0.00299 | Maximum detected concentration |
| Phenanthrene | 29 | 1 | 0.0134 | 0.0385(U) | n/a | 0.0134 | Maximum detected concentration |
| Trichloroethene | 29 | 2 | 0.00103(U) | 0.00294 | n/a | 0.00294 | Maximum detected concentration |

Note: Data qualifiers are defined in Appendix A.
*n/a = Not applicable.

**Table G-3.2-1**
**Physical and Chemical Properties of**
**Inorganic COPCs for the TA-57 Aggregate Area**

| COPC | $K_d$[a] ($cm^3/g$) | Water Solubility[a,b] (g/L) |
|---|---|---|
| Antimony | 45 | Insoluble |
| Arsenic | 29 | Insoluble |
| Barium | 41 | Insoluble |
| Chromium | 850 | Insoluble |
| Copper | 35 | Insoluble |
| Cyanide (Total) | 9.9 | na[c] |
| Lead | 900 | Insoluble |
| Mercury | 52 | Insoluble |
| Perchlorate | na | 2.45E+05 |
| Selenium | 5 | Insoluble |
| Silver | 8.3 | Insoluble |
| Zinc | 62 | Insoluble |

[a] Information from http://rais.ornl.gov/cgi-bin/tox/TOX_select?select=nrad.

[b] Information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] na = Not available.

**Table G-3.2-2**
**Physical and Chemical Properties of Organic COPCs for the TA-57 Aggregate Area**

| COPC | Water Solubility[a] (mg/L) | Organic Carbon Coefficient $K_{oc}$[a] (L/kg) | Log Octanol-Water Partition Coefficient $K_{ow}$[a] | Vapor Pressure[a] (mm Hg at 25°C) |
|---|---|---|---|---|
| Benzoic acid | 3.40E+03[b] | 1.45E+01 | 1.87E+00[b] | 7.00E-04[b] |
| Bis(2-ethylhexyl)phthalate | 2.70E-01[b] | 1.65E+05 | 7.60E+00[b] | 1.42E-07[b] |
| Butylbenzylphthalate | 2.69E+00 | 9.36E+03 | 4.73E+00 | 8.25E-06 |
| Dichlorobenzene[1,4-] | 8.13E+01 | 3.75E+02 | 3.44E+00 | 1.74E+00 |
| Fluoranthene | 2.60E-01[c] | 5.55E+04[c] | 5.16E+00 | 9.22E-06 |
| Methylene chloride | 1.30E+04[b] | 2.37E+01 | 1.30E+00[b] | 4.30E+02[b] |
| Phenanthrene | 1.15E+00[b] | 2.08E+04 | 4.46E+00[b] | 1.12E-04[b] |
| Trichloroethene | 1.28E+03 | 6.07E+01 | 2.42E+00 | 6.90E+01 |

[a] Information from http://rais.ornl.gov/cgi-bin/tox/TOX_search, unless noted otherwise.

[b] Information from http://www.epa.gov/superfund/sites/npl/hrsres/tools/scdm.htm.

[c] Information from NMED (2014, 600115).

**Table G-4.1-1**
**Exposure Parameter Values Used to Calculate**
**Chemical SSLs for the Industrial and Residential Scenarios**

| Parameters | Residential Values | Industrial Values |
|---|---|---|
| Target HQ | 1 | 1 |
| Target cancer risk | $10^{-5}$ | $10^{-5}$ |
| Averaging time (carcinogen/mutagen) | 70 yr × 365 d | 70 yr × 365 d |
| Averaging time (noncarcinogen) | Exposure duration × 365 d | Exposure duration × 365 d |
| Skin absorption factor | Semivolatile organic compound (SVOC) = 0.1 | SVOC = 0.1 |
| | Chemical-specific | Chemical-specific |
| Adherence factor–child | 0.2 mg/cm$^2$ | n/a[a] |
| Body weight–child | 15 kg (0–6 yr of age) | n/a |
| Cancer slope factor–oral (chemical-specific) | (mg/kg-d)$^{-1}$ | (mg/kg-d)$^{-1}$ |
| Inhalation unit risk (chemical-specific) | (µg/m$^3$) | (µg/m$^3$) |
| Exposure frequency | 350 d/yr | 225 d/yr |
| Exposure time | 24 h/d | 8 h/day |
| Exposure duration–child | 6 yr[b] | n/a |
| Age-adjusted ingestion factor for carcinogens | 36,750 mg/kg | n/a |
| Age-adjusted ingestion factor for mutagens | 25,550 mg/kg | n/a |
| Soil ingestion rate–child | 200 mg/d | n/a |
| Particulate emission factor | $6.61 \times 10^9$ m$^3$/kg | $6.61 \times 10^9$ m$^3$/kg |
| Reference dose–oral (chemical-specific) | (mg/kg-d) | (mg/kg-d) |
| Reference dose–inhalation (chemical-specific) | (mg/kg-d) | (mg/kg-d) |
| Exposed surface area–child | 2690 cm$^2$/d | n/a |
| Age-adjusted skin contact factor for carcinogens | 112266 mg/kg | n/a |
| Age-adjusted skin contact factor for mutagens | 166833 mg/kg | n/a |
| Volatilization factor for soil (chemical-specific) | (m$^3$/kg) | (m$^3$/kg) |
| Body weight–adult | 80 kg | 80 kg |
| Exposure duration[c] | 30 yr[d] | 25 yr |
| Adherence factor–adult | 0.07 mg/cm$^2$ | 0.12 mg/cm$^2$ |
| Soil ingestion rate–adult | 100 mg/d | 100 mg/d |
| Exposed surface area–adult | 6032 cm$^2$/d | 3470 cm$^2$/d |

Note: Parameter values from NMED (2014, 600115).

[a] n/a = Not applicable.

[b] The child exposure duration for mutagens is subdivided into 0–2 yr and 2–6 yr.

[c] Exposure duration for lifetime resident is 26 yr. For carcinogens, the exposures are combined for child (6 yr) and adult (20 yr).

[d] The adult exposure duration for mutagens is subdivided into 6–16 yr and 16–30 yr.

**Table G-4.2-1**
**Residential Carcinogenic**
**Screening Evaluation for AOC 57-006**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Chromium | 58.6 | 96.6 | 6.07E-06 |
| Bis(2-ethylhexyl)phthalate | 0.269 | 380 | 7.08E-09 |
| | | **Total Excess Cancer Risk** | **6E-06** |

*SSLs from NMED (2014, 600115).

**Table G-4.2-2**
**Residential Noncarcinogenic**
**Screening Evaluation for AOC 57-006**

| COPC | EPC (mg/kg) | Residential SSL* (mg/kg) | HQ |
|---|---|---|---|
| Antimony | 1.12(U) | 31.3 | 3.58E-02 |
| Barium | 99.9 | 15,600 | 6.40E-03 |
| Copper | 13.5 | 3130 | 4.33E-03 |
| Selenium | 0.358 | 391 | 9.16E-04 |
| Zinc | 64 | 23,500 | 2.72E-03 |
| Methylene Chloride | 0.0028 | 409 | 6.85E-06 |
| Trichloroethene | 0.000726 | 6.77 | 1.07E-04 |
| | | **HI** | **0.05** |

*SSLs from NMED (2014, 600115).

**Table G-4.2-3**
**Industrial Noncarcinogenic**
**Screening Evaluation for AOC 57-007**

| COPC | EPC (mg/kg) | Industrial SSL* (mg/kg) | HQ |
|---|---|---|---|
| Antimony | 0.488 | 519 | 9.40E-04 |
| Perchlorate | 0.000841 | 908 | 9.26E-07 |
| Zinc | 55.7 | 389,000 | 1.43E-04 |
| Fluoranthene | 0.0145 | 33,700 | 4.30E-07 |
| Methylene Chloride | 0.00277 | 5130 | 5.40E-07 |
| Phenanthrene | 0.0134 | 25,300 | 5.30E-07 |
| Trichloroethene | 0.00294 | 36.5 | 8.05E-05 |
| | | **HI** | **0.001** |

*SSLs from NMED (2014, 600115).

**Table G-4.2-4**
**Residential Carcinogenic**
**Screening Evaluation for AOC 57-007**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | Excess Cancer Risk |
|---|---|---|---|
| Arsenic | 1.95 | 4.25 | 4.59E-06 |
| Chromium | 25.4 | 96.6 | 2.63E-06 |
| Bis(2-ethylhexyl)phthalate | 0.13 | 380 | 3.42E-09 |
| Butylbenzylphthalate | 0.339 | 2800[b] | 1.21E-09 |
| Dichlorobenzene[1,4-] | 0.00043 | 32.8 | 1.31E-10 |
| **Total Excess Cancer Risk** | | | **7E-06** |

[a] SSLs from NMED (2014, 600115) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table G-4.2-5**
**Residential Noncarcinogenic**
**Screening Evaluation for AOC 57-007**

| COPC | EPC (mg/kg) | Residential SSL[a] (mg/kg) | HQ |
|---|---|---|---|
| Antimony | 0.474 | 31.3 | 1.51E-02 |
| Barium | 102 | 15,600 | 6.54E-03 |
| Copper | 14.2 | 3130 | 4.54E-03 |
| Cyanide (Total) | 0.73 | 11.2 | 6.52E-02 |
| Lead | 13.5 | 400 | 3.37E-02 |
| Mercury | 3.56 | 23.5 | 1.51E-01 |
| Perchlorate | 0.00112 | 54.8 | 2.04E-05 |
| Selenium | 1.11(U) | 391 | 2.84E-03 |
| Silver | 1.62 | 391 | 4.13E-03 |
| Zinc | 58.6 | 23,500 | 2.49E-03 |
| Benzoic Acid | 2.83 | 250,000[b] | 1.13E-05 |
| Fluoranthene | 0.0145 | 2320 | 6.25E-06 |
| Methylene Chloride | 0.00299 | 409 | 7.31E-06 |
| Phenanthrene | 0.0134 | 1740 | 7.70E-06 |
| Trichloroethene | 0.00294 | 6.77 | 4.34E-04 |
| **HI** | | | **0.3** |

[a] SSLs from NMED (2014, 600115) unless otherwise noted.

[b] EPA regional screening level (http://www.epa.gov/region06/6pd/rcra_c/pd-n/screen.htm).

**Table G-4.3-1**
**Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 57-006**

| COPC | EPC[a] (mg/kg) | Vapor-Intrusion Risk-Based Concentration[b] (mg/kg) | HQ |
|---|---|---|---|
| Methylene chloride | 0.0028 | 62.7 | 4.47E-05 |
| Tricloroethene | 0.000726 | 0.209 | 3.47E-03 |
| | | **HI** | **0.004** |

[a] Maximum detected concentration.
[b] Vapor-intrusion risk values generated by the Johnson and Ettinger advanced soil model.

**Table G-4.3-2**
**Residential Carcinogenic Screening of Vapor Intrusion for AOC 57-007**

| COPC | EPC[a] (mg/kg) | Vapor-Intrusion Risk-Based Concentration[b] (mg/kg) | Cancer Risk |
|---|---|---|---|
| Dichlorobenzene[1,4-] | 0.00043 | 0.27 | 1.62E-08 |
| | | **Total Excess Cancer Risk** | **2E-08** |

[a] Maximum detected concentration.
[b] Vapor-intrusion risk values generated by the Johnson and Ettinger advanced soil model.

**Table G-4.3-3**
**Residential Noncarcinogenic Screening of Vapor Intrusion for AOC 57-007**

| COPC | EPC[a] (mg/kg) | Vapor-Intrusion Risk-Based Concentration[b] (mg/kg) | HQ |
|---|---|---|---|
| Methylene chloride | 0.00299 | 89.9 | 3.32E-05 |
| Trichloroethene | 0.00294 | 0.687 | 4.28E-03 |
| | | **HI** | **0.004** |

[a] Maximum detected concentration.
[b] Vapor-intrusion risk values generated by the Johnson and Ettinger advanced soil model.

**Table G-5.4-1**
**ESLs for Terrestrial Receptors**

| COPC | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | | | | | | | | |
| Antimony | 46 | na* | na | na | na | na | 2.6 | 2.6 | 2.4 | 78 | 11 |
| Arsenic | 820 | 850 | 120 | 42 | 26 | 18 | 140 | 15 | 32 | 6.8 | 18 |
| Barium | 41000 | 28000 | 8600 | 820 | 930 | 1000 | 2900 | 1300 | 1800 | 330 | 110 |
| Chromium | 1800 | 1000 | 200 | 68 | 40 | 28 | 750 | 45 | 110 | na | na |
| Copper | 4000 | 1300 | 92 | 38 | 22 | 15 | 240 | 38 | 64 | 80 | 70 |
| Cyanide | 2800 | 0.59 | 0.4 | 0.1 | 0.1 | 0.1 | 660 | 310 | 340 | na | na |
| Lead | 3700 | 630 | 95 | 21 | 16 | 14 | 330 | 72 | 120 | 1700 | 120 |
| Mercury | 61 | 0.29 | 0.066 | 0.07 | 0.022 | 0.013 | 20 | 1.7 | 3 | 0.05 | 34 |
| Selenium | 90 | 81 | 4.3 | 1 | 0.87 | 0.75 | 1.9 | 0.66 | 0.83 | 4.1 | 0.52 |
| Silver | 4300 | 670 | 14 | 11 | 4.3 | 2.6 | 140 | 14 | 24 | na | 560 |
| Zinc | 7800 | 2400 | 250 | 350 | 85 | 48 | 1600 | 98 | 170 | 120 | 160 |
| **Organic Chemicals (mg/kg)** | | | | | | | | | | | |
| Benzoic acid | 1800 | na | na | na | na | na | 3.7 | 1 | 1.3 | na | na |
| Bis(2-ethylhexyl)phthalate | 380 | 8.1 | 0.1 | 20 | 0.04 | 0.02 | 2400 | 0.59 | 1.1 | na | na |
| Butylbenzylphthalate | 18000 | na | na | na | na | na | 2000 | 90 | 160 | na | na |
| Dichlorobenzene[1,4-] | 380 | na | na | na | na | na | 10 | 0.88 | 1.5 | 1.2 | na |
| Fluoranthene | 3300 | na | na | na | na | na | 230 | 22 | 38 | 10 | na |
| Methylene Chloride | 4200 | na | na | na | na | na | 3 | 9 | 2.6 | na | 1600 |
| Phenanthrene | 1700 | na | na | na | na | na | 52 | 10 | 15 | 5.5 | na |
| Trichloroethene | 37000 | na | na | na | na | na | 150 | 42 | 55 | na | na |

Note: ESLs from ECORISK Database, Version 3.2 (LANL 2014, 262559).
*na = Not available.

**Table G-5.4-2**
**Minimum ESL Comparison for AOC 57-006**

| COPC | EPC (mg/kg) | ESL (mg/kg) | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 1.1(U) | 2.4 | Deer mouse | **0.46** |
| Zinc | 53.6 | 48 | American Robin (insectivore) | **1.12** |
| **Organic Chemicals (mg/kg)** | | | | |
| Methylene Chloride | 0.00248 | 2.6 | Deer mouse | 0.001 |
| Trichloroethene | 0.000539 | 42 | Montane Shrew | 0.00001 |

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

**Table G-5.4-3**
**HI Analysis for AOC 57-006**

| COPEC | EPC (mg/kg) | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 1.1(U) | 0.024 | na* | na | na | na | na | **0.42** | **0.42** | **0.46** | 0.014 | 0.1 |
| Zinc | 53.6 | 0.007 | 0.022 | 0.21 | 0.15 | **0.63** | **1.12** | 0.034 | **0.55** | **0.32** | **0.45** | 0.34 |
| | **HI** | 0.03 | 0.02 | 0.2 | 0.2 | 0.6 | 1 | 0.5 | 1 | 0.8 | 0.5 | 0.4 |

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1.0. Data qualifiers are defined in Appendix A.
*na = Not available.

**Table G-5.4-4**
**Minimum ESL Comparison for AOC 57-007**

| COPC | EPC (mg/kg) | ESL (mg/kg) | Receptor | HQ |
|---|---|---|---|---|
| **Inorganic Chemicals (mg/kg)** | | | | |
| Antimony | 0.475 | 2.4 | Deer mouse | 0.2 |
| Arsenic | 1.80 | 6.8 | Earthworm | 0.27 |
| Barium | 109.6 | 110 | Plant | **1** |
| Chromium | 23.1 | 28 | American Robin (insectivore) | **0.82** |
| Copper | 15.7 | 15 | American Robin (insectivore) | **1.05** |
| Cyanide (Total) | 0.73 | 0.1 | American Robin (all diets) | **7.3** |
| Lead | 13.8 | 14 | American Robin (insectivore) | **0.99** |
| Mercury | 4.04 | 0.013 | American Robin (insectivore) | **311** |
| Selenium | 1.11(U) | 0.52 | Plant | **2.13** |
| Silver | 3.08 | 2.6 | American Robin (insectivore) | **1.18** |
| Zinc | 59.5 | 48 | American Robin (insectivore) | **1.24** |
| **Organic Chemicals (mg/kg)** | | | | |
| Benzoic Acid | 2.83 | 1 | Montane Shrew | **2.83** |
| Bis(2-ethylhexyl)phthalate | 0.13 | 0.02 | American Robin (insectivore) | **6.5** |
| Butylbenzylphthalate | 0.339 | 90 | Montane Shrew | 0.0038 |
| Dichlorobenzene[1,4-] | 0.00043 | 0.88 | Montane Shrew | 0.00049 |
| Fluoranthene | 0.0145 | 10 | Earthworm | 0.0015 |
| Methylene Chloride | 0.00299 | 2.6 | Deer mouse | 0.0012 |
| Phenanthrene | 0.0134 | 5.5 | Earthworm | 0.0024 |
| Trichloroethene | 0.00294 | 42 | Montane Shrew | 0.00007 |

Note: Bolded values indicate HQs greater than 0.3. Data qualifiers are defined in Appendix A.

**Table G-5.4-5**
**HI Analysis for AOC 57-007**

| COPEC | EPC (mg/kg) | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | 109.6 | 0.0027 | 0.0039 | 0.013 | 0.13 | 0.12 | 0.11 | 0.038 | 0.084 | 0.061 | **0.33** | **1** |
| Chromium | 23.1 | 0.013 | 0.023 | 0.12 | **0.34** | **0.58** | **0.82** | 0.031 | **0.51** | 0.21 | na* | na |
| Copper | 15.7 | 0.0039 | 0.012 | 0.17 | **0.41** | **0.71** | **1.05** | 0.066 | **0.41** | 0.25 | 0.2 | 0.22 |
| Cyanide (Total) | 0.73 | 0.0003 | **1.24** | **1.83** | **7.3** | **7.3** | **7.3** | 0.0011 | 0.0024 | 0.0021 | na | na |
| Lead | 13.8 | 0.0037 | 0.022 | 0.15 | **0.66** | **0.86** | **0.99** | 0.042 | 0.19 | 0.12 | 0.0081 | 0.12 |
| Mercury | 4.04 | 0.066 | **13.9** | **61** | **57.7** | **184** | **311** | 0.2 | **2.38** | **1.35** | **80.8** | 0.12 |
| Selenium | 1.11(U) | 0.012 | 0.014 | 0.26 | **1.11** | **1.28** | **1.48** | **0.58** | **1.68** | **1.34** | 0.27 | **2.13** |
| Silver | 3.08 | 0.0007 | 0.0046 | 0.22 | 0.28 | **0.72** | **1.18** | 0.022 | 0.22 | 0.13 | na | 0.0055 |
| Zinc | 59.5 | 0.0076 | 0.025 | 0.24 | 0.17 | **0.7** | **1.24** | 0.037 | **0.61** | **0.35** | **0.5** | **0.37** |
| Benzoic Acid | 2.83 | 0.0016 | na | na | na | na | na | **0.76** | **2.83** | **2.18** | na | na |
| Bis(2-ethylhexyl)phthalate | 0.13 | 0.0003 | 0.016 | **1.3** | 0.0065 | **3.25** | **6.5** | 0.0001 | 0.22 | 0.12 | na | na |
| | **HI** | 0.1 | **15** | **66** | **68** | **199** | **332** | **2** | **9** | **6** | **82** | **4** |

Note: Bolded values indicate HQs greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.
*na = Not available.

**Table G-5.5-1**
**PAUFs for Ecological Receptors for AOC 57-006**

| Receptor | HR (ha)[a] | Population Area (ha) | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.000000236 |
| American Robin | 0.42 | 16.8 | 0.0000595 |
| Deer Mouse | 0.077 | 3 | 0.000333 |
| Desert Cottontail | 3.1 | 124 | 0.00000806 |
| Montane Shrew | 0.39 | 15.6 | 0.0000641 |
| Red Fox | 1038 | 41,520 | 0.0000000241 |

[a] Values from EPA (1993, 059384).

[b] PAUF is calculated as the area of the site (0.001 ha) divided by the population area.

**Table G-5.5-2**
**Adjusted HIs at AOC 57-006**

| COPECs | EPC (mg/kg) | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Antimony | 1.1(U) | 5.8E-10 | na* | na | na | na | na | 3.4E-06 | 2.7E-05 | 0.00015 | 0.014 | 0.1 |
| Zinc | 53.6 | 1.7E-10 | 5.3E-09 | 5.1E-08 | 9.1E-06 | 3.7E-05 | 6.6E-05 | 2.7E-07 | 3.5E-05 | 0.00011 | **0.45** | **0.34** |
| | **Adjusted HI** | 8E-10 | 5E-09 | 5E-08 | 9E-06 | 4E-05 | 7E-05 | 4E-06 | 6E-05 | 0.0003 | 0.5 | 0.4 |

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.
*na = Not available.

**Table G-5.5-3**
**PAUFs for Ecological Receptors for AOC 57-007**

| Receptor | HR (ha)[a] | Population Area (ha) | PAUF[b] |
|---|---|---|---|
| American Kestrel | 106 | 4240 | 0.0000071 |
| American Robin | 0.42 | 16.8 | 0.00179 |
| Deer Mouse | 0.077 | 3 | 0.01 |
| Desert Cottontail | 3.1 | 124 | 0.000242 |
| Montane Shrew | 0.39 | 15.6 | 0.00192 |
| Red Fox | 1038 | 41,520 | 0.00000072 |

[a] Values from EPA (1993, 059384).

[b] PAUF is calculated as the area of the site (0.03 ha) divided by the population area.

**Table G-5.5-4**
**Adjusted HIs for AOC 57-007**

| COPECs | EPC (mg/kg) | Red Fox (mammalian top carnivore) | American Kestrel (avian top carnivore) | American Kestrel (avian intermediate carnivore) | American Robin (avian herbivore) | American Robin (avian omnivore) | American Robin (avian insectivore) | Desert Cottontail (mammalian herbivore) | Montane Shrew (mammalian | Deer Mouse (mammalian omnivore) | Earthworm (soil dwelling invertebrate insectivore) | Plant (terrestrial autotroph-producer) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Barium | 109.6 | 1.9E-09 | 2.8E-08 | 9.0E-08 | 0.00024 | 0.00021 | 0.0002 | 9.1E-06 | 1.6E-04 | 6.1E-04 | **0.33** | **1** |
| Chromium | 23.1 | 9.3E-09 | 1.6E-07 | 8.2E-07 | 0.00061 | 0.001 | 0.0015 | 7.4E-06 | 0.00099 | 0.0021 | na* | na |
| Copper | 15.7 | 2.8E-09 | 8.6E-08 | 1.2E-06 | 0.00074 | 0.0013 | 0.0019 | 1.6E-05 | 0.0008 | 0.0025 | 0.2 | 0.22 |
| Cyanide (Total) | 0.73 | 1.9E-10 | 8.8E-06 | 1.3E-05 | 0.013 | 0.013 | 0.013 | 2.7E-07 | 4.5E-06 | 2.2E-05 | na | na |
| Lead | 13.8 | 2.7E-09 | 1.6E-07 | 1.0E-06 | 0.0012 | 0.0015 | 0.0018 | 1.0E-05 | 0.00037 | 0.0012 | 0.0081 | 0.12 |
| Mercury | 4.04 | 4.8E-08 | 9.9E-05 | 0.00043 | 0.1 | **0.33** | **0.56** | 4.9E-05 | 0.0046 | 0.014 | **80.8** | 0.12 |
| Selenium | 1.11(U) | 8.9E-09 | 9.7E-08 | 1.8E-06 | 0.002 | 0.0023 | 0.0026 | 0.00014 | 0.0032 | 0.013 | 0.27 | **2.13** |
| Silver | 3.08 | 5.2E-10 | 3.3E-08 | 1.6E-06 | 0.0005 | 0.0013 | 0.0021 | 5.3E-06 | 0.00042 | 0.0013 | na | 0.0055 |
| Zinc | 59.5 | 5.5E-09 | 1.8E-07 | 1.7E-06 | 0.0003 | 0.0013 | 0.0022 | 9.0E-06 | 0.0012 | 0.0035 | **0.5** | **0.37** |
| Benzoic Acid | 2.83 | 1.1E-09 | na | na | na | na | na | 0.00019 | 0.0054 | 0.022 | na | na |
| Bis(2-ethylhexyl)phthalate | 0.13 | 2.5E-10 | 1.1E-07 | 9.2E-06 | 1.2E-05 | 0.0058 | 0.012 | 1.3E-08 | 0.00042 | 0.0012 | na | na |
| **Adjusted HI** | | 8E-08 | 0.0001 | 0.0005 | 0.1 | 0.4 | 0.6 | 0.0004 | 0.02 | 0.06 | **82** | **4** |

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1. Data qualifiers are defined in Appendix A.
*na = Not available.

**Table G-5.5-5**
**LOAEL-Based ESLs for Terrestrial Receptors**

| COPEC | Receptor | LOAEL–Based ESL* (mg/kg) |
|---|---|---|
| Barium | Earthworm | 3200 |
| | Plant | 260 |
| Mercury | Earthworm | 0.5 |
| Selenium | Plant | 3 |
| Zinc | Earthworm | 930 |
| | Plant | 810 |

*LOAEL-based ESLs from ECORISK Database, Version 3.2 (LANL 2014, 262559).

**Table G-5.5-6**
**HI Analysis Using LOAEL-Based ESLs at AOC 57-007**

| COPEC | EPC (mg/kg) | Earthworm | Plant |
|---|---|---|---|
| Barium | 109.6 | 0.03 | **0.42** |
| Mercury | 4.04 | **8.08** | n/a* |
| Selenium | 1.11(U) | n/a | **0.37** |
| Zinc | 59.5 | 0.06 | 0.07 |
| | **HI** | **8** | 0.9 |

Notes: Bolded values indicate HQ greater than 0.3 or HI greater than 1.
*n/a = Not applicable.