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*Date:* July 30, 1999
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Mr. James Bearzi
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**SUBJECT: SUBMITTAL OF VOLUNTARY CORRECTIVE MEASURES REPORT FOR POTENTIAL RELEASE SITES 16-006(g), DRUM STORAGE AREA AGGREGATE – [16-029(g2) AND C-16-074], 16-005(d) and 16-034(p)**

Dear Mr. Bearzi:

Enclosed please find the Certification and two copies of the *Voluntary Corrective Measures Report For Potential Release Sites 16-006(g), Drum Storage Area Aggregate – [16-029(g2) And C-16-074], 16-005(d) and 16-034(p).* This site is colloquially known as "V-Site". Also enclosed are insertion instructions and one copy of the additional references to be added to the Operable Unit 1082 reference set. If you have any questions, please contact Warren Neff at (505) 665-9259 or Joe Mose at (505) 667-5808.

Sincerely,

Julie A. Canepa, Program Manager
LANL/ER

Sincerely,

Theodore J. Taylor, Program Manager
DOE/LAAO

JC/TT/BK/em

Enclosures: (1) Certification
(2) Voluntary Corrective Measures Report For Potential Release 16-006(g), Drum Storage Area Aggregate – [16-029(g2) And C-16-074], 16-005(d) and 16-034(p).
(3) Insertion instructions and additional references to be added to the Operable Unit 1082 reference set.

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## CERTIFICATION

I certify under penalty of law that these documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violation.

Document Title: *SUBMITTAL OF VOLUNTARY CORRECTIVE MEASURES REPORT FOR POTENTIAL RELEASE SITES 16-006(g), Drum Storage Area Aggregate – [16-029(g2) And C-16-074], 16-005(d) and 16-034(p).*

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LA-UR-99-3001
July 1999

# Voluntary Corrective Measures Completion Report for Potential Release Sites

## 16-006(g)
## Drum Storage Area Aggregate–
## [16-029(g2) and C-16-074]
## 16-005(d)
## 16-034(p)

Environmental Restoration Project
A Department of Energy Environmental Cleanup Program

**Los Alamos**
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LA-UR-99-3001
July 1999

# Voluntary Corrective Measures Completion Report for Potential Release Sites

## 16-006(g)
## Drum Storage Area Aggregate–
## [16-029(g2) and C-16-074]
## 16-005(d)
## 16-034(p)

Environmental Restoration Project
A Department of Energy Environmental Cleanup Program

**Los Alamos**
NATIONAL LABORATORY
Los Alamos, NM 87545

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## 1.0 EXECUTIVE SUMMARY

Between October 1997 and September 1998, four buildings (buildings 27, 10, 13, and 63) in technical area 16 (TA-16) at Los Alamos National Laboratory (LANL or the Laboratory) were removed by the Laboratory's decontamination and decommissioning (D&D) group. The buildings had been used in the development of explosives during the 1940s and 1950s. The decommissioning of these facilities provided the Laboratory's Environmental Restoration (ER) Project with an opportunity to evaluate the nature and extent of contamination at 17 collocated potential release sites (PRSs) and to cleanup these sites as structures and waste lines were removed. This report documents the characterization, cleanup, and confirmation of cleanup at five of the PRSs: 16-006(g), 16-029(g2), C-16-074, 16-005(d), and 16-034(p).

In the spring of 1997, ER Project personnel developed the strategy for cleanup and the proposed preliminary remediation goals (PRGs) for these 17 PRSs. The strategy was submitted as the "Voluntary Corrective Measures (VCM) Plan for Potential Release Sites at TA-16 16-005(d), 16-006(g,h), 16-013, 16-017, 16-025(x), 16-026(q), 16-029(g2,h2,w,x), 16-031(c,d), 16-034(p), C-16-065, C-16-068, C-16-074" (LANL 1997, 55653) and was approved by the New Mexico Environment Department (NMED) on October 10, 1997.

Five PRSs [16-013, 16-025(x), 16-031(d), C-16-065, and C-16-068] were characterized, and contaminant concentrations were found to be below cleanup levels. These PRSs were proposed for no further action (NFA) in the "Voluntary Corrective Measures Completion Report for Potential Release Sites 16-013, 16-025(x), 16-031(d), C-16-065, and C-16-068," submitted in September 1997 (LANL 1997, 56569). Of the 12 remaining PRSs, all were sampled. Upon reviewing the analytical results, ER Project personnel determined that seven PRSs required additional sampling to define boundaries for detected contamination.

The remaining five PRSs [16-006(g), 16-029(g2), C-16-074, 16-005(d), and 16-034(p)] are the subject of this report. Confirmation sampling after cleanup of these PRSs indicated that residual contamination is below PRGs and near background values (BVs).

Human health and ecological screening assessments were performed for the five PRSs. These assessments showed that, for the remaining pockets of contaminants above BVs, there were incomplete release pathways; therefore, exposure is improbable.

From early in the Manhattan Project (1943) until approximately 1961, these five PRSs played a role in explosives processing and assembly. The atomic bomb detonated at Trinity Site was assembled at V-Site. With the exception of the V-Site facilities, which are being preserved for their historical significance, the structures associated with the PRSs in this report have been removed. Today, no Laboratory operations are conducted at these locations; however, all the PRSs are located within a secured area to which access is controlled. The remediated sites have been recontoured and revegetated with grasses.

Of the five PRSs addressed in this report, three [16-005(d), 16-006(g) and 16-034(p)] are discussed as separate PRSs. The other two PRSs, 16-029(g2) and C-16-074, were grouped together because of geographic proximity. Table ES-1 provides descriptions of each PRS.

**Table ES-1**
**Description of PRSs Covered in This Report**

| PRS | Description |
|---|---|
| 16-006(g) | The site of a former septic tank and 4-in. vitrified clay pipe (VCP) drainline that received effluent from Building 16-515, a high explosives (HE) assembly and quality-monitoring facility. |
| 16-029(g2) | A below-grade concrete vault that once contained a shaker table used to test HE assemblies for sensitivity to vibration. It was subsequently backfilled with soil to ground level. |

**Table ES-1**

**Description of PRSs Covered in This Report (continued)**

| | |
|---|---|
| C-16-074 | An asphalt pad where drums of waste were stored. The pad was constructed on the surface above the concrete vault that formerly contained an HE shaker table [PRS 16-029(g2)]. |
| 16-005(d) | The site of a former septic tank and 4-in. VCP drainline that received effluent from Building 16-27, an HE production facility. |
| 16-034(p) | The basement floor and foundation of potentially contaminated Building 16-41. The building served as an office and laboratory until 1962. In 1962, the building was removed, and the basement housed an incinerator which was used from 1962 until 1995. |

All five PRSs were potentially contaminated with HE compounds and inorganics associated with operations at the PRSs. The HE compounds were assumed to have been carefully controlled during operations so that very limited amounts were released. Although bomb components fabricated from radioactive materials were handled at the sites, no radioactive contamination was detected.

Sampling campaigns at the PRSs in this report began in October 1997 and were completed in March 1999. A total of 84 screening samples were collected at the five PRSs; 39 were submitted for fixed-laboratory analyses. Except for the downgradient sampling done at the Drum Storage Area Aggregate [PRSs 16-029(g2) and C-16-074], each PRS had a minimum of five samples collected from within its boundary for fixed-laboratory analyses. Evaluation of the analytical results from sampling done in 1997 and 1998 disclosed data gaps. Detection limits for analysis of antimony were not sufficiently low and contamination at several PRSs was unbounded. In February and March 1999, the field team conducted limited sampling to correct these data gaps.

All samples collected for site characterization were field screened for HE, alpha and gamma radioactivity, inorganics [using x-ray fluorescence (XRF) spectrometry], and volatile organic compounds (VOCs) [using the photo ionization detector (PID)]. The highest results from field-screening were used to select samples for fixed-laboratory analyses.

Based on the number and distribution of sampling locations across the sites, the data set is sufficient to characterize the five PRSs. Sample collection and analyses are considered adequate to identify potential contaminants. Inorganic and organic chemicals, such as HE, probably associated with former operations at the sites, were the primary chemicals of potential concern (COPCs) considered in the reported ecological and human health risk screenings.

Uranium analyses of samples collected at each PRS generally exceeded the Laboratory's sitewide BV for uranium. This observation prompted ER Project personnel to evaluate approximately 400 soil and tuff samples collected at TA-16 during earlier investigations. Statistical evaluation of these samples indicates either uniform low-level uranium contamination across TA-16, which is unlikely based on the site's operational history, or an upper tolerance limit (UTL) for uranium of 3.85 mg/kg in TA-16 background samples. This level is higher than the Laboratory's sitewide BV of 1.82 mg/kg. Samples collected from the five PRSs in this report yielded no detected uranium concentration above the BV specific to TA-16. Documentation of the development of the TA-16 BV is attached to this report as Appendix E.

No specific spatial analysis of contaminant extent was performed; however, simple mapping of COPCs and exploratory analysis indicate that contaminants were observed infrequently at discrete, isolated locations at the PRSs. Detected contaminants were vertically and laterally bounded at each PRS. There is no indication of a substantial release or of migration of hazardous chemicals across a site.

Based on the results of ecological and human health risk screenings, no adverse effects are anticipated from any of the five PRSs, and each is recommended for NFA.

**Table ES-2**
**Summary of Proposed Actions**

| PRS Number | PRS Description | Hazardous and Solid Waste Amendments (HSWA)[a] | Radionuclide Component[b] | Proposed Action | Rationale for Recommendation | Section Number |
|---|---|---|---|---|---|---|
| 16-006(g) | Former septic tank and drainline | Yes | No | NFA, Criterion 5[c] | Available data indicate that contaminants pose an acceptable level of human health and ecological risk. | 2.0 |
| 16-029(g2) | Shaker table vault | Yes | No | NFA, Criterion 5 | Available data indicate that contaminants pose an acceptable level of human health and ecological risk. | 3.0 |
| C-16-074 | Drum storage pad | No | No | NFA, Criterion 5 | Available data indicate that contaminants pose an acceptable level of human health and ecological risk. | 3.0 |
| 16-005(d) | Former septic tank and drainline | Yes | No | NFA, Criterion 5 | Available data indicate that contaminants pose an acceptable level of human health and ecological risk. | 4.0 |
| 16-034(p) | Former basement floor and foundation for laboratory and incinerator | Yes | No | NFA, Criterion 5 | Available data indicate that contaminants pose an acceptable level of human health and ecological risk. | 5.0 |

[a] If the site is listed in Module VIII of the Laboratory's Hazardous Waste Facility Permit, then "yes" applies. Otherwise, "no" applies.

[b] If a release has occurred at the PRS and radionuclides are associated with the release, then "yes" applies. Otherwise, "no" applies.

[c] NFA Criteria are listed in Section II.B.4.a.(4).(b), "No Further Action (NFA) Proposals Criteria," in the *NMED RCRA Permits Management Program Document Requirement Guide* (NMED 1998, 57897).

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## 1.0 INTRODUCTION

This report documents the characterization and cleanup of five potentially contaminated sites at LANL, a multi-disciplinary research facility owned by the Department of Energy (DOE) and managed by the University of California. Removal of the structures occupying these sites, older technical facilities used in the development of explosives in the 1940s and 1950s, was scheduled to begin in the summer of 1997. The decommissioning of these facilities afforded an opportunity to the Laboratory's ER Project to evaluate the nature and extent of contamination at the sites and to clean up these sites as structures and waste lines were removed.

The Laboratory's ER Project is involved in a national effort by the DOE to clean up facilities that were formerly involved in weapons research and production. The goal of the ER Project is to ensure that DOE's past operations do not threaten human or environmental health and safety in and around Los Alamos County, New Mexico. To achieve that goal, the ER Project is currently investigating sites potentially contaminated by past Laboratory operations and is remediating those sites that pose an unacceptable risk to human health or to the environment.

These investigations and site remediations, including sampling and analysis, were conducted under the requirements of the Resource Conservation and Recovery Act (RCRA).

The sites investigated and/or remediated are either solid waste management units (SWMUs) or areas of concern (AOCs). In the Laboratory's ER Project, SWMUs and AOCs are collectively referred to as PRSs.

Figure 1.0-1 shows the location of TA-16 with respect to the Laboratory. Figure 1.0-2 shows V-Site and an index to sampling location figures.

For SWMUs 16-005(d), 16-006(g), 16-029(g2), 16-034(p), and AOC C-6-074, the investigation and remediation were done in accordance with the Hazardous and Solid Wastes Amendments (HSWA) of 1984 and follow the requirements in Module VIII of the Laboratory's Hazardous Waste Facility Permit (EPA 1990, 01585). Module VIII was issued to the Laboratory by the US Environmental Protection Agency (EPA) on May 23, 1990, and was modified on May 19, 1994.

Of the five PRSs presented in this report, three [16-005(d), 16-006(g), and 16-034(p)] are discussed as individual PRSs; PRSs 16-029(g2) and C-16-074 were grouped together because of geographic proximity. PRSs 16-005(d) and 16-006(g) are former septic tanks and drainlines discharging effluent from HE production facilities. PRS 16-034(p) is the basement floor and foundation of potentially contaminated Building 16-41. PRS 16-029(g2) is a concrete vault that once contained a shaker table used to test HE assemblies for sensitivity to vibration. It was subsequently backfilled with soil and PRS C-16-074, a waste drum storage pad, was constructed on the ground surface above the concrete vault.

The plan for remediation of these five sites is presented in two documents; the VCM Plan for PRSs at TA-16 (LANL March 1997, 55653) approved by NMED on October 10, 1997, and the addendum to that VCM (LANL June 1998, 63069). The two documents develop a strategy for cleanup of 17 PRSs. Five PRSs [16-013, 16-025(x), 16-031(d), C-16-065, and C-16-068)] were characterized, contaminant concentrations were found to be below cleanup levels, and these PRSs were proposed for NFA in the VCM completion report for PRSs at TA-16, submitted in September 1997. Of the 12 remaining PRSs, all were sampled and, upon review of analytical results, it was determined that seven PRSs require additional work, either an ecological risk assessment or further delineation of the nature and extent of contamination. Site investigation at the five PRSs discussed in this report indicates that residual contamination is below cleanup levels; all five PRSs are recommended for NFA.

The strategy for cleaning up the sites consisted of two remedial stages.

In the first remedial stage, personnel in the Laboratory's D&D group demolished and removed underground and above ground structures. Upon completion of D&D activities, site characterization and cleanup

was initiated. Field screening for HE, metals, VOCs, and radioactive materials was conducted by ER Project personnel in open excavations to detect the presence of contamination. When contamination above cleanup levels was detected in soils, field screening was used to define the boundary of the area to be cleaned up. Field-screening readings were used to direct the removal of contaminated soils from the areas of high contamination until the NMED-approved target cleanup level was achieved. The agreed-upon cleanup levels for the VCM are the EPA Region 9 PRGs for industrial soils. To ensure that all contaminated soil above the cleanup levels was removed during this stage of the cleanup, contaminated soils were removed until field-screening instrumentation and techniques indicated that contamination levels in the remaining soils were below 50% of the PRGs.

In the second remedial stage, verification sampling was conducted to satisfy requirements of the approved work plan and to confirm that cleanup levels were achieved in the remaining soil. It is important to recognize that all cleanup activities were directed by field-screening samples and that all final cleanup confirmation decisions are based on fixed-laboratory analyses of samples.

The appendixes of this document contain fundamental background information for this report.

- A list of acronyms and a glossary of terms is located in Appendix A.
- The current and anticipated future land use of the general area that includes the PRSs (e.g., the facility, TA, or other general area) is discussed in detail in Section B-1.0, "Geographic Setting, Operational History, and Land Use." Sections B-2.0 through B-6.0 include a detailed discussion of the climate, geology, hydrology, ecological resources, and cultural resources for this general area.
- Appendix C includes the complete quality assurance/quality control (QA/QC) analytical data assessment.
- Appendix D provides the chemical analytical data for the investigation. In addition, this data is provided to the administrative authority (AA) in electronic format.
- Appendix E contains the statistical estimate of uranium BV developed for V-Site.
- Appendix F includes information and criteria used in the human health and ecological screening assessments.
- Appendix G-1.0 summarizes the administrative history of the PRSs and provides copies of all AA correspondence and the Laboratory's responses. Appendix G-2.0 contains documents referenced in this VCM completion report that are specific to this report. Copies of any other references are included in the appropriate volume of the OU 1082 reference set.

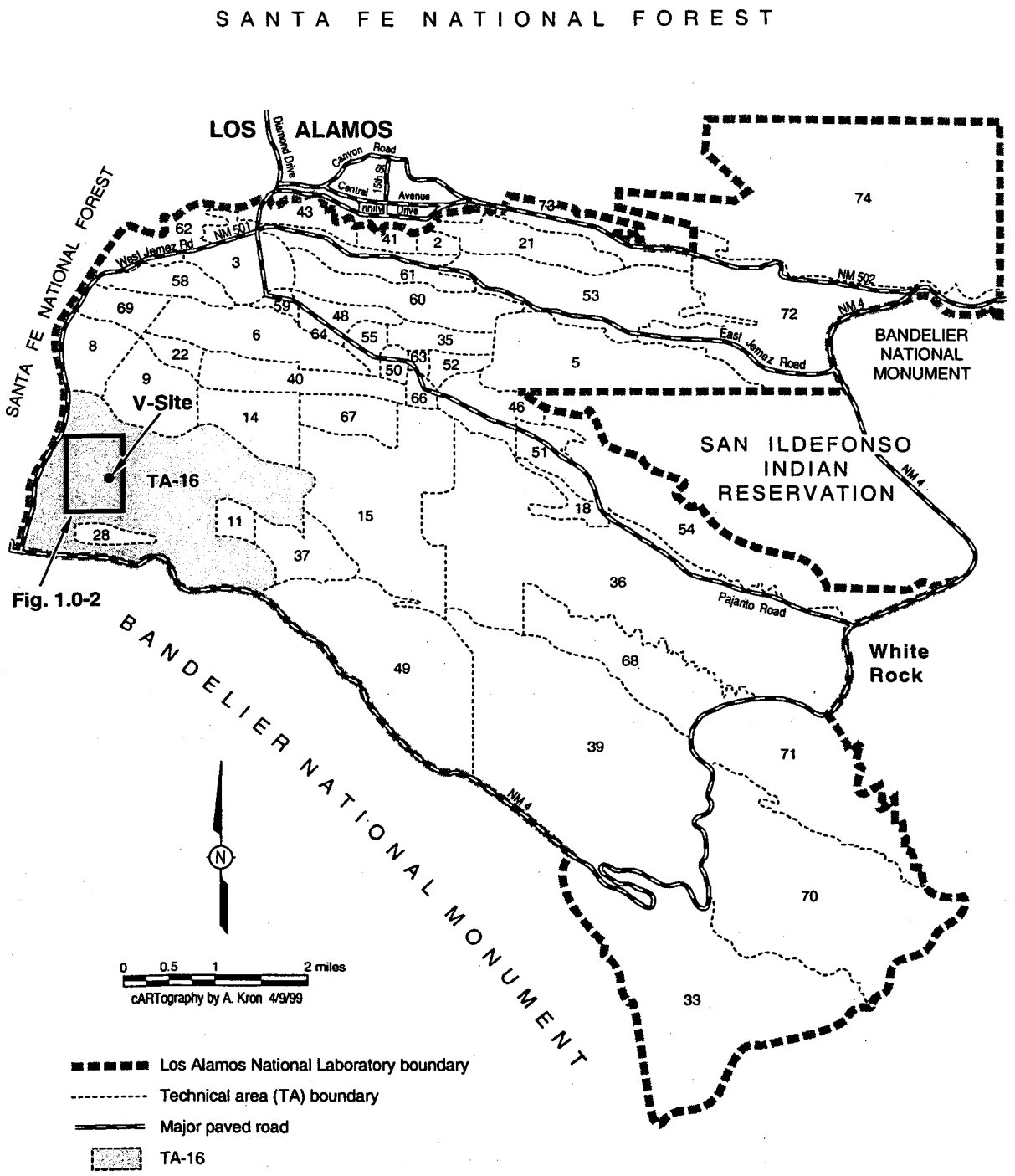


**Figure 1.0-1. Map of the Laboratory showing TA-16, V-Site, and the location of Figure 1.0-2**

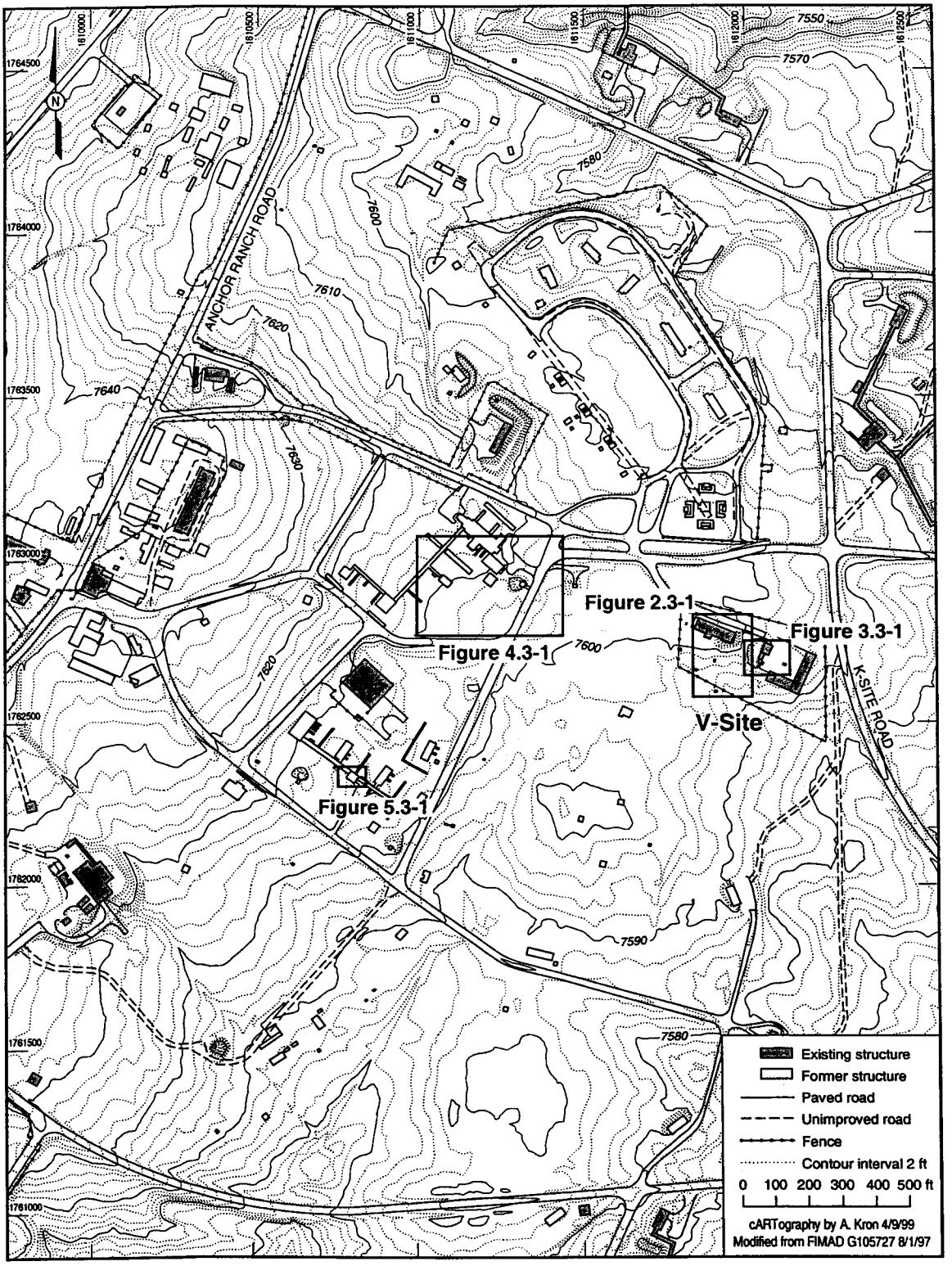


**Figure 1.0-2. Location of V-Site at TA-16, and an index to detailed sampling location maps**

## 2.0 PRS 16-006(g)

### 2.1 Summary

PRS 16-006(g) is a former 1500 gal. septic tank (TA-16-527) and 4-in. drainline that received effluent from sinks and toilets in the southeast corner of Building 16-515. The COPCs are HE, uranium, metals, and VOCs.

For PRS 16-006(g) the objective of the VCM was to characterize the PRS and to implement an accelerated cleanup in conjunction with D&D of the septic tank and drainline. The cleanup strategy for the site included sampling in appropriate locations to detect the presence of any contamination, removing contamination if it were present at levels greater than PRGs, bounding the spatial extent of contamination, and determining decreasing trends in remaining contaminant concentrations. Additional details about characterization and cleanup objectives are contained in Section 2.3.3, "Preliminary Conceptual Model."

After monitoring D&D activities, the field team collected nine samples from locations based on noted joints or breaks in the drainline. These samples were screened for HE, radioactivity, VOCs, and metals. Based on screening results, three of these samples were submitted for laboratory analysis for HE, boron, metals, VOCs, and uranium. Upon receipt of analytical results, two additional samples were collected to bound detected contamination at the septic tank. Bounding samples were analyzed for HE, boron, VOCs, and uranium. Details of sampling activities are included in Section 2.3.4, "Field Investigation and Remediation."

Sampling confirmed the presence of very low levels of anticipated COPCs. They were detected near the inlet to the drainline and near the septic tank. A sample collected downgradient and below the septic tank contained no HE, boron, VOCs, or uranium above BVs or detection limit, thus bounding the extent of contamination. Very low levels of methylene chloride detected near the inlet to the drainline were bounded at the septic tank. The potential for contaminant migration is minimal because of the limited amount of moisture in soil that could dissolve or disperse contaminants, which are in isolated subsurface pockets and near BV concentrations. Details are included in Section 2.3.5, "Revised Site Conceptual Model."

In the human health screening assessment, contaminants above BVs or estimated quantitation limits (EQLs) were compared to EPA's Region 9 PRGs for Industrial Workers. The COPCs were identified as methylene chloride, tetrachloroethene, trichloroethene, acetone, and two high explosives: HMX (High Melting eXplosive) and RDX (Research Department Explosive). All of the COPCs were below industrial PRGs; a human health risk assessment was not performed.

An ecological screening assessment was conducted in which those inorganic, organic, and radioactive constituents, whose maximum concentrations exceeded BVs or were detected below EQLs in samples collected at less than 5 ft depth, were identified as COPCs. These COPCs were compared to a set of ecological screening limits (ESLs) for nine ecological receptors at V-Site. All COPCs were eliminated as chemicals of potential ecological concern (COPEC) because a likely receptor exposure pathway could not be identified. Details of the human health screening assessment are included in Section 2.4.2.1 and for the ecological screening assessment details are included in Section 2.4.2.2.

Based on the human health and ecological screening assessments, PRS 16-006(g) is recommended for NFA.

### 2.2 Description and Operational History

PRS16-006(g) is a SWMU listed in Module VIII of the Laboratory's Hazardous Waste Facility Permit (EPA 1990, 01585).

### 2.2.1 Site Description

PRSs 16-006(g) is a septic tank and drainline that served Building 16-515 at former TA-25 (V-Site) (see Figure 2.2-1). The 16-006(g) drainline discharges to an outfall line that is associated with PRS 16-029(x). (PRS 16-029[x] was the HE sump and drainline for Building 16-515.)

The septic tank within PRS 16-006(g), TA-16-52, was located in a level, wooded area about 50 ft south of Building 16-515. The tank was 6 ft long × 10 ft wide × 4.5 ft deep, had a capacity of 1500 gal. and was constructed of reinforced concrete with a wooden cover. Engineering drawing ENG-C 6031 indicates that the septic tank was connected by a 4-in. VCP to sink and toilets at the southeast corner of Building 16-515, and that the system did not serve any of the HE-processing areas of the building. Drawing ENG-C 6028 indicates that effluent from that septic tank discharged to the outfall line from sump and drainline PRS 16-029(x) at manhole TA-16-795. Operational History

### 2.2.2 Operational History

Primary operations at V-Site were (1) X-Division x-ray work and photo processing in the west end of TA-16-515, (2) HE casting in the east end of TA-16-515, (3) pioneering work on plastic explosives in TA-16-516, and (4) assembly and photo processing in TA-16-519 and TA-16-520.

Building 16-515 was complete in June 1944 as part of the original TA-25. Drawing ENG-C 1839 suggests it was built as a warehouse, but also housed a shop and small office. By fall of 1945, the building was remodeled into a laboratory, inspection room, and repair area for HE parts. The laboratory housed an x-ray machine and a darkroom. Drawing ENG-C 6030 indicates that part of the walls near the x-ray machine were lead-covered; the lead panels are still in place. The inspection and repair room floors were fitted on three sides with lead-lined troughs leading outside to the trough under the porch. The floor was configured with a one percent slope draining toward the troughs. Drawing ENG-C 639 indicates that lead was removed from the troughs in 1950.

HE casting of boracitol occurred in the eastern end of the building during the 1950s and 1960s. Further changes occurred in 1963 hen the laboratory area was remodeled to include a temperature cycling chamber. The sump and drainage system was scheduled for demolition and restoration programs in 1970, as were manholes TA-16-73, TA-16-794, TA-16-795, TA-16-796, TA-16-797, among others (Thrap 1970, 05785). The demolition did not include Building 16-515, which is still standing. All active work at the site ceased by 1980.

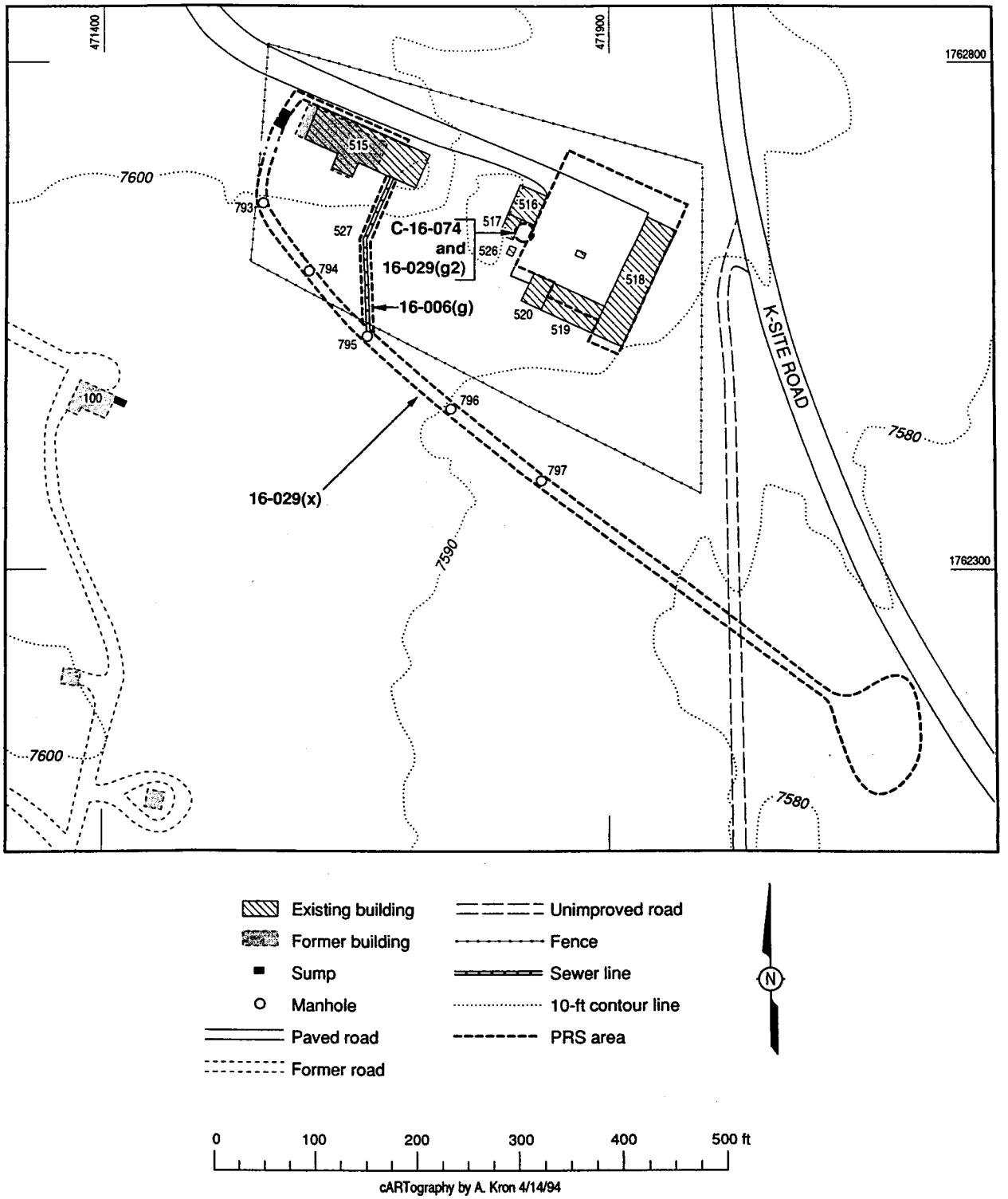


**Figure 2.2-1. Location of the V-Site PRSs covered in this report**

## 2.3 Investigatory and Remediation Activities

### 2.3.1 Summary

Section 2.3 describes the investigatory activities for PRS 16-006(g). This section includes previous investigations (Section 2.3.2), the preliminary conceptual model that guided the voluntary corrective measures (VCM) field work (Section 2.3.3), and a description of the VCM field activities (Section 2.3.4). Section 2.3.4 also contains information on D&D activities, VCM plan requirements, remediation stages, and a review of the data. A revised site conceptual model is presented in Section 2.3.5 using the information gained during the remedial investigation.

### 2.3.2 Previous Investigations

No previous investigations have been performed at this site.

### 2.3.3 Preliminary Conceptual Model

This section presents the preliminary conceptual model of contaminant occurrence and distribution at PRS 16-006(g). The conceptual model provides the best understanding of what contamination, if any, was released, the likely distribution and location of releases, potential transformation of the contaminants, and potential translocation of the contaminants based on transport mechanisms, pathways, and chemical properties. The objectives of the model were to ensure that samples were collected in appropriate locations, that samples were analyzed for the correct potential contaminants, and that all characterization and remediation objectives of the VCM were appropriate.

The conceptual model comprises the assumptions used to guide the VCM sampling and cleanup design. The objectives of the sampling design were to sample in locations appropriate for detecting contamination, to remove contamination if it is present at levels greater than PRGs, to bound the contamination, and to determine decreasing trends in contaminant concentrations.

PRS 16-006(g) is comprised of a VCP drainline and an associated septic tank from Building TA-16-515. The discharge from this drainline flowed into manhole TA-16-795, then through the main drainage line into the pond area at PRS 16-029(x) (not included in this report). Based on the history of operations at this building and the source of contamination, the suspected chemicals of concern (COCs) at this PRS include VOCs, semivolatile organic compounds (SVOCs), metals (particularly barium, boron, and silver), HE [particularly RDX and 2,4,6-trinitrotoluene (TNT)], and uranium. (See Figure 2.2-1.)

The primary mechanism for contaminant transport is hypothesized to have been liquid leakage from joints or breaks in the VCP drainline while the system was active. Snowmelt and rainfall may percolate to the subsurface and assist in mobilizing the liquid (with dissolved contaminants) that leaked from the pipes and the tank. The secondary transport mechanism may be liquid and gaseous diffusion through the porous soil matrix.

The major (preferential) pathway for contaminant migration is vertical movement beneath the drainpipe and tank. Contamination, if present, should be found in the soil directly beneath the broken or cracked pipes and tank. Downward migration of contaminants may slow naturally at the tuff interface (assumed to be a zone of lower permeability than the soil which the pipe is located). Migration should continue vertically either through the tuff, along fractures, or along the interface.

The extent of potential translocation of contaminants is based primarily on solubility, adsorptivity, and fluid flow rate. It is assumed that any contaminants released from this PRS were primarily solubilized in the drainline fluid. Contaminants may precipitate from solution or be adsorbed into silts, clays, and organic matter. While the system was active, the flow rate of fluid internal to the drainline was high compared to the flow rate of the fluid in the soil and tuff material. The potential vertical translocation of contaminants through the soil is anticipated to be minimal (possibly less than a few feet), whereas the expected potential

horizontal translocation along the drainline was the entire length of the drainline. Contamination, if present, should be concentrated near the source (at the bottom of the drainline or tank), and concentrations should diminish with depth and lateral distance from any release points.

### 2.3.4 Field Investigation and Remediation

The goal of the VCM at PRS 16-006(g) was to conduct site investigations and to implement an accelerated cleanup in conjunction with D&D activities. D&D activities removed the underground drainline and septic tank at PRSs 16-006(g). ER Project personnel conducted all soil removals and characterization and verification sampling activities.

Consistent with the conceptual model, the field team collected samples beneath the tank and beneath the drainline where cracks and breaks had occurred. The samples were then characterized by analyzing for suspected COCs. The potential translocation of contamination was evaluated by sampling at various depths (beneath locations with suspected contamination) to determine decreasing trends.

The following sampling equipment and standard operating procedure (SOP) were used:

- Excavations were conducted using a Cat 416B backhoe. Soil and tuff samples were collected from approximately 0 to 0.5 ft below the excavated drainline and tank. These samples were collected from the trenches or backhoe bucket following LANL-ER-SOP-6.09, R0, "Spade and Scoop Method for Collection of Soil Samples."

- Samples were screened in the field for HE and beta/gamma radioactivity using HE spot test kits with modified Griess reagents following (LANL-ER-SOP-10.06, R1, "High Explosives Spot Test") and a Ludlum 12 survey meter with pancake and air proportional detectors (LANL-ER-SOP-10.07, R1, "Field Monitoring for Surface and Volume Radioactivity Levels").

- In the field chemistry trailer the samples were further analyzed for RDX and TNT using the D-Tech immunoassay HE field-screening kit (EPA SW-846 Methods 4051 and 4050) and for 24 metals (listed in Appendix C) using a Tracor Northern Spectrace 9000 XRF spectrometer (LANL-ER-SOP-10.08, R0, "Operation of the Spectrace 9000 Field-Portable X-Ray Fluorescence Instrument").

- The soil and tuff samples were described and logged on the sample collection log forms (LANL-ER-SOP-01.04, R3, "Sample Control and Field Documentation").

- Samples were collected from the boreholes using stainless steel split-spoon samplers according to LANL-ER-SOP-06.24, R0 ("Sample Collection from Split Spoon and Shelby Tube Samplers").

- Drilling activities were conducted in accordance with LANL-ER-SOP-04.01, "Drilling Methods and Drill Site Management". Drilling was conducted using the Acker II drill rig.

#### 2.3.4.1 D&D Activity

D&D personnel removed the drainline from October 20,1997, to October 30, 1997, and removed the septic tank on February 6, 1998. Excavations were carried out using a trackhoe and a backhoe. Overburden soil was stockpiled along the excavation within the PRS and was later field screened for HE by ER Project personnel. The excavated drainline and tank were placed on plastic sheeting until they were disposed of by D&D. The D&D contractor field screened material within the drainline using the HE spot test kit. There were no positive results. ER Project field team personnel documented the D&D activities and noted the locations of cracks and broken joints along the drainline. During D&D, the contractor discovered several breaks in the pipe. These locations of potential contamination were flagged and later sampled by ER Project personnel.

### 2.3.4.2 VCM Plan Requirements

The VCM plan specified collecting eight samples from PRS 16-006(g) for in situ field-screening. In situ field-screening consisted of screening at the sample location for HE (using the HE spot test kit), radioactivity (using a direct reading beta/gamma analyzer), and VOCs (using a photo ionization detector 10.2 evbulb) at the on-site field chemistry trailer. The eight samples were also screened for metals using the XRF spectrometer. Four of these screening samples were to be further screened for HE using the D-Tech kit. Two laboratory samples were to be selected from the screening samples and submitted for off-site analysis. One laboratory sample was to be collected from beneath the excavated tank, and one sample was to be collected from beneath the excavated drainline.

The laboratory sample from beneath the drainline was to be selected from the screening samples using the following prioritized biasing scheme: (1) RDX or TNT values greater than detection limits on the D-Tech field kit (0.5 ppm) but less than 50% of cleanup levels; (2) elevated metals (50% of the cleanup levels listed in Table 2.3-1) based on XRF screening results; (3) radioactivity (greater than two times background) based on in situ field-screening; and (4) elevated VOCs (greater than 0 ppm) based on in situ field-screening.

If results from field-screening indicated that contaminants were present above 50% of the cleanup level for HE and metals (as shown in Table 2.3-1), greater than two times background concentrations for radioactivity, or greater than 0 ppm VOCs, that soil was to be excavated until results were no longer above these criteria. Table 2.3-1 presents the soil cleanup levels according to the approved VCM plan (LANL 1997, 55653.2). The EPA Region 9 PRGs for industrial soil were used as cleanup levels for the VCM activities. Note that some of the Region 9 PRGs have changed since they were included in the approved VCM plan.

**Table 2.3-1**
**Approved Soil Cleanup Levels for V-Site VCM**

| Chemical | Cleanup Level (mg/kg) | Rationale |
|---|---|---|
| Barium | 11,000 | HI[a] = 0.1 |
| Beryllium | 11 | Risk = $10^{-5}$[b] |
| Cadmium | 85 | HI = 0.1 |
| Chromium (total) | 450 | Risk = $10^{-6}$ |
| Copper | 6300 | HI = 0.1 |
| Cyanide | 1400 | HI = 0.1 |
| DNB[c] mixture | 6.8 | HI = 0.1 |
| DNT[d] mixture | 2.8 | Risk = $10^{-6}$ |
| HMX | 3400 | HI = 0.1 |
| Lead | 1000 | EPA Region VI guidance |
| Nickel | 3400 | HI = 0.1 |
| RDX | 17 | Risk = $10^{-6}$ |
| Silver[e] | 940 | HI = 0.1 |
| TNB[f] | 3.4 | HI = 0.1 |
| TNT | 64 | Risk = $10^{-6}$ |

[a] HI = Hazard index for noncarcinogens.

[b] The VCM Plan states that, for beryllium, the $10^{-5}$risk level is used "...to establish a threshold above the background concentration range for this metal." (LANL 1997, 55653.2)

[c] DNB = Dinitrobenzene.

[d] DNT = Dinitrotoluene.

[e] Cleanup level was not listed in V-Site VCM plan. Information is included here for completeness.

[f] TNB = Trinitrobenzene.

The VCM plan addendum specified screening the stockpiled overburden soil (the soil overlying the drainline and tank) prior to returning it to the excavation from which it originated. The soil was to be screened because it was possible that contamination could have spread to the stockpiled soil during D&D activities. This overburden soil was to be screened using the HE spot test kit or the D-Tech kit. Overburden soil that was determined to contain HE above 50% of the PRGs (based on screening) was to be managed as waste. Overburden soil that did not screen positive for HE was to be returned to its place of origin. These screening results are not presented in Table 2.3-3 because the results were used solely for the purpose of determining whether soil could be returned to the site.

#### 2.3.4.3 Remediation Stage I

This section presents a discussion of the remedial activities including field-screening, cleanup, characterization, and nature and extent sampling. Table 2.3-2 lists all analytical samples and the analytical suites associated with each sample. The individual analytes that make up each suite can be found in Appendix D.

**Table 2.3-2**
**Summary of Samples Collected for Fixed-Laboratory Analysis for PRS 16-006(g)[a]**

| Location ID | Sample ID | Sample Type | Depth (ft) | Media | Boron | HE | Inorganic Chemicals | SVOCs | Uranium | VOCs |
|---|---|---|---|---|---|---|---|---|---|---|
| 16-3036 | 0316-97-1036 | Collocated | 3–3.5 | Soil | 3890R | 3889R | 3890R | 3888R | 3891R | 3888R |
| 16-3357 | 0316-97-0099 | Grab | 3–3.5 | Soil | 3890R | 3889R | 3890R | 3888R | 3891R | 3888R |
| 16-3364 | 0316-98-0100 | Grab | 6–6.5 | Soil | 4100R | 4099R | 4100R | 4098R | 4101R | 4098R |
| 16-5987 | RE16-99-0005 | Grab | 4.5–5.5 | Qbt 4 | 5198R | 5199R | NA[b] | NA | 5200R | 5197R |
| 16-5987 | RE16-99-0021 | Grab | 7.5–8.5 | Qbt 4 | 5335R | 5336R | NA | NA | 5337R | 5334R |

[a] Numbers in the cells for each analytical suite are request numbers.

[b] NA = Not applicable.

Sampling activities were conducted at PRS 16-006(g) on October 30, 1997, February 6 and 8, 1998, and March 9, 1999, following the D&D activities. Soil samples were collected from locations beneath the excavated septic tank and VCP drainline. Whenever possible, locations were based on noted joints or breaks in the line as documented during D&D removal. A total of nine samples were collected from nine locations for in situ and XRF screening. Six of these samples were further screened for HE using the D-Tech kit. A total of five laboratory samples were collected and submitted for off-site analysis. Three of those laboratory samples were selected from the screening samples based on screening results. Two of those laboratory samples were collected as lateral and vertical bounding samples based on off-site analytical results for the three initial laboratory samples. These two samples were verification samples. Figure 2.3-1 presents the sample locations.

According to the VCM work plan, one laboratory sample (0316-98-0100, location 16-3364) was collected from beneath the excavated septic tank. In the absence of elevated screening results, the second laboratory sample (0316-97-0099, location 16-3357) was selected from the location of the steel pipe adjacent to the building. A collocated QA/QC laboratory sample (0316-97-1036, location 16-3036) was collected 1 ft south of sample 0316-97-0099 to investigate spatial variability.

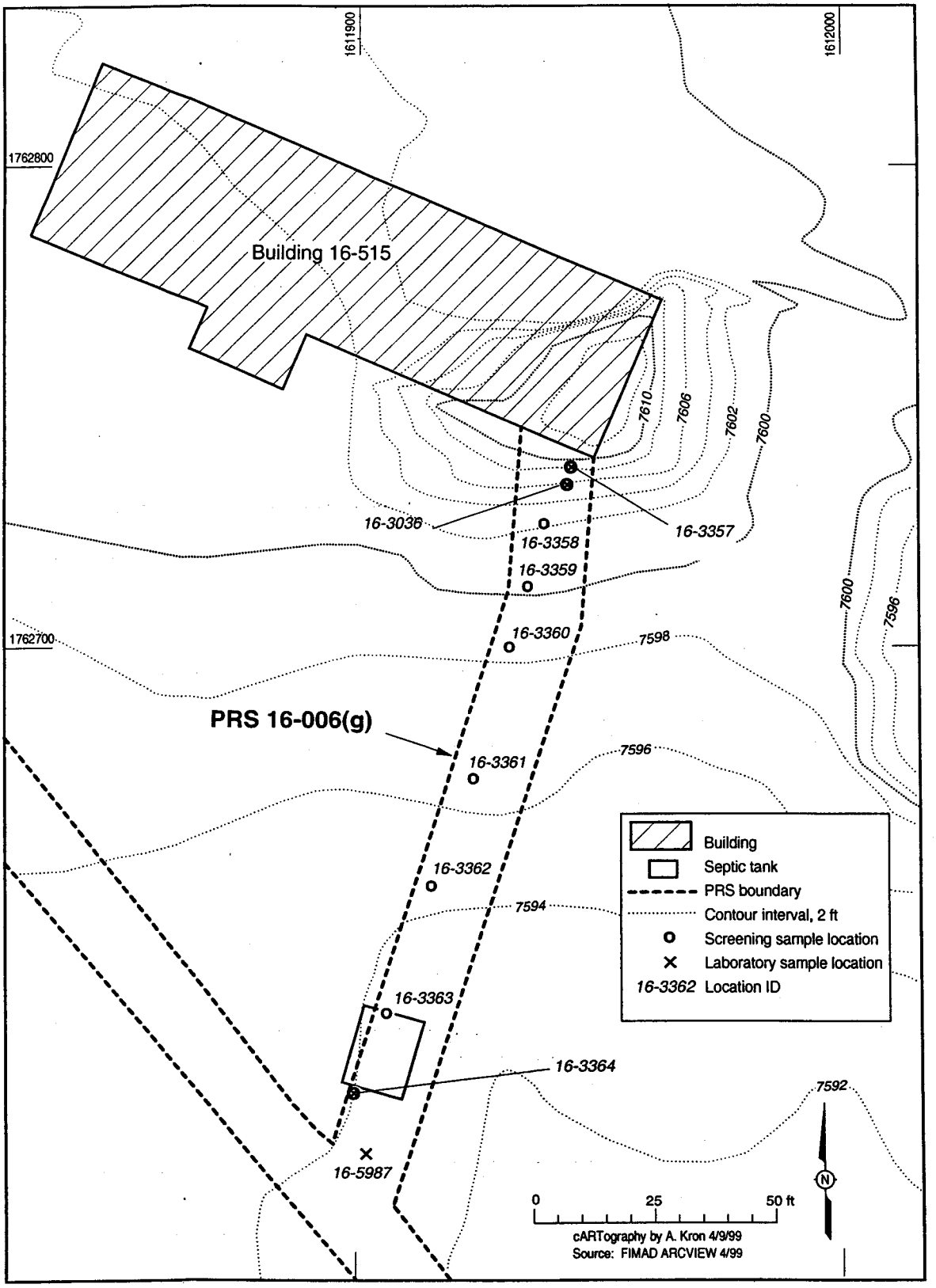


**Figure 2.3-1. Locations of PRS 16-006(g) samples**

Upon evaluation of the laboratory results from these initial laboratory samples, it was determined that a bounding sample needed to be collected beneath the former septic tank (location 16-3364) in order to define a decreasing trend in contaminant concentrations of uranium, HE, and VOCs. The field team remobilized at a later date and collected a lateral bounding sample (RE16-99-0005, location 16-5987) approximately 5 ft down-drainage from location 16-3364. This was done to bound contaminants that may have been transported along or near the soil/tuff interface. The Acker II drill rig was used to sample at this location (Figure 2.3-2). Note that this sample is deeper than the drainline samples but shallower than the bottom of the septic tank. A vertical bounding sample (RE16-99-0021, location 16-5987) was collected at this same location (approximately 5 ft down-drainage and below location 16-3364) to bound contaminants that may have been transported downward. The depth of this sample was 2 ft below the former septic tank. The samples were not screened for metals using the XRF or for HE using the HE spot test kit. They were submitted directly to the off-site laboratory as samples RE16-99-0005 and RE16-99-0021 and were analyzed for uranium, HE, and VOCs. The three initial laboratory samples (0316-97-0099, 0316-97-1036, and 0316-98-0100) were analyzed for HE, inorganics, SVOCs, VOCs, and uranium. Tables 2.3-3 and 2.3-4 present the sample information and screening results.

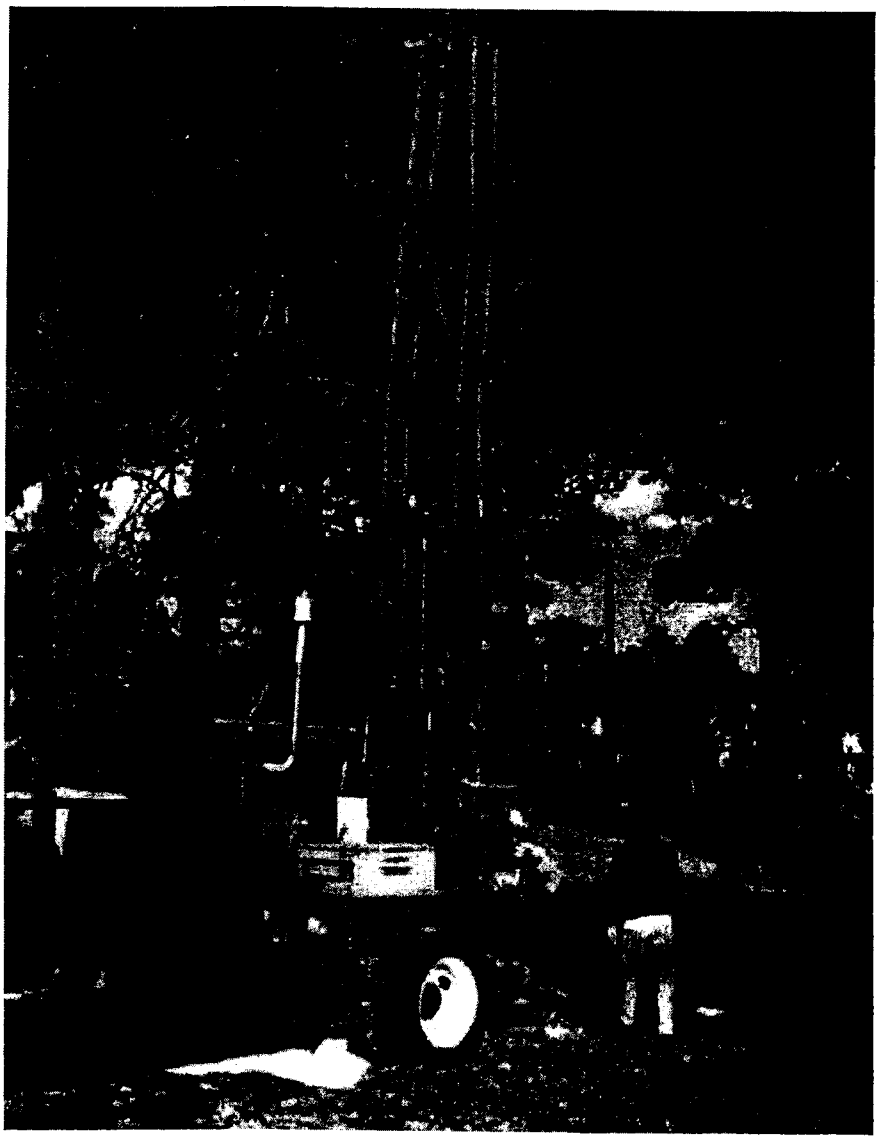

**Figure 2.3-2. Photograph of drilling at PRS 16-006(g)**

**Table 2.3-3**
**Sampling Information for PRS 16-006(g)**

| Sample ID | Location ID | Depth (ft)[a] | Media | Sample Description | Date Collected | Laboratory Sample |
|---|---|---|---|---|---|---|
| 0316-97-1357 | 16-3357 | 3–3.5 | Soil | At steel pipe | 10/30/97 | 316-97-0099 |
| 0316-97-1036 | 16-3036 | 3–3.5 | Soil | Collocated QA sample of 316-97-0099 | 10/30/97 | 316-97-1036 |
| 0316-97-1358 | 16-3358 | 3–3.5 | Soil | 13 ft south of pipe | 10/30/97 | NA[b] |
| 0316-97-1359 | 16-3359 | 3–3.5 | Soil | 26 ft south of pipe at joint | 10/30/97 | NA |
| 0316-97-1360 | 16-3360 | 2.5–3 | Soil | 28 ft south of pipe at joint | 10/30/97 | NA |
| 0316-97-1361 | 16-3361 | 2–2.5 | Soil | 40 ft south of pipe at break | 10/30/97 | NA |
| 0316-97-1362 | 16-3362 | 1.5–2 | Soil | 85 ft south of pipe at break | 10/30/97 | NA |
| 0316-98-1363 | 16-3363 | 6–6.75 | Soil | Beneath tank (north) | 2/6/98 | NA |
| 0316-98-1364 | 16-3364 | 6–6.5 | Soil | Beneath tank (south) | 2/6/98 | 316-98-0100 |
| RE16-99-0005 | 16-5987 | 4.3–5.5 | Qbt 4[c] | 5 ft south of 16-3364 lateral bounding sample | 2/8/99 | RE16-99-0005 |
| RE16-99-0021 | 16-5987 | 7.5–8.5 | Qbt 4 | 5 ft south of 16-3364 vertical bounding sample | 3/9/99 | RE16-99-0021 |

[a] Depths are from surface grade.

[b] NA = Not applicable

[c] Qbt 4 = Quarternary Bandelier Tuff, Unit 4

**Table 2.3-4**
**Field-Screening Results for PRS 16-006(g)**

| Sample ID | HE Spot Test | D-Tech RDX (mg/kg) | D-Tech TNT (mg/kg) | Silver (mg/kg) | Barium (mg/kg) | Chromium (mg/kg) | Copper (mg/kg) | Lead (mg/kg) | Nickel (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|
| 0316-97-1357 | Negative | <0.5 | <0.5 | 70 ± 15 | 366 ± 7 | 340 ± 117 | ND[a] | ND | ND |
| 0316-97-1036 | Negative | <0.5 | <0.5 | 49 ± 17 | 445 ± 8 | ND | 60 ± 19 | ND | ND |
| 0316-97-1358 | Negative | NA[b] | NA | 65 ± 15 | 369 ± 7 | ND | ND | ND | ND |
| 0316-97-1359 | Negative | <0.5 | <0.5 | ND | 359 ± 7 | ND | ND | ND | ND |
| 0316-97-1360 | Negative | NA | NA | ND | 317 ± 6 | ND | 55 ± 18 | ND | ND |
| 0316-97-1361 | Negative | <0.5 | <0.5 | ND | 318 ± 6 | ND | ND | ND | ND |
| 0316-97-1362 | Negative | NA | NA | ND | 291 ± 6 | ND | 45 ± 17 | ND | ND |
| 0316-98-1363 | Negative | <0.5 | <0.5 | ND | 314 ± 6 | ND | ND | ND | ND |
| 0316-98-1364 | Negative | <0.5 | <0.5 | 67 ± 15 | 309 ± 6 | ND | ND | ND | ND |
| RE16-99-0005 | Negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-99-0021 | Negative | NA | NA | NA | NA | NA | NA | NA | NA |

[a] ND = Non-detect.

[b] NA = Not applicable.

The overburden soil was screened per the VCM addendum (LANL 1997, 63069.2). The soil was screened at 10- to 15- ft intervals (approximately 50–100 $yds^3$ of soil per interval) at locations underlying the excavated drainline and tank where soil had previously been sampled. These previously sampled locations are the most likely to have been contaminated. There were no positive HE field-screening results, and all the soil was returned to the excavation site. Figure 2.3-3 shows the PRS after the overburden soil was returned (following the VCM activities).

The concentrations of silver based on XRF screening are reported in Table 2.3-4. These silver results are greater than three times the standard deviations; however, these values are considered to be artifacts due to fluorescence of the mercury iodide detector. The peak associated with iodine (from the detector) is very close to that of silver resulting in the overlap of the two peaks. Results are a decrease in resolution and a higher detection limit for silver. Because these values are close to the reported detection limit for silver (50 mg/kg), these values may not be reliable.

All field-screening results for radiation were less than two times background. The VOCs were not detected. The field screening results indicated that there is no radioactivity and no vapor phase VOC plume at the site. In addition, there are no indications of staining or organic odors that might suggest leaks or spills of solvents.

Three deviations were made from the approved VCM Work Plan:

1. Eight samples were required for in situ and XRF screening. One additional sample was collected to better characterize the PRS.

2. Four samples were required for further HE screening using the D-Tech kit. two additional samples were collected to better characterize the PRS.

3. Two laboratory samples (excluding the QA/QC samples) were required. Two extra samples were collected as lateral and vertical bounding samples to obtain more information on trends of contamination. Bounding samples were not required in the approved plan.

Because there was no removal of contaminated soil, characterization and boundary samples served to verify achievement of PRGs.

**Figure 2.3-3. Photograph of PRS 16-006(g) following VCM activities**

#### 2.3.4.4 Data Review

All data discussed in the body of this report are also discussed in Appendixes C and D of this report. Appendix C provides an assessment of the data quality. Appendix D provides a list of analytical results and the analytes that make up the analytical suites. The complete data set has been submitted to the AA in electronic format. Tables in this section include all detected values and some undetected values. All analytical results were validated by the Laboratory's ER Project routine validation protocol, with the exception of boron results which received no baseline validation. Boron is not part of the regular target analyte list (TAL) metal suite. Therefore, the Laboratory's ER Project does not require boron data to receive baseline validation. Focused validation was conducted on boron results when possible. All non-rejected data are usable for decision-making purposes and adequate for evaluating a potential release. Qualifiers on the data indi-

cate if error or bias on the data must be considered while using the data. Qualified data are acceptable to use, as long as the qualifications on the data are considered.

### (a) Inorganic Chemical Comparison to Background

All inorganic results are compared to the Laboratory's background data set (Ryti et al. 1998, 59730). BVs are applied to the data based upon the soil horizon from which the sample was collected. Table 2.3-5 lists the frequency of detected analytes at PRS 16-006(g), the range of detected levels, and in which soil horizons the samples originated. Table 2.3-6 compares detected inorganic chemicals against their associated BVs.

**Table 2.3-5**
**Frequency of Detected Inorganic Chemicals in PRS 16-006(g) Samples**

| Analyte | Media | Number of Analyses | Number of Detects | Concentration Range (mg/kg) | BV (mg/kg) | Frequency of Detects Above Background[a] |
|---|---|---|---|---|---|---|
| Aluminum | Soil | 3 | 3 | 2730–3810 | 29200 | 0/3 |
| Antimony | Soil | 3 | 0 | [0.32–0.46] | 0.83 | 0/3 |
| Arsenic | Soil | 3 | 3 | 3–3.6 | 8.17 | 0/3 |
| Barium | Soil | 3 | 3 | 70.2–101 | 295 | 0/3 |
| Beryllium | Soil | 3 | 3 | 0.42–0.51 | 1.83 | 0/3 |
| Boron | Qbt 4 | 2 | 0 | [1.8–28] | No BV | 0/2 |
| | Soil | 3 | 3 | 3.39–6.4 | No BV | 0/3 |
| Cadmium | Soil | 3 | 3 | 0.13–0.23 | 0.4 | 0/3 |
| Calcium | Soil | 3 | 3 | 1280–1960 | 6120 | 0/3 |
| Chromium, Total | Soil | 3 | 3 | 3–4.34 | 19.3 | 0/3 |
| Cobalt | Soil | 3 | 3 | 3.6–5.5 | 8.64 | 0/3 |
| Copper | Soil | 3 | 3 | 4.8–7.2 | 14.7 | 0/3 |
| Iron | Soil | 3 | 3 | 6950–11700 | 21500 | 0/3 |
| Lead | Soil | 3 | 3 | 7.1–12.5 | 22.3 | 0/3 |
| Magnesium | Soil | 3 | 3 | 473–902 | 4610 | 0/3 |
| Manganese | Soil | 3 | 3 | 391–514 | 671 | 0/3 |
| Mercury | Soil | 3 | 1 | [0.024]–0.11 | 0.1 | 1/3 |
| Nickel | Soil | 3 | 3 | 3.2–5 | 15.4 | 0/3 |
| Potassium | Soil | 3 | 3 | 480–519 | 3460 | 0/3 |
| Selenium | Soil | 3 | 3 | 0.25–0.38 | 1.52 | 0/3 |
| Silver | Soil | 3 | 0 | [0.82] | 1 | 0/1 |
| Sodium | Soil | 3 | 3 | 263–380 | 915 | 0/3 |
| Thallium | Soil | 3 | 3 | 0.19–0.38 | 0.73 | 0/3 |
| Uranium | Qbt 4 | 2 | 2 | 0.25–0.37 | 2.4 | 0/2 |
| Vanadium | Soil | 3 | 3 | 8.2–16.5 | 39.6 | 0/3 |
| Zinc | Soil | 3 | 3 | 17.2–28.6 | 48.8 | 0/3 |

[a] Value is the ratio of values exceeding the BV to the number of non-rejected analyses.

**Table 2.3-6**
**Inorganic Chemicals with Concentrations at or Exceeding BVs in PRS 16-006(g) Samples[a]**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg) | BV (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|---|
| Mercury | 16-3357 | 0316-97-0099 | 0.11(J-)[b] | 0.1 | Soil | 3–3.5 |
| Uranium | 16-3036 | 0316-97-1036 | 2.1 | 1.82 | Soil | 3–3.5 |
| | 16-3357 | 0316-97-0099 | 2.01 | 1.82 | Soil | 3–3.5 |
| | 16-3364 | 0316-98-0100 | 2.24 | 1.82 | Soil | 6–6.5 |

[a] Descriptions of the analytical methods can be found in Appendix C. Detection limits can be found in Appendix D.

[b] J- = The analyte was positively identified, and the result is likely biased low.

The inorganic results were affected by minor quality issues. Two of three request numbers incorporated a QA/QC analysis that was conducted on a sample not associated with the samples in that request. In all cases, the analysis was conducted on a sample from TA-16. This did not affect the analytical results because the QA/QC results do not appear to differ across various sites within TA-16.

Aluminum, chromium, copper, iron, manganese, and zinc results were qualified as J due to duplicate result variations in the 42–51% range (above the acceptable limit of 35%). One request number had duplicate results for zinc that varied by 97%. These data were qualified as J and should be considered to have a larger range of error associated with them (up to a factor of two) than those with smaller duplicate variation. Duplicate variation had a minimal impact on data usability. The results indicate that the TA-16 samples are heterogeneous, which, prior to sampling, was expected.

Some data were qualified based on poor spike recovery. Antimony, mercury, and silver were frequently qualified due to low spike recoveries. This is not unexpected because these three elements are difficult to analyze due to their chemical natures. Silver was rejected in one request number because the spike recovery results were well below the acceptable level. In another request, spike recoveries for silver were 72%, very near the acceptable limit of 75%. Antimony results were qualified as UJ in one request number because the spike recovery was 74%, just below the acceptable limit of 75%. Mercury results were qualified as UJ or J- in two of the three request numbers because the spike recovery results were 39% and 41%, respectively, in those two. Spike recovery results for other elements such as barium, chromium, vanadium, and zinc varied between 63% and 74%, just below the acceptable limit of 75%. All of these analytes were qualified as UJ or J-, depending upon whether they were detected (with the exception of mercury, discussed below). QA/QC issues associated with low spike recovery had a minimal impact on the data because, generally, the spike recovery results were relatively close to the acceptable limit of 75%. The rejected silver data was not used for making decisions.

Mercury was detected in one sample associated with PRS 16-006(g); at location 16-3357. The concentration at which it was detected (0.11 mg/kg) is slightly above the BV. In addition, this value was qualified as J- because of the poor spike recovery results, indicating that the actual value may be higher. However, the mercury result for a sample collected at location 16-3036, which is less than 12 in. from location 16-3557, showed an undetected mercury result of 0.059 (mg/kg). This numerical result is qualified as J because of a problem with the spike sample. The bias due to poor spike recovery associated with this value is not large enough to result in mercury concentrations well above the BV. It is apparent from the results of this essentially collocated pair that there is no significant evidence of a mercury release, despite the fact that one mercury result had a value slightly above BV. All other mercury results were below the BV.

Boron was analyzed for at PRS 16-006(g) due to the potential use of boracitol, a boron-containing explosive, at Building 16-515. Boron results were not validated during the routine validation process because it

is not a standard analyte. Boron received a focused validation using a procedure similar to that used for routine inorganic validation. The boron results in request 4100R are usable without qualification. The sample duplicate results and spike recovery results were well within the acceptable limits. All remaining QA/QC results were within acceptable ranges. The boron results in request 3890R are also usable without qualification. The sample duplicate results, as well as the blank results and calibration results, were well within acceptable limits. No spike analysis was conducted although this does not significantly affect the analytical results, given the high quality of the existing QA/QC results. No Laboratory-specific BV is available for boron. A national BV was derived from the literature boron values for soils over volcanic rocks in the US. The range of boron in these soils varied from <20 to 50 ppm, with a mean value of 20 ppm (Kabata-Pendias and Pendias 1984, 59814). Boron BVs for tuff, taken from melt inclusions in the Plinian tephra of the Lower Bandelier Tuff, range from 7 to 32 ppm, with a mean value of 24 mg/kg (Dunbar and Hervig 1992, 62893). Boron at PRS 16-006(g) was detected at 4.6 to 6.4 mg/kg in soil and undetected at 1.8 mg/kg in tuff, well below the BV, and undetected at 28 mg/kg in tuff, using a less precise method.

Uranium was the only radioactive metal analyzed at this site. It involved a partial digestion method similar to SW-846 Method 3050 and analysis by inductively coupled plasma mass spectroscopy (ICPMS) SW-846, method 6020. There were no QA/QC issues associated with the uranium data that required qualification of the data. Some of the uranium analyses conducted at this PRS used QA/QC data taken from a sample that was not associated with these three PRSs. In all cases the QA/QC sample was a sample from TA-16 and, in many cases, that sample was located near this PRS. The soil across TA-16 is not expected to vary outside of the acceptable range of soil heterogeneity; therefore, QA/QC samples collected in TA-16, but not within the PRS boundary, are acceptable (EPA 1994, 48639, p. 25). This did not significantly impact the quality of the analytical results and the data were not qualified on this basis.

In general, the uranium concentrations measured in these samples, and in the rest of the samples in this report, are higher than the uranium BV of 1.82 mg/kg. This is the BV for uranium prepared with a SW-846, method 3050 extraction. Elevated uranium levels might indicate that uranium was released at these PRSs; however, a discussion in Appendix E of this document shows that the samples in this report do not have uranium values that differ statistically from other samples collected at TA-16. TA-16 is not known to have significant uranium contamination. The sites at TA-16 that have known or highly suspected radionuclide contamination were omitted from the comparison as discussed in Appendix E. On the basis of this comparison, uranium will not be carried forward into screening assessment. Further discussion of uranium issues at TA-16 can be found in Appendix E of this document.

Based on the comparison of analytical results to BVs, a comparison of BVs to detection limits and in light of the discussions above, no inorganic chemicals will be carried forward into the screening assessment. (See Table 2.3-7.)

**Table 2.3-7**

**PRSs 16-006(g) Results of Inorganic Data Review**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Boron | Soil/Qbt 4 | Eliminated | All boron results are well below the US average boron concentration for volcanic soils and tuff. |
| Mercury | Soil | Eliminated | Only one of a collocated pair had a detected result which was only slightly above the BV. |
| Uranium | Soil/Qbt 4 | Eliminated | Results do not statistically differ from results throughout TA-16. |

### (b) Radionuclide Comparison with Background

Field screening for gross beta-gamma radioactivity showed no radioactivity above background levels. No radioactive elements, except for uranium discussed above, are COPCs at this PRS and no samples were analyzed for radionuclides.

### (c) Evaluation of Organic Chemicals

PRS 16-006(g) was analyzed for VOCs, SVOCs, and HE. Tables 2.3-8 and 2.3-9 list the detected organic compounds. No QA/QC problems were associated with the HE analyses. One SVOC analysis had QA/QC samples contaminated with phthalates, a common laboratory contaminant (Smith 1997, 58478, p. 157). The phthalates present in the blank and the sample were qualified as U as a result of this laboratory contamination. (Data qualifier flags are defined in the Glossary, Appendix A-2.) There were no other QA/QC issues associated with SVOC analysis.

**Table 2.3-8**

**Frequency of Detected Organic Chemicals in PRS 16-006(g) Verification Samples**

| Analyte | Media | Number of Samples Analyzed | Contract-Required EQL (mg/kg) | Concentration Range (mg/kg)[a] | Frequency of Detects[b] |
|---|---|---|---|---|---|
| Acetone | Soil | 3 | 0.02 | 0.004(J)–[0.025] | 1/3 |
| | Qbt 4 | 2 | 0.02 | [0.021]–0.046 | 1/2 |
| Isopropyltoluene[4-] | Soil | 3 | ND | 0.002(J)–0.051 | 2/3 |
| Methylene Chloride | Soil | 3 | 0.005 | [0.003]–0.008 | 2/3 |
| Tetrachloroethene | Soil | 3 | 0.005 | [0.006]–0.013(J)[c] | 1/3 |
| Trichloroethene | Soil | 3 | 0.005 | [0.006]–0.007(J) | 1/3 |
| HMX | Soil | 3 | 2.2 | [0.163]–0.18 | 1/3 |
| RDX | Soil | 3 | 1.0 | [0.163]–0.191 | 1/3 |

[a] Brackets indicate the value is below detection limits.

[b] Value is the ratio of values above the detection limit to the number of analyses.

[c] J = The reported value is an estimated quantity.

**Table 2.3-9**

**Detected Organic Chemicals in PRS 16-006(g) Verification Samples**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | Media | Depth (ft) |
|---|---|---|---|---|---|
| Acetone | 16-3364 | 0316-98-0100 | 0.004(J) | Soil | 6–6.5 |
| | 16-5987 | RE16-99-0005 | 0.046 | Qbt 4 | 4.5–5.5 |
| Isopropyltoluene[4-] | 16-3036 | 0316-97-1036 | 0.051 | Soil | 3–3.5 |
| | 16-3364 | 0316-98-0100 | 0.002(J) | Soil | 6–6.5 |
| Methylene Chloride | 16-3036 | 0316-97-1036 | 0.008 | Soil | 3–3.5 |
| | 16-3357 | 0316-97-0099 | 0.006 | Soil | 3–3.5 |
| Tetrachloroethene | 16-3364 | 0316-98-0100 | 0.013(J) | Soil | 6–6.5 |
| Trichloroethene | 16-3364 | 0316-98-0100 | 0.007(J) | Soil | 6–6.5 |
| HMX | 16-3364 | 0316-98-0100 | 0.18 | Soil | 6–6.5 |
| RDX | 16-3364 | 0316-98-0100 | 0.191 | Soil | 6–6.5 |

[a] Data qualifier flags are defined in the Glossary, Appendix A-2.

There were various QA/QC problems associated with VOC analysis. Methylene chloride, a common laboratory contaminant, was found in samples and in their blanks. As a result, methylene chloride was qualified as U in these samples. There was also one request number with internal standard test results below the acceptable 50% level. The recoveries ranged from 38% to 47% for two internal standards in one request. Any detected analytes were qualified as J. There were very few detected analytes in these samples. The undetected analytes were unqualified based on the internal standard problem. Overall, the QA/QC problems in the VOC data were minor, mostly due to the fact that few VOCs were detected in the samples associated with this PRS, and only detected compounds were affected by the QA/QC problems. Many of the J-qualifiers applied to the organic data were applied by the analytical laboratory and accepted during routine validation. This indicates there may be error associated with the value because it was detected very near the detection limit.

N-butylbenzene was detected at 0.004 mg/kg in sample 0316-97-1036. This result was qualified as U based on the results of focused validation. Focused validation showed that comparison of the analytical result to the n-butylbenzene library reference standard result was not of sufficient quality to accurately assign the analytical result to n-butylbenzene. Sample 0316-97-1036 was also used as the matrix/matrix spike duplicate sample. N-butylbenzene was not detected in either the matrix spike or the matrix spike duplicate, further strengthening the argument that n-butylbenzene is not present in the sample and should not be carried forward into the screening assessment.

4-Isopropyl toluene was detected in two samples, but it will not be carried forward into the screening assessment because it is a naturally occurring compound occurring in over 100 different plant-derived oils (Lewis 1992, 57283, p. 1011). Several other naturally occurring aromatic oils (listed as tentatively identified compounds) were also present in sample 0316-97-1036, indicating the sample was high in natural aromatic oils.

The organic constituent data were reviewed in comparison with the contract-specified EQLs. The procedures used by each analytical laboratory result in organic constituent EQLs that may be somewhat different from the contract-specified EQLs. However, a comparison of the data with the contract-specified EQLs found no data qualified as U with concentrations greater than twice the contract-specified EQLs.

Figure 2.3-4 indicates the locations of the samples containing the organic compounds carried forward into screening assessment. Table 2.3-10 indicates which organic compounds will be carried forward into screening assessment.

**Table 2.3-10**
**PRS 16-006(g) Results of Organic Data Review**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Methylene chloride | Soil/Qbt 4 | Retained | Detected in two nearly collocated samples |
| HMX | Soil/Qbt 4 | Retained | Detected in one sample, along with other organic compounds |
| RDX | Soil/Qbt 4 | Retained | Detected in one sample, along with other organic compounds |
| Isopropyl toluene | Soil/Qbt 4 | Eliminated | A naturally occurring compound found in two samples, along with other natural oils. |
| Tetrachloroethene | Soil/Qbt 4 | Retained | Detected in one sample, along with other organic compounds |
| Trichloroethene | Soil/Qbt 4 | Retained | Detected in one sample, along with other organic compounds |
| N-butyl benzene | Soil/Qbt 4 | Eliminated | Incorrectly identified as detected by analytical laboratory, based on focused validation of data |
| Acetone | Soil/Qbt 4 | Retained | Detected in one sample, along with other organic compounds |

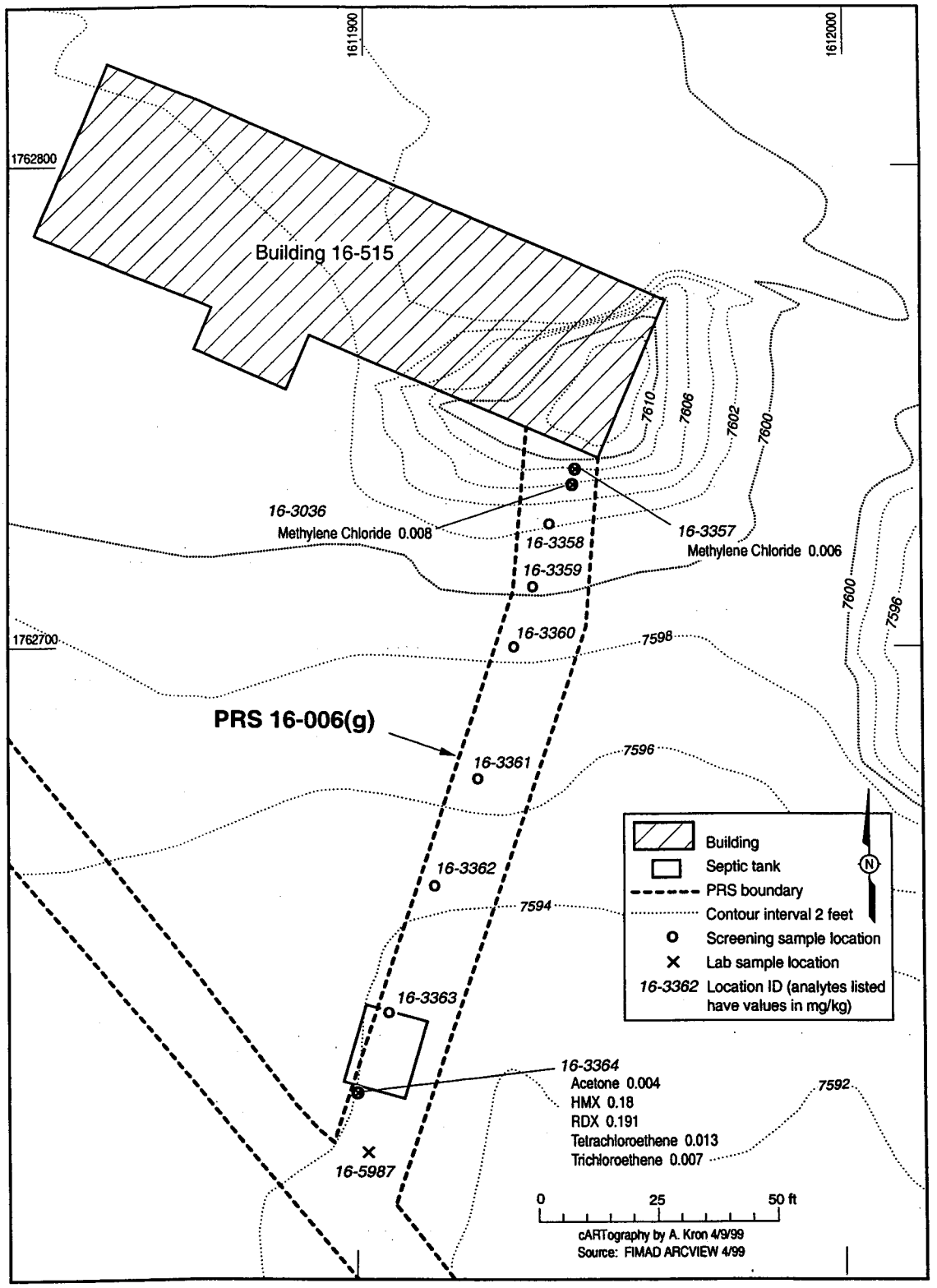


**Figure 2.3-4. Locations of samples containing organic compounds at PRS 16-006(g)**

### 2.3.5 Revised Site Conceptual Model

Evaluation of sampling results in the context of the preliminary conceptual model (Section 2.3.3) did not disclose required changes to that model.

#### 2.3.5.1 Nature and Extent of Contamination in PRS 16-006(g)

Sampling at PRS 16-006(g) was focused on collecting from surface and subsurface soils that were most severely affected by leaks from the drainline. Sampling occurred near the drainline inlet and discharge, and along the reach of the drainline with generally uniform distribution. This distribution of sampling across the PRS enables a comprehensive assessment of the PRS, as well as an indication of potential migration within the PRS.

Nine samples were collected at PRS 16-006(g). They were screened for HE by spot test and D-Tech, for VOCs by PID, for metals by XRF spectrometry, and for radioactivity. Screening results were used to select samples with higher contaminant levels for fixed-laboratory analyses. A total of five samples were submitted for fixed-laboratory analyses. Analytical data quality from these analyses are adequate for decision-making purposes.

The existing data and characterization plan do not support the analysis of temporal trends. However, simply mapping the COPCs that were detected above BVs or EQLs shows that contaminants were infrequently observed at discrete, isolated locations across the aggregate. There is no indication of a substantial release or migration of hazardous chemicals across any portion of the PRS.

HE compounds [anticipated contaminants associated with PRS 16-006(g)] are assumed to have been carefully controlled during operations, but were detected. HMX and RDX were found at 0.18 ppm and 0.191 ppm, respectively, in sample 0316-98-0100, which was collected at a depth of 6.0 to 6.5 ft. In it six organic compounds including the HEs were detected, each at concentrations below or near EQLs. During subsequent sampling in February and March 1999 at location 16-5987, samples RE16-99-0005 and RE16-99-0021 were collected next to and 2 ft deeper than where sample 0316-98-0100 was collected. The shallower sample, RE16-99-0005, contained acetone at 0.046 mg/kg and methylene chloride at an estimated value of 0.0026 mg/kg. Sample RE16-99-0021, collected from 16-5987 at a depth of 8-8.5 ft, contained no HEs or VOCs above BVs, indicating that the extent of contamination is bounded.

Methylene chloride was detected at three locations along the drainline. Two samples taken at depths of 3 to 3.5 ft and one ft apart at locations 16-3357 and 16-3036, contained methylene chloride at concentrations slightly above EQL. Also, methylene chloride was detected in sample RE16-99-0005. It was taken downgradient near the septic tank (location 16-5987) at a depth of 4.5 to 5.5 ft.

The septic tank posed greatest potential as the source of contamination by having longer effluent residence times and by providing hydraulic head for contaminant migration. The deepest sample at the site, RE16-99-0021, was collected at 8 to 8.5 ft deep at location 16-5987. No methylene chloride or other organic compounds were detected in it; thus bounding the contamination both vertically and laterally.

The data indicate that there was limited leakage from the drainline at depth and that bounded, low-level contamination exists near locations 16-3357 and 16-3364. The detected contaminants will be carried forward for further assessment in this report.

Other than HE, low concentrations of certain organic compounds were infrequently detected across the aggregate. At location 16-3364 acetone was detected at 0.004 ppm. Analytical results for these organic compounds from samples collected at location 16-3364 in March 1999 showed either no contamination or lower contaminant concentrations at greater depths.

### 2.3.5.2 Environmental Fate

This section evaluates the environmental fate of the six organic chemicals retained for further evaluation from Section 2.3.4.5. The evaluation of environmental fate addresses the chemical processes that affect the persistence of a constituent along the migration pathway. Published studies have generated empirical data on degradation of constituents in the environment that are useful for evaluating environmental fate. This data, in Table 2.3-11, presents the number of days it takes for constituents to degrade by 50% in water and soil. The transport evaluation addresses physical processes affecting mobility along the migration pathway. Physicochemical properties such as vapor pressure, solubility in water, and soils adsorbtion tendencies are important for evaluating constituent mobility. The transport and mobility of these contaminants are discussed below, and their physicochemical properties are listed in Table 2.3-11.

**Table 2.3-11**
**Physicochemical Properties for COPCs at PRS 16-006(g)**

| COPC Name | Vapor Pressure mm Hg@20C | Solubility mg/l@25C | Kd | Koc |
|---|---|---|---|---|
| Acetone | 2.99[a] | 604000[a] | 0.0095[a] | 0.95[a] |
| HMX | 0.00084[b] | 2.63[b] | NA[c] | 2.4[b] |
| Methylene chloride | 0.49[a] | 17400[a] | 0.1[a] | 10[a] |
| RDX | 0.000408[b] | 38.4[b] | NA | 1010[b] |
| Tetrachloroethene | 0.024[a] | 232[a] | 2.65[a] | 265[a] |
| Trichloroethene | 0.095[a] | 1180[a] | 0.94[a] | 94[a] |

[a] EPA 1999, 63062; acetone from Table A-3-3, pp. 8–10; methylene chloride from Table A-3-142, pp. 142–144; tetrachloroethene from Table A-3-181, pp. 104–106; trichloroethene from Table A-3-191, pp. 135–137

[b] MEPAS 1995, 63179

[c] NA = Not available.

Water solubility is perhaps the most important chemical characteristic used to assess chemical mobility. In addition, soil sorption, chemical sorption, or chemical binding in soil may limit the transport of a chemical. These properties may be expressed as ratios of the amount of an organic chemical partitioned between solid and liquid phases. The partitioning ratio between organic material and water is known as the carbon-water sorption coefficient (Koc). The partitioning ratio between soils and water is known as the distribution coefficient (Kd). Volatilization of an organic chemical will enhance its diffusion through the soil and its potential release to the atmosphere.

The following information, summarized from Ney (1995, 58210), is presented to give an indication of the fate and transport tendencies of organic chemicals. The higher the water solubility of a chemical, the more likely it is to be mobile and the less likely it is to accumulate, bioaccumulate, volatilize, and persist in the environment. However, a highly soluble chemical (greater than 1000 mg/l) is also more prone to biodegradation and metabolism. The lower the water solubility of a chemical (less than 10 mg/l) the more likely it is that it will be immobilized by way of adsorption. Chemicals with a Koc of greater than 10,000 will tend to remain immobilized on soil particles. Chemicals with a Koc of 1000 or less will tend to be more mobile in soil water. A chemical with a low vapor pressure (less than 0.000001 mm Hg) is less likely to volatilize. A chemical with high vapor pressure (greater than 0.01 mm Hg) is more likely to volatilize.

HMX and RDX have low water solubilities indicating that the chemicals will not be highly mobile in percolating water from rainfall infiltration. Other organic chemicals listed in Table 2.3-11 have low to moderate solubilities. Although acetone and methylene chloride are very soluble in water, they (along with tetrachloroethene and trichloroethene) have high vapor pressures indicating that the dominant phase of these chemicals is gaseous. The vapor pressures of the other organic chemicals are very low, indicating that they will

not be highly mobile through soil pore-gas diffusion. The organic chemicals present at this site have relatively low Koc values indicating that they are not highly adsorbed.

Acetone and methylene chloride are very soluble, are not strongly sorbed on soil particles, and therefore; are available for transport. Acetone and methylene chloride will biodegrade readily and will be present mainly in soil gas. The other organic chemicals are moderately soluble and not strongly sorbed onto soil particles. However, the source terms (mass available for migration) are very low due to low concentrations present, and the amount of soil water percolating through the soil at the site is limited due to high evapotranspiration in the semi-arid climate. Based on this information and site conditions, it appears unlikely that organic chemicals will be transported outside the PRS boundary.

## 2.4 Site Assessments

### 2.4.1 Summary

In Section 2.3.4.5 of this report, the data was evaluated to identify those constituents at PRS 16-006(g) that should be carried forward to a screening-level assessment of human health and ecological effects. Tables 2.4-1 and 2.4-2 present all the COPCs that have been retained for analysis in the assessments. In addition, these tables identify whether any of the COPCs are retained as COCs or chemicals of ecological concern (COECs).

A human health screening assessment is provided in Section 2.4.2.1. The screening assessment contains the following sections: (a) scoping, (b) screening evaluation, (c) uncertainty analysis, and (d) interpretation. General methods for the human health screen are presented in Section 2.4.1.1, and additional information is provided in Appendix F, Section F-1.0.

An investigation of potential ecological effects is provided in Section 2.4.2.2. The ecological screening assessment contains the following sections: (a) scoping, (b) screening evaluation, (c) uncertainty analysis, and (d) interpretation. General methods are presented in Section 2.4.1.2. Additional ecological information is provided in Appendix F, Section F-2.0.

#### 2.4.1.1 Human Health Screening General Approach

A human health screening assessment was used in this VCM to determine which COPCs would contribute the greatest amount of risk, if any, to potential human receptors. COPCs were evaluated by comparing actual contaminant levels in surface and subsurface soil with human health risk-based concentrations of contaminants in soil. The human health risk-based concentrations used for this evaluation were derived by EPA, Region 9, and reported in Region 9 PRGs (EPA 1998, 58751). This document provides remediation goals for both residential and industrial receptors. For this report's evaluation, industrial receptor PRGs were used to evaluate COPCs according to the following rationale:

- No change in the industrial land-use designation for this area is expected according to the land use master plan and future land use map for the Laboratory. These documents are a part of the Site Development Plan—Annual Update 1995 (LANL 1995, 57224, pp. 14, 16).
- At this PRS, the potential for human exposure to contaminants in the environment is very low. This is a highly secure area of the Laboratory and public access is not allowed. Therefore, use of an industrial receptor is appropriate.

Use of Region 9 industrial receptor PRGs as cleanup levels was approved by NMED in the V-Site VCM plan (LANL 1997, 55653.2, p.50). The maximum detectable concentrations of COPCs in surface and subsurface soils were compared to the Region 9 industrial PRG (see Table 2.4-1). These PRGs are provided in Appendix F, Section F-1.0. Those COPCs whose maximum concentrations exceeded their PRGs were retained for further evaluation as COCs.

#### 2.4.1.2 Ecological Screening General Approach

An ecological screening assessment was used in this VCM to determine (1) if COECs were present at V-Site and (2) If a quantitative ecological risk assessment was required (to determine if the COECs pose risks to ecological receptors).

The ecological screening methodology followed general guidance provided by EPA, NMED (NMED 1998, 57761), and the Laboratory (Kelly et al. 1998, 57916). Other documents that contributed to the ecological screening assessment include:

- "Framework for Ecological Risk Assessment" (EPA 1992, 48847.1) and
- "Guidelines for Ecological Risk Assessment" (EPA 1998, 59600.1).

The ecological screening process used in this report deviates from the exact format presented in the latest LANL ecological risk guidance because this report is being prepared following a VCM, rather than for an RFI. Remediation at the PRSs addressed in this report has been accomplished and as a result the screening methodology used here was tailored specifically for these sites. In addition, complete exposure pathways are nonexistent or extremely limited at each of the PRSs in this report. Nonetheless, the ultimate conclusions and recommendations reached using the tailored methodology are consistent with what would have been achieved using the format presented in the LANL guidance.

### 2.4.2 Screening Assessments

#### 2.4.2.1 Human Health

The human health screening assessment for PRS 16-006(g) is provided in this section.

**(a) Scoping**

PRS-006(g) is located at V-Site. The area is fenced and entry is controlled (LANL 1997, 55653). Therefore, the use of industrial PRGs (as previously discussed) is appropriate for screening both current and reasonable future land use.

**(b) Screening Evaluation**

For this PRS, no COCs were identified; i.e., none of the COPCs screened exceeded industrial PRGs as shown in Table 2.4-1 (Appendix F contains a complete list of the industrial PRGs). Because no human health COCs were identified, a human health risk assessment was not performed.

**Table 2.4-1**
**Human Health Screening for PRS 16-006(g)**

| COPC Name | Location ID | Sample ID | Maximum Concentration (mg/kg)[a] | Depth (ft) | VCM Plan Cleanup Level (mg/kg) | Current Region 9 PRG (mg/kg) | Result | Rationale |
|---|---|---|---|---|---|---|---|---|
| Acetone | 16-3364 | 0316-98-0100 | 0.004(J) | 6–6.5 | NA[b] | 610[c] | Eliminated | Maximum concentration is less than the PRG. |
| Methylene chloride | 16-3036 | 0316-97-1036 | 0.008 | 3–3.5 | NA | 20 | Eliminated | Maximum concentration is less than the PRG. |

**Table 2.4-1**
**Human Health Screening for PRS 16-006(g) (continued)**

| COPC Name | Location ID | Sample ID | Maximum Concentration (mg/kg)[a] | Depth (ft) | VCM Plan Cleanup Level (mg/kg) | Current Region 9 PRG (mg/kg) | Result | Rationale |
|---|---|---|---|---|---|---|---|---|
| Tetrachloro-ethene | 16-3364 | 0316-98-0100 | 0.013(J) | 6–6.5 | NA | 16 | Eliminated | Maximum concentration is less than the PRG. |
| Trichloro-ethene | 16-3364 | 0316-98-0100 | 0.007(J) | 6–6.5 | NA | 6.1 | Eliminated | Maximum concentration is less than the PRG. |
| HMX | 16-3364 | 0316-98-0100 | 0.18 | 6–6.5 | 3400 | 5300[c] | Eliminated | Maximum concentration is less than the PRG. |
| RDX | 16-3364 | 0316-98-0100 | 0.191 | 6–6.5 | 17 | 27 | Eliminated | Maximum concentration is less than the PRG. |

[a] Data qualifier flags are defined in the Glossary, Appendix A-2.

[b] NA = Not available.

[c] These COPCs are noncarcinogenic; therefore, one-tenth of the PRG is used for comparison

**(c) Uncertainty Analysis**

Given the past and probable future uses of V-Site, it is unlikely that using industrial PRGs would underestimate any potential effects of chemical constituents. The exposure pathways—incidental ingestion of soil, inhalation of particulates, inhalation of volatiles, and dermal exposure— that were evaluated in the Region 9 PRG document are sufficiently conservative, resulting in equally conservative PRGs for screening purposes (EPA 1998, 58571).

Concerning use of Region 9 PRGs (EPA 1998, 58751), it should be noted that not all toxicity values used in Region 9's database are approved for use by the EPA headquarters workgroup for toxicity criteria. Some are flagged because they have been derived from alternative sources of information (e.g., Health Effects Assessment Summary Tables [HEAST], EPA's National Center for Environmental Assessment [NCEA], and other sources). These sources are considered valid secondary sources and their values are used as they are in the Region 9 document.

**(d) Interpretation**

No COCs were identified for PRS-006(g). All maximum concentrations were below background levels for inorganics or were below PRGs. Based on this screening evaluation for human health, PRSs 16-006(g) is recommended for NFA.

### 2.4.2.2 Ecological

The ecological screening assessment for PRS 16-006(g) is provided in this section.

**(a) Scoping**

The scoping phase of the ecological screening assessment included a site visit and completion of an ecological scoping checklist and an ecological pathways conceptual exposure model (CEM). The site visit,

checklist, and CEM were used to determine the presence of ecological receptors and completeness of exposure pathways for ecological receptors. The scoping checklist and CEM are included in Appendix F, Section F-2.0.

PRS 16-006(g) is in an area that is mixed grassland and ponderosa pine habitat. As a result of excavation, removal of the drainline, and subsequent backfill of the excavated soil, the ground area above the drainline location is barren of vegetation and covered by mulch. V-Site borders areas of natural habitat with few developments, although PRS 16-006(g) is adjacent to the V-Site building complex. Ecological receptors are present in the vicinity of PRS 16-006(g), as sign of elk, deer, and fossorial (i.e., burrowing) mammals were observed during the site visit. No nesting habitat for threatened or endangered (T&E) species is on or near V-Site, although the area may be considered as within the medium frequency foraging range of the peregrine falcon (LANL 1999, 63130). This is not likely to present any risk to the falcon as the potential contamination is subsurface and complete exposure pathways are unlikely.

Potentially complete exposure pathways include incidental ingestion of soil by burrowing animals and uptake by plants. The incidental ingestion pathway is characterized as "unlikely", and the uptake by plants pathway as "minor" on the ecological scoping checklist (see Appendix F, Section F-2.0).

**(b) Screening Evaluation**

The COPCs identified in Section 2.3.4.5, Data Review, were further investigated using the following methodology:

- Those inorganic, organic, and radionuclide constituents whose maximum concentrations exceed BVs were compared to ESLs. ESLs are used in a fashion similar to human health PRGs, but differ in that ESLs are species- and food-chain-specific; thus, nine individual ESLs have been established for use at the Laboratory. Because uncertainty factors are used in the development of ESLs, some ESLs are below BVs. In those cases where the ESL is below the BV, it will be evaluated on a case by case basis. The use of ESLs is further discussed in Section 2.4.2.2 (c), "Uncertainty Analysis".

- The data are screened to ecologically relevant depths, to eliminate samples that are not in potential ecological exposure pathways. Ecologically relevant depths are defined as 0 to 5 ft below the surface. All PRS 16-006(g) data were screened to retain samples within 5 ft of the surface.

No COPCs at PRS 16-006(g) were retained as COECs following the ecological data screening. Table 2.4-2 shows the COPCs and the results of the ecological data screening.

**Table 2.4-2**
**Ecological COPC Analysis at PRS 16-006(g)**

| COPC Name | Location ID | Sample ID | Depth (ft) | Maximum Concentration (mg/kg) | Lowest ESL (Species:Value [mg/kg]) | Reason for Elimination / Retention |
|---|---|---|---|---|---|---|
| Methylene chloride | 16-3036 | 0316-97-1036 | 3–3.5 | 0.008 | deer mouse : 6.68 | Eliminated; <ESL |
| Tetrachloroethene | 16-3364 | 0316-98-0100 | 6–6.5 | 0.013(J) | deer mouse : 4.91 | Eliminated; depth, <ESL |
| Trichloroethene | 16-3364 | 0316-98-0100 | 6–6.5 | 0.007(J) | deer mouse : 2.50 | Eliminated; depth, <ESL |
| HMX | 16-3364 | 0316-98-0100 | 6–6.5 | 0.18 | deer mouse : 1.50 | Eliminated; depth, <ESL |

**Table 2.4-2**
**Ecological COPC Analysis at PRS 16-006(g) (continued)**

| COPC Name | Location ID | Sample ID | Depth (ft) | Maximum Concentration (mg/kg) | Lowest ESL (Species:Value [mg/kg]) | Reason for Elimination / Retention |
|---|---|---|---|---|---|---|
| RDX | 16-3364 | 0316-98-0100 | 6–6.5 | 0.191 | deer mouse : 5.19 | Eliminated; depth, <ESL |
| Acetone | 16-3364 | 0316-98-0100 | 6–6.5 | 0.004(J) | deer mouse : 1.85 | Eliminated; depth, <ESL |

### (c) Uncertainty Analysis

There are uncertainties inherent in all phases of ecological risk screening and assessment. Generally, these uncertainties are related to field sampling, laboratory analysis, the use of ESLs for data screening, and the subjective analyses of exposure pathways.

Both the sampling plan and the execution of field sampling were intended to characterize the nature and extent of potential contamination at the site. Sampling only in areas with less-than-maximum concentrations would result in an underestimate of potential risk; conversely, sampling only in areas exhibiting maximum concentrations would result in an overestimate of true ecological risk. Biasing the selection of sampling locations with field-screening helped ensure that samples were taken at locations with maximum contaminant concentrations. These sampling-related uncertainties have not had significant effect on the confidence of this ecological screening assessment.

The uncertainty associated with the laboratory analyses involves detection limits for some metals that were above the BVs (see Section 2.3.4.5, "Data Review", for a discussion of this issue). The uncertainty associated with the laboratory analyses is not likely to significantly affect the confidence of this ecological screening assessment.

The use of consistently derived ESLs is an important tool in ecological risk assessment. The Laboratory's ER Project Ecological Risk Team developed the ESLs used in this ecological screening assessment, and so the ESLs are the best available ecological screening tool for use at this site, although the ESLs are currently under review and are likely to be revised in mid-1999. The ESLs were derived with the following assumptions:

- the maximum chemical availability,
- the receptor receives all its exposure from the contaminated site,
- the minimum receptor weight, and
- the maximum receptor dietary-intake rates.

Each of these assumptions leads to an overestimate of potential risk. The assumption that an animal receptor receives all of its exposure at the point of the maximum detected concentration contrasts starkly with the reality of a receptor's exposure to the environment over its entire home range. This results in an estimate of a receptor's true exposure that may be significantly overestimated. On the other hand, ESLs do not account for additive or synergistic effects of contaminants, which may result in an underestimate of potential risk. Due to the extremely conservative nature of this model, these uncertainties are not expected to result in any underestimate of ecological risk that would significantly affect any ecological receptors or the environment.

The primary exposure pathways for ecological receptors are dietary intake, incidental ingestion of soil, plant uptake, and food web transport. Additional potential pathways include dermal contact with contaminated soil, inhalation of volatile constituents, inhalation of fugitive dust, and external irradiation. Of all these potential pathways, only the incidental ingestion of soil and plant uptake pathways were considered to be complete, and these were characterized as "unlikely" or "minor," respectively, because of the depths at which the contaminants were detected (3 ft or deeper). The characterization of the exposure pathways introduces another uncertainty into the screening assessment, but this uncertainty is not likely to significantly affect the interpretations made in the assessment.

**(d) Interpretation**

No COPCs are identified as COECs at PRS 16-006(g). This decision is based on the comparison of sampling data to BVs (Section 2.3.4.5, Data Review), screening against ESLs, and the unlikely receptor exposure pathways.

### 2.4.3 Risk Assessments

No risk assessments are necessary or required because no COPCs exceeded human health and/or ecological screening criteria at PRS 16-006(g).

### 2.4.4 Other Applicable Assessments

#### 2.4.4.1 Surface Water

PRS 16-006(g) was an underground septic tank that served Building 16-515. Because the PRS was a subsurface structure and received no surface water run-on or run-off, it was not evaluated for surface water concerns using LANL-ER-SOP 2.01, R0, "Surface Water Site Assessment". Both prior to and following the removal of the tank, there was no evidence of erosion at the site. The PRS is situated in a level field, and there is very little surface water run-on or run-off occurring at the PRS location. The area has a slight gradient that trends toward the east, and any surface water run-off from the site would enter a ponded area to the south east.

#### 2.4.4.2 Groundwater

Borehole R-25, currently being installed by the Laboratory's ER Project, will be used in part to assess intermediate depth and deep groundwater at TA-16. Groundwater was not directly assessed as part of the VCM conducted at PRS 16-006(g); however, it is unlikely that releases from these PRSs affected the uppermost perched horizon or any deeper groundwater zones. Contamination at all PRSs is confined to locations immediately beneath drainlines. Further, contamination is greatest in soils and is only sporadically present in the underlying tuff; all locations show a decreasing trend in contamination with depth. Finally, a persistent hydrologic driver to the spread of contamination was never present at any of the PRSs in this aggregate.

#### 2.4.4.3 Underground Storage Tanks

There have been no underground storage tanks at this PRS.

## 2.5 Conclusions and Recommendations

The objective of the VCM at PRS 16-006(g) was to implement an accelerated cleanup in conjunction with D&D of the septic tank and drainline. The cleanup strategy for the site included sampling in appropriate locations to detect the presence of any contamination, to remove contamination if it were present at levels greater than PRGs, and to bound the spatial extent of contamination by determining decreasing trends in remaining contaminant concentrations.

Initial site characterization was conducted as D&D personnel were removing the drainline and septic tank. Site investigation included initial screening/characterization sampling to define the nature of contamination, and upon evaluation of initial analytical results, sampling to bound the extent of contamination. Screening samples were taken from approximately uniformly distributed locations along the drainline and were sufficient for detecting leakage from the drainline. The data collected are adequate for defining the nature and extent of contamination and for determining the need for any further action at the site. Analyses for inorganic, organic, HE, and radioactive contamination showed the following:

- there were no inorganics above LANL BVs and/or in the range of BVs.
- uranium analyses at 16-006(g) are at variance with the Laboratory's site-wide uranium BV; however, uranium analyses at this site were all below the proposed TA-16 local BV of 3.85 mg/kg, (see Appendix E for development of TA-16 uranium BV in soils),
- HEs (HMX and RDX) were detected below the septic tank at 0.18 mg/kg and 0.191 mg/kg, respectively. Examination of adjacent samples revealed diminishing concentrations both laterally and vertically. The detected HMX and RDX were evaluated in human health and ecological screening assessments.
- Acetone, methylene chloride, tetrachloroethene, and trichloroethene were detected below the septic tank at low concentrations. In addition, methylene chloride was detected in one sample at the junction of the steel pipe and the VCP pipe at the drainline inlet. Evaluation of analytical results along the drainline showed a diminishing trend in all detected organic concentrations, both laterally and vertically.

The human health screening assessment showed that the HMX, RDX, and organics did not exceed their respective PRGs and a risk assessment was not performed. The ecological screening assessment compares detected HE and organic contamination concentrations to BVs and ESLs with consideration of the exposure pathway. In addition, at this PRS many exposure pathways are incomplete and receptor exposure is unlikely. The assessment identified no COECs.

Historical wastewater flow measurements are not available for the site; however, it is estimated that operations on the east end of Building 16-515 may have been conducted by as many as 15 people, yielding approximately 500 gal./day of effluent. The drain line and septic tank was not used after 1980, and was used very sparingly from the 1960's. No saturated soils or tuff, or other evidence of significant leakage or discharge from breaks in the septic tank or drainline were discovered during field investigations. The system was designed to discharge into PRS 16-029(x) so leakage through cracks or breaks would have been minimal. Today, based on the absence of apparent shallow, subsurface saturated zones, and gently sloping surface topography, there is believed to be no hydrological river to disperse any remaining contaminants at the site.

In conclusion, the fundamental requirement of the VCM Plan was met: to assess and, if necessary, clean up PRS 16-006(g) in relation to NMED-approved PRGs. Low levels of organic contaminants remaining in the soil have been "bounded", i.e. sampling data indicates that maximum concentrations at the source of contamination was removed and that remaining contaminant concentrations diminish with distance from the removed source. PRS 16-006(g) is recommended for NFA.

# 3.0 DRUM STORAGE AREA AGGREGATE [PRSS 16-029(g2) AND C-16-074]

## 3.1 Summary

The Drum Storage Area Aggregate is made up of one SWMU [PRS 16-029(g2)] and one AOC C-16-074. PRS 16-029(g2) is a shallow concrete structure 11-ft × 16-ft × 4-ft deep. It was built in 1944 and used for one year. It once contained a shaker table used to test HE assemblies for sensitivity to vibration. After it was backfilled with soil, AOC C-16-074, a waste drum storage pad, was constructed on the ground surface above the concrete vault. Based on the history of operations, we suspect the COPCs at this aggregate to be HE (specifically RDX and TNT), uranium, metals (especially barium and silver), VOCs, and SVOCs.

The objective of the VCM was to investigate the aggregated PRSs and determine the nature and extent of all detected contamination. No D&D activities took place at the sites because the structures were determined to be of historical significance. Additional details about characterization objectives are contained in Section 3.3.3, "Preliminary Conceptual Model."

The field team collected 15 samples and field screened them for metals, HE, VOCs, and radioactivity.

The VCM addendum stated, "Should screening results indicate that contaminants are below 50% of the cleanup levels, two biased samples will be collected from one of the borings for off-site laboratory analysis. The samples will be biased to soil that has screened above detection limits but below 50% of the cleanup levels for HE or metals. If no HE or metals are detected based on screening, the samples will be collected from the downgradient location" (LANL 1998, 63069, p.24).

In the absence of positive field-screening results, three laboratory samples (including one duplicate) were collected from the downgradient location (16-5820) and were analyzed for inorganics (including uranium), HE, VOCs, and SVOCs. Upon evaluation of analytical results, the field team collected an additional, deeper sample at this same location to bound the extent of contamination. One surface sample was collected and analyzed for uranium. Details of field activities are reported in Section 3.3.4 "Field Investigation and Remediation."

Three factors—isolated pockets of subsurface contaminants near BVs, limited amounts of soil water for dissolving and dispersing contaminants, and the absence of a persistent hydrologic driver to spread contamination—indicate minimal potential for contaminant migration. Details are included in Section 3.3.5, "Revised Site Conceptual Model."

During the human health screening assessment, contaminants above BVs or EQLs were compared to EPA's Region 9 PRGs for industrial workers. The contaminants, identified as COPCs, were below industrial PRGs; a human health risk assessment was not performed.

None of the COPCs identified at the Drum Storage Area Aggregate were retained as COECs because there are no complete exposure pathways for ecological receptors at the aggregate. Details of the human health risk screening assessment are reported in Section 3.4.2.1; details of the ecological screening assessment are included in Section 3.4.2.2.

Based on the human health and ecological screening assessments, PRSs 16-029 and C-16-074 are recommended for NFA.

## 3.2 Description and Operational History

The Drum Storage Area Aggregate is made up of one SWMU [PRS16-029(g2)] and one AOC (C-16-074). PRS 16-029(g2) is listed in Module VIII of the Laboratory's Hazardous Waste Facility Permit (EPA 1990, 01585).

### 3.2.1 Site Description

PRS 16-029(g2) was formerly pit TA-16-523. Engineering drawing ENG-C 1837 indicates that it was an 11-ft × 16-ft × 4-ft concrete structure located directly to the east of TA-16-517. The pit was built in 1944 and abandoned in place in 1945.

C-16-074 sits directly on top of 16-029(g2). It is a potential contamination source associated with a drum storage area located on the concrete pad east of TA-16-517. The pad is level, empty, and surrounded by the asphalt paving of the adjacent courtyard. Drainage from the courtyard flows north around TA-16-516 to a ditch leading east to the ditch along K-Site Road. Drainage from the drum storage area itself flows south.

### 3.2.2 Operational History

Pit TA-16-523 held a remote-controlled vibration table used for shake tests of a prototype for the Fat Man device. No radioactive materials were used in this pit and no incidents occurred here. A 1983 memo indicates that HE and beryllium were used at TA-16-523. The pit was eventually filled with dirt and covered with a concrete slab.

Although V-Site was used for many years as a general storage area at S-Site, no oil stains are present at C-16-074; only a few rust rings remain on the concrete pad. The SWMU Report states that drums containing residual HE-contaminated hydraulic oil were stored in this location (LANL 1990, 07512.1).

## 3.3 Investigatory and Remediation Activities

### 3.3.1 Summary

Section 3.3 describes the investigatory activities for the V-Site Drum Storage Area Aggregate consisting of PRSs 16-029(g2) and C-16-074. This section includes previous investigations (Section 3.3.2), the preliminary conceptual model that guided the RFI field work (Section 3.3.3), and the RFI field activities (Section 3.3.4). Section 3.3.4 contains information on D&D activities, VCM Plan requirements, remediation stages, and a review of the data. A site conceptual model will be revised, if appropriate, in Section 3.3.5 using the information gained during the RFI.

### 3.3.2 Previous Investigations

There have been no previous investigations performed at this Drum Storage Area Aggregate.

### 3.3.3 Preliminary Conceptual Model

This section presents the preliminary conceptual model of contaminant occurrence and distribution at PRSs 16-029(g2) and C-16-074. The conceptual model provides our best understanding of what contamination was released, if any; the distribution and location of releases; the potential transformation of the contaminants; and the potential translocation of the contaminants based on transport mechanisms, pathways, and chemical properties. The objectives of the model are to ensure (1) that samples are collected in appropriate locations, (2) that samples are analyzed for the correct potential contaminants, and (3) that all characterization and remediation objectives of the VCM are appropriate.

The conceptual model contains the assumptions used to guide the VCM sampling and cleanup design. The objectives of the sampling design are (1) to sample in appropriate locations to detect contamination, if it is present; (2) to bound the contamination; and (3) to determine decreasing trends in contaminant concentrations.

PRS 16-029(g2) is a concrete shaker pit that held a remote-controlled vibration table used for shake tests on the prototype of the Fat Man device. No radioactive materials were used in this pit and no incidents occurred here. The pit was eventually filled with soil and covered with a concrete pad which was used to

store waste drums at PRS C-16-074. The pad is level, presently empty, and surrounded by the asphalt paving of the adjacent courtyard. Historical evidence indicates that the drums contained HE-contaminated hydraulic oil. Drainage generally flows to the south and southeast. PRSs 16-029(g2) and C-16-074) are an aggregate because the drum storage area is located on top of the shaker pit.

Based on the history of operations at these buildings, and on the source of contamination, the suspected COCs at the aggregate include VOCs, SVOCs, inorganic chemicals (specifically barium and silver), HE (RDX and TNT), and uranium. Constituents of the potentially released VOCs, SVOCs, and HE may have partially degraded into other constituents that could be potential contaminants.

We hypothesize that the primary mechanisms for contaminant transport would be leakage of contaminants from cracks in the drum storage pad or shaker pit foundation and washing of contaminants from the drum storage pad surface into the subsurface soil. Snowmelt and rainfall may wash contaminants from the surface to the subsurface. The surface water may percolate to the subsurface and help move contaminants (primarily dissolved species) to greater subsurface depths. The secondary transport mechanism would be liquid and gaseous diffusion through the porous soil matrix.

The major (preferential) pathway for contaminant migration is vertical movement beneath the drum storage and shaker pit and horizontal migration along the soil/tuff interface. Contamination, if present, should be found directly beneath the concrete foundations. Downward migration of contaminants may naturally slow at the tuff interface. The interface itself should serve as a preferential channel for the contaminants due to the low permeability of tuff and the much greater permeability of the soil. Transport would then be dominated by flow along the soil/tuff interface in the downgradient direction. Vertical infiltration of liquids through the tuff would be more likely if the tuff is highly fractured.

The extent of potential translocation of contaminants is based mainly on solubility, adsorptivity, and transport mechanism flow rate. Most of the contaminants released at this PRS should have been primarily solubilized. The contaminants may have precipitated from solution or have been adsorbed onto silts, clays, and organic matter. The limiting factors for contaminant translocation are the mechanism flow rate and the diffusion rate. Due to the typical unsaturated flow conditions at the site, we expect infiltration, flow rates (permeability), and diffusion rates into the soil and tuff material to be low. Given the unsaturated conditions at this site, contaminants are not likely to move quickly or to travel far.

### 3.3.4 Field Investigation and Remediation

The goals of the VCM at the Drum Storage Area Aggregate were to conduct investigations and to clean up any contamination to approved levels. No D&D activities were conducted at this aggregate. All structures in the vicinity of the Drum Storage Area Aggregate were left in place due to their historical significance (Figure 3.3-1). ER Project personnel conducted all characterization and verification sampling activities.

Following the conceptual model, the field team collected samples from beneath the foundation of the shaker pit and downslope and downgradient from the aggregate. The samples were characterized by analysis for suspected COCs. The potential translocation of contamination was evaluated by sampling at vertical depths beneath the structures as well as sampling in the downslope direction.

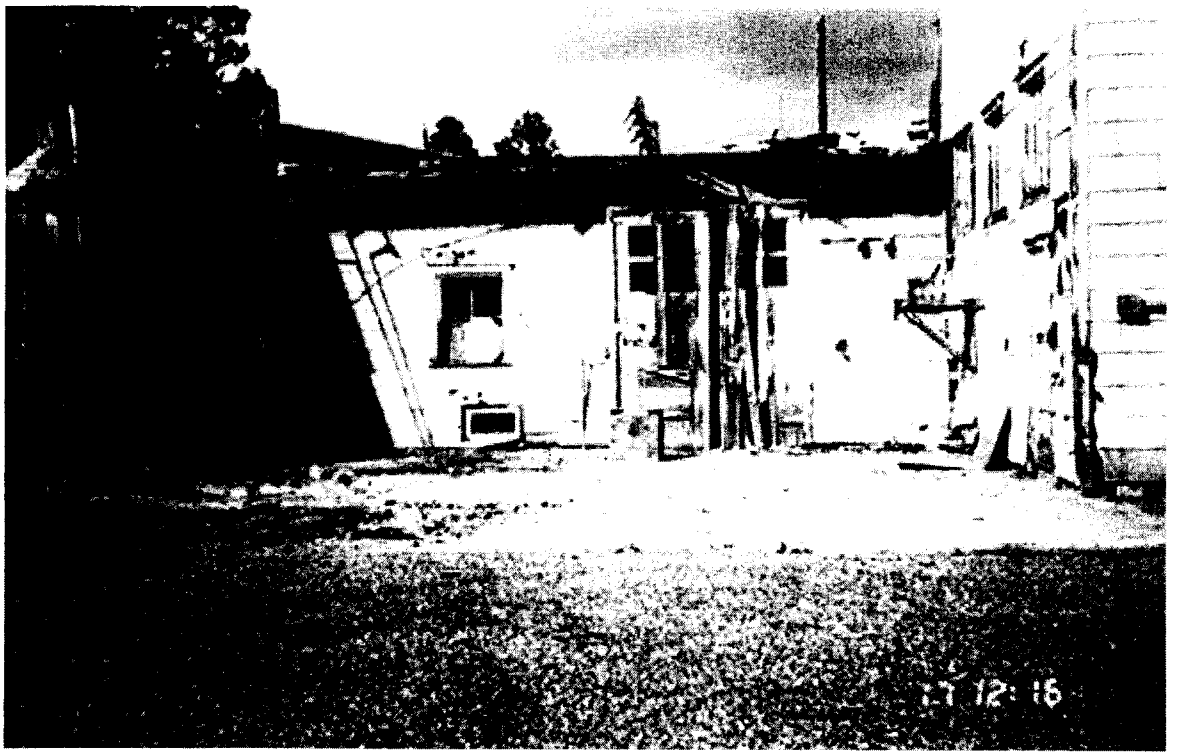

**Figure 3.3-1. Photograph of the Drum Storage Area Aggregate**

The field team used the following sampling equipment and SOPs.

- Surface samples were collected using LANL-ER-SOP-6.09, "Spade and Scoop Method for Collection of Soil Samples".
- Samples were screened in the field for HE and beta/gamma radioactivity using the HE spot test kit with modified Griess reagents (LANL-ER-SOP-10.06, R1, "High Explosive Spot Test") and a Ludlum 12 survey meter with pancake and air proportional detector (LANL-ER-SOP-10.07, R1, "Field Monitoring for Surface and Volume Radioactivity Levels").
- In the field chemistry trailer, the samples were analyzed further for RDX and TNT using a D-Tech immunoassay HE field-screening kit (EPA SW-846 Methods 4051 and 4050) and for 24 metals (listed in Appendix C) using a Tracor Northern Spectrace 9000 XRF (LANL-ER-SOP-10.08, R0 "Operation of the Spectrace 9000 Field-Portable X-Ray Fluorescence Instrument").
- The soil and tuff samples were described and logged in on the sample collection log forms (LANL-ER-SOP-01.04, R3, "Sample Control and Field Documentation").
- Drilling activities were conducted in accordance with LANL-ER-SOP-04.01, R1, "Drilling Methods and Drill Site Management".
- Samples were collected from boreholes using stainless steel split-spoon samplers according to LANL-ER-SOP-06.24, R0, "Sample Collection from Split Spoon and Shelby Tube Samplers."
- Vertical drilling was conducted using the Acker II drill rig.
- Angled boreholes were drilled using a modified Meta drill rig.

#### 3.3.4.1 D&D Activity

No D&D activities were performed at this aggregate due to historical preservation concerns.

#### 3.3.4.2 VCM Plan Requirements

For in situ field screening, the VCM plan specified the collection of samples from 2 ft intervals in 4 borehole locations within the Drum Storage Area Aggregate. This screening at the sample location consisted of screening for HE (with an HE spot test kit and a D-Tech kit), radioactivity (with a direct reading beta/gamma analyzer), and VOCs (with a PID10.2 evbulb). Samples were also screened in the on-site field chemistry trailer for metals (with an XRF) and HE (with a DTech Kit). The plan required that two laboratory samples be selected from the screening samples and submitted for off-site analysis.

The two PRSs in this aggregate were to be sampled together because the C-16-074 drum storage area is essentially on top of the 16-029(g2) shaker test pit. The strategy for sampling these PRSs was revised from the RFI work plan to detect the presence of subsurface contamination with the structures in place.

Selection of the laboratory samples was to be biased to soil that screened above detection levels and below 50% cleanup levels (for HE or metals). If no HE or metals were detected, based on screening, then the samples were to be collected from the downgradient location.

If field-screening results indicated that contaminants were (1) present above 50% of the cleanup levels for HE and metals (as shown in Table 3.3-1), (2) greater than two times the background concentrations of radioactivity, or (3)greater than 0 ppm for VOCs, that soil was to be excavated until results were no longer above these criteria. Table 3.3-1 presents the soil cleanup levels according to the approved VCM plan (LANL 1997, 55653). The EPA Region 9 PRGs for industrial soil were used as cleanup levels for the VCM activities. Note that some of the PRGs have changed in the Region 9 database since they were included in the approved VCM plan.

**Table 3.3-1**
**Approved Soil Cleanup Levels for V-Site VCM**

| Chemical | Cleanup Level (mg/kg) | Rationale |
|---|---|---|
| Barium | 11000 | HI[a] = 0.1 |
| Beryllium | 11 | Risk = $10^{-5}$[b] |
| Cadmium | 85 | HI = 0.1 |
| Chromium (total) | 450 | Risk = $10^{-6}$ |
| Copper | 6300 | HI = 0.1 |
| Cyanide | 1400 | HI = 0.1 |
| DNB mixture | 6.8 | HI = 0.1 |
| DNT mixture | 2.8 | Risk = $10^{-6}$ |
| HMX | 3400 | HI = 0.1 |
| Lead | 1000 | EPA Region VI guidance |
| Nickel | 3400 | HI = 0.1 |
| RDX | 17 | Risk = $10^{-6}$ |
| Silver[c] | 940 | HI = 0.1 |
| TNB | 3.4 | HI = 0.1 |
| TNT | 64 | Risk = $10^{-6}$ |

[a] HI = hazard index for noncarcinogens

[b] The VCM Plan states that, for beryllium, the $10^{-5}$ risk level is used "...to establish a threshold above the background concentration range for this metal." (LANL 1997, 55653.2)

[c] Cleanup level was not listed in the V-site VCM plan. Information is included here for completeness.

### 3.3.4.3 Remediation Stage I

This section presents a discussion of the remedial activities including field-screening, characterization, and sampling. Table 3.3-2 lists all analytical samples and the analytical suites associated with each sample. The individual analytes that make up each suite can be found in Appendix D.

**Table 3.3-2**
**Summary of Drum Storage Area Aggregate Samples Collected for Fixed-Laboratory Analysis[a]**

| Location ID | Sample ID | Sample Type | Depth (ft) | Media | Boron | HE | Inorganic Chemicals | SVOCs | Uranium | VOCs | Cyanide |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-5820 | RE16-98-0041 | grab | 2–4 | QBT4 | NA[b] | 4379R | 4378R | 4377R | 4380R | 4377R | 4378R |
| 16-5820 | RE16-98-0042 | duplicate, split | 4–6 | QBT4 | 4378R | 4379R | 4378R | 4377R | 4380R | 4377R | NA |
| 16-5820 | RE16-98-0045 | duplicate, split | 4–6 | QBT4 | 4378R | 4379R | 4378R | 4377R | 4380R | 4377R | NA |
| 16-5820 | RE16-99-0022 | grab | 10–11 | QBT4 | NA | NA | 5461R | NA | NA | NA | NA |
| 16-5820 | RE16-99-0013 | grab | 0–0.5 | soil | NA | NA | NA | NA | 5211R | NA | NA |
| 16-5820 | RE16-99-0006 | grab | 0–0.5 | QBT4 | NA | NA | 5210 R | NA | NA | NA | NA |

[a] Numbers in the cells for each analytical suite are request numbers.

[b] NA = Not applicable.

Sampling activities were conducted at PRSs 16-029(g2) and C-16-074 from June 11, 1998, to August 20, 1998, according to the revised strategy in the V-Site VCM SAP addendum (LANL 1996, 63069). A total of 17 screening samples were collected from 8 boreholes. Soil and tuff were collected from the boreholes at 2 ft intervals using split-spoon samplers. Fifteen samples were screened for in situ parameters for metals (using XRF), and for HE (using a D-Tech kit). A total of 7 laboratory samples were collected and submitted for off-site analysis. In an attempt to sample directly below the shaker pit, 3 boreholes were jackhammered through the shaker pit cover. However, the jackhammer was not able to penetrate through the thick concrete floor of the pit which was approximately 3.5 ft below grade. Samples were collected from these three boreholes (16-3815, 16-3816, and 16-3817) in order to screen beneath the drum storage area. The field management team decided to drill 45° angle holes directly south of the pit in order to collect samples from approximately 2 ft below the bottom of the pit. Boreholes 16-5821, 16-5822, and 16-5823 were the angled boreholes sited along the southern shaker pit. Boreholes 16-5818 and 16-5820 were vertical boreholes sited downgradient (southeast) of the shaker pit and drum storage area. Figure 3.3-2 presents the sampling locations, Figure 3.3-3 is a photograph of angled drilling at the site.

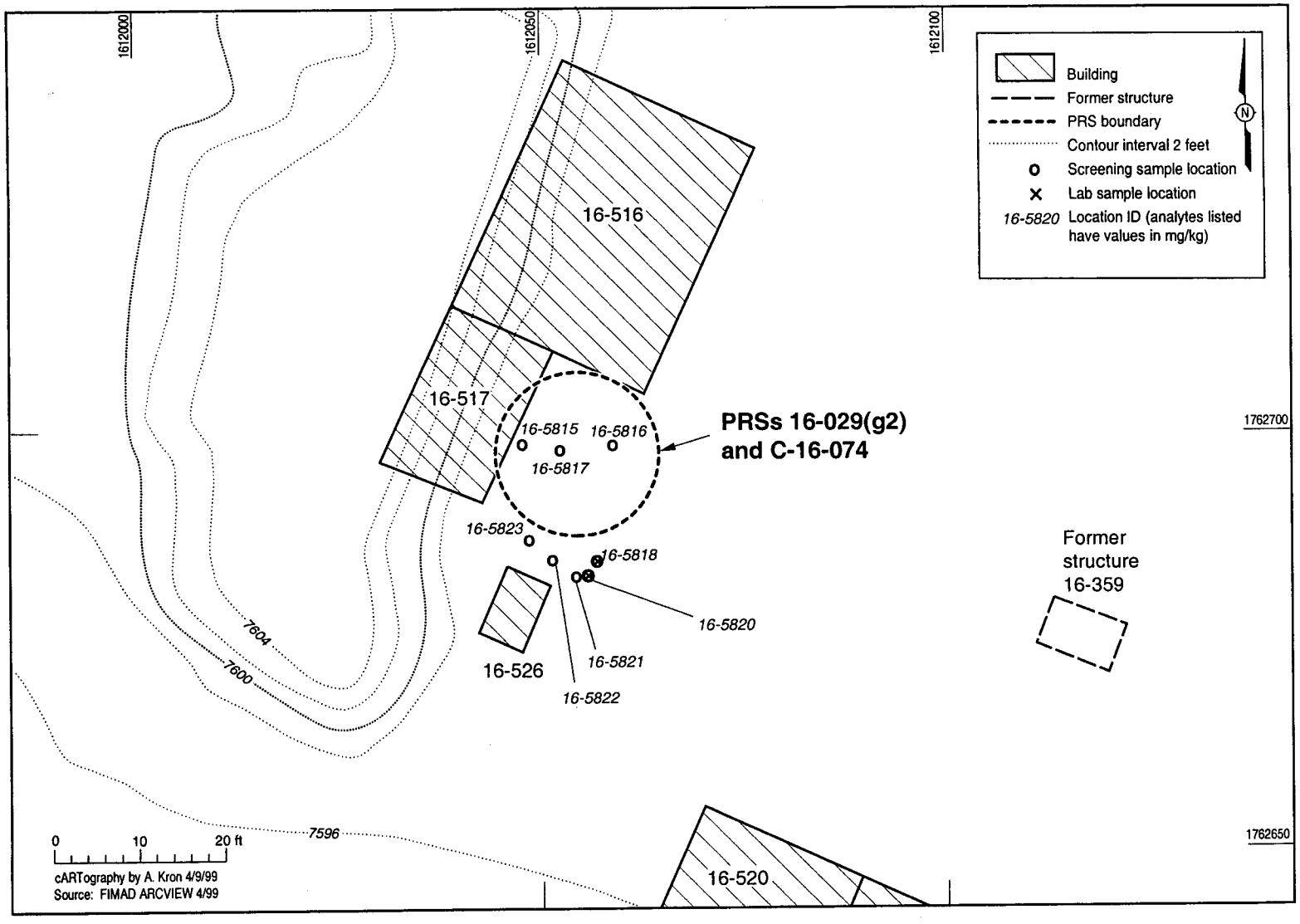


**Figure 3.3-2. Sampling locations and detected analytes for PRSs 16-029(g2) and C-16-074**

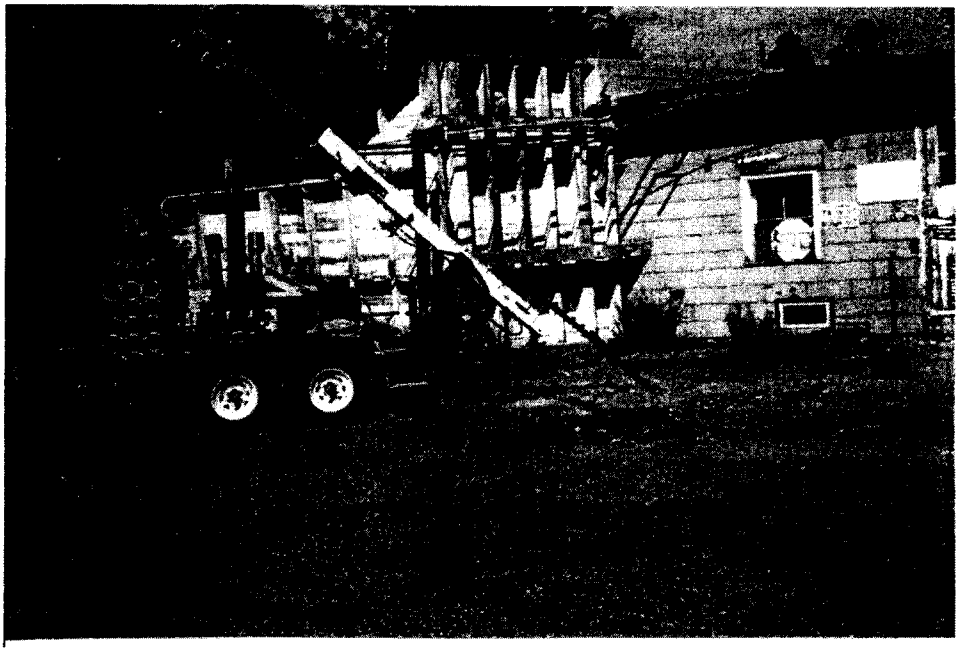

**Figure 3.3-3. Photograph of angled drilling at PRSs 16-029(g2) and C-16-074**

Per the VCM plan addendum (LANL 1996, 63069), the soil samples were collected from beneath the shaker pit and downgradient from the pit and drum storage area. In the absence of positive field-screening results, the laboratory samples were collected from the downgradient location: 16-5818. Two laboratory samples (RE16-98-0035 and RE16-98-0036) were collected from this borehole. The samples arrived at the off-site laboratory at a temperature greater than 4°C and were therefore deemed unusable.

New samples (RE16-98-0041 and RE16-98-0042) were collected from a borehole directly south and downgradient from the original borehole (at location 16-5820) and submitted for laboratory analysis. An additional laboratory sample (RE16-98-0045) was submitted as a duplicate split of RE16-98-0042 to investigate laboratory reproducibility. The laboratory samples were submitted to an off-site laboratory for inorganics, HE, VOC, SVOC, and uranium analyses.

After evaluating the results of these initial laboratory samples, ER Project personnel determined that a bounding sample needed to be collected at location 16-5820 to define a decreasing trend in metals contamination. The field team re-mobilized and collected a vertical bounding sample (RE16-99-0006) at location 16-5820. The sample was not screened for metals or HE. It was submitted directly to the off-site laboratory and analyzed for a limited suite of inorganics. An additional surface sample (RE16-99-0013, location 16-5280) was collected from this same location and analyzed for uranium to address concerns regarding background uranium concentrations. Tables 3.3-3 and 3.3-4 present sampling information and field-screening results. The metals listed in Table 3.3-4 are the COCs that were identified and presented in the VCM plan. Note that beryllium is a COC, however, this metal is not detected by the XRF.

**Table 3.3-3**
**Sampling Information for Drum Storage Area Aggregate**

| Screening Sample ID | Location ID | Depth (ft)[a] | Matrix | Sample Location | Date Collected | Laboratory Sample |
|---|---|---|---|---|---|---|
| RE16-98-1185 | 16-5815 | 0–2 | Soil (sandy clay) | SW borehole within the shaker pit | 6/11/98 | NA[b] |
| RE16-98-1186 | 16-5815 | 2–2.5 | Soil (sandy clay) | SW borehole within the shaker pit | 6/11/98 | NA |
| RE16-98-1187 | 16-5816 | 0–2 | Soil (sandy clay) | NE borehole within the shaker pit | 6/11/98 | NA |
| RE16-98-1188 | 16-5816 | 2.3–2.5 | Soil (sandy clay) | NE borehole within the shaker pit | 6/11/98 | NA |
| RE16-98-1189 | 16-5817 | 0–2 | Soil (sandy clay) | Center borehole within the shaker pit | 6/12/98 | NA |
| RE16-98-1190 | 16-5817 | 2–2.6 | Soil (sandy clay) | Center borehole within the shaker pit | 6/12/98 | NA |
| RE16-98-1191 | 16-5818 | 0–2 | Soil (sand/silt/clay) | Downgradient and SE of shaker pit | 6/12/98 | NA |
| RE16-98-1192 | 16-5818 | 2–4 | Qbt/clay/ sand | Downgradient and SE of shaker pit | 6/12/98 | RE16-98-0035 |
| RE16-98-1193 | 16-5818 | 4–4.83 | Qbt | Downgradient and SE of shaker pit | 6/12/98 | RE16-98-0036 |
| RE16-98-1194 | 16-5818 | 4.83–7 | Qbt | Downgradient and SE of shaker pit | 6/12/98 | NA |
| RE16-98-1195 | 16-5820 | 2–4 | Qbt | Downgradient and SE of pit, directly south of 16-5818 | 6/26/98 | RE16-98-0041 |
| RE16-98-1196 | 16-5820 | 4–6 | Qbt | Downgradient and SE of pit, directly south of 16-5818 | 6/26/98 | RE16-98-0042 RE16-98-0045 (Duplicate split) |
| RE16-99-0006 | 16-5820 | 7.6–8.0 | Qbt | Downgradient and SE of pit, directly south of 16-5818 | 2/10/99 | RE16-99-0006 |
| RE16-99-0013 | 16-5820 | 0–0.5 | Sand | Downgradient and SE of pit, directly south of 16-5818 | 2/11/99 | RE16-99-0013 |
| RE16-98-1197 | 16-5821 | 5.5–5.9 | Qbt | Eastern-most angled borehole, south of pit | 7/14/98 | NA |
| RE16-98-1198 | 16-5822 | 5.5–5.9 | Qbt | Center angled borehole, south of pit | 7/16/98 | NA |
| RE16-98-1095 | 16-5823 | 6.5–7 | Qbt | Western-most angled borehole, south of pit | 8/20/98 | NA |
| RE-16-99-0022 | 16-5820 | 10–11 | Qbt | Downgradient and SE of pit, directly south of 16-5818 | 4/8/99 | RE-16-99-0022 |

[a] Depths from surface grade.

[b] NA = Not applicable.

**Table 3.3-4**
**Field-Screening Results for Drum Storage Area Aggregate**

| Sample # | HE Spot Test | D-Tech RDX (mg/kg) | D-Tech TNT (mg/kg) | Silver (mg/kg) | Barium (mg/kg) | Chromium (mg/kg) | Copper (mg/kg) | Nickel (mg/kg) | Lead (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|
| RE16-98-1185 | Negative | <0.5 | <0.5 | 80 ± 18 | 538 ± 8 | ND[a] | ND | ND | ND |
| RE16-98-1186 | Negative | <0.5 | <0.5 | 86 ± 18 | 591 ± 8 | ND | ND | ND | ND |
| RE16-98-1187 | Negative | <0.5 | <0.5 | 97 ± 17 | 579 ± 8 | ND | ND | ND | ND |
| RE16-98-1188 | Negative | <0.5 | <0.5 | 92 ± 18 | 590 ± 8 | ND | ND | ND | ND |
| RE16-98-1189 | Negative | <0.5 | <0.5 | ND | 590 ± 8 | ND | 82 ± 23 | ND | ND |
| RE16-98-1190 | Negative | <0.5 | <0.5 | 70 ± 17 | 514 ± 8 | ND | ND | ND | ND |
| RE16-98-1190 Duplicate | NA[b] | NA | NA | 90 ± 17 | 510 ± 8 | ND | 84 ± 23 | ND | ND |
| RE16-98-1191 | Negative | <0.5 | <0.5 | 28 ± 14 | 441 ± 7 | ND | ND | ND | ND |
| RE16-98-1192 | Negative | <0.5 | <0.5 | 48 ± 15 | 404 ± 7 | ND | ND | ND | ND |
| RE16-98-1193 | Negative | <0.5 | <0.5 | 41 ± 14 | 272 ± 6 | ND | ND | ND | ND |
| RE16-98-1194 | Negative | <0.5 | <0.5 | 37 ± 15 | 273 ± 6 | ND | ND | ND | ND |
| RE16-98-1195 | Negative | <0.5 | <0.5 | 63 ± 15 | 290 ± 6 | ND | ND | ND | ND |
| RE16-98-1196 | Negative | <0.5 | <0.5 | 46± 15 | 255 ± 5 | ND | ND | ND | ND |
| RE16-98-1196 Duplicate | NA | NA | NA | ND | 263 ± 6 | ND | ND | ND | ND |
| RE16-99-0006 | Negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-99-0013 | Negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-1197 | Negative | <0.5 | <0.5 | 67 ± 15 | 318 ± 6 | ND | 67 ± 22 | ND | ND |
| RE16-98-1197 Duplicate | NA | NA | NA | ND | 317 ± 6 | ND | 70 ± 22 | ND | ND |
| RE16-98-1198 | Negative | <0.5 | <0.5 | 114 ± 18 | 371 ± 7 | ND | 60 ± 23 | ND | ND |
| RE16-98-1198 Duplicate | NA | NA | NA | 81 ± 18 | 356 ± 7 | ND | ND | ND | ND |
| RE16-98-1095 | Negative | <0.5 | <0.5 | 84 ± 14 | 255 ± 5 | ND | 97 ± 23 | ND | ND |
| RE16-98-1095 Duplicate | Negative | <0.5 | <0.5 | 46 ± 14 | 258 ± 5 | ND | 80 ± 22 | ND | ND |

[a] ND = Non-detect.

[b] NA = Not applicable.

The concentrations of silver based on XRF screening are reported in Table 3.3-4. These silver results are greater than three times the standard deviations; however, these values are considered to be artifacts due to fluorescence of the mercury iodide detector. The peak associated with the iodine (from the detector) is close to that of silver, resulting in an overlap of the two peaks. This results in a decrease in resolution and a higher detection limit for silver. Because these values are close to the reported detection limit for silver (50 mg/kg), the values may not be reliable.

All field-screening results for radionuclides were at less than two times background and VOCs were not detected. The field screening results indicate that there is no radioactivity and no vapor phase VOC plume at the site. In addition, there are no indications of staining or organic odors that might suggest leaks or spills of solvents.

Three deviations were made from the VCM work plan addendum:

1. The field team drilled 8 boreholes, rather than the required four. Three boreholes resulted from unsuccessful attempts to drill through the shaker pit, but provided screening information for contaminants that may have leaked through the concrete drum storage area. One extra downgradient borehole was drilled when the initial set of samples had to be re-collected.

2. The field team collected 4 laboratory samples rather than the required 2. One extra sample was collected to bound contamination by determining a decreasing trend in metals contamination. An additional sample was collected to better characterize uranium concentrations at the aggregate site.

3. The field team drilled the boreholes to shallower depths than suggested in the addendum because the actual depth of the shaker pit was shallower than anticipated.

#### 3.3.4.4 Remediation Stage II

No contaminated soil was removed, so site characterization and bounding samples served to verify that PRGs were achieved.

#### 3.3.4.5 Data Review

All data discussed in the body of this report are also discussed in Appendixes C and D of this report. Appendix C provides an assessment of the data quality. Appendix D provides a list of analytical results and the analytes that make up the analytical suites. The complete data set has been submitted to the AA in electronic format. Tables in this section include all detected values and some undetected values. All analytical results were validated by the Laboratory's ER Project routine validation protocol, with the exception of boron results which received no baseline validation. Boron is not part of the regular target analyte list (TAL) metal suite. Therefore, the Laboratory's ER Project does not require boron data to receive baseline validation. Focused validation was conducted on boron results when possible. All non-rejected data are usable for decision-making purposes and adequate for evaluating a potential release. Qualifiers on the data indicate if error or bias on the data must be considered while using the data. Qualified data are acceptable to use, as long as the qualifications on the data are considered.

**(a) Inorganic Chemical Comparison to Background**

All inorganic results are compared to the LANL background data set (Ryti et al. 1998, 59730). BVs are applied to the data based upon the soil horizon the sample was collected from. Table 3.3-5 lists all the frequency of detected analytes at the Drum Storage Area Aggregate, the range of detected levels, and what soil horizons the samples originated in. Table 3.3-6 compares detected inorganic chemicals with the associated BV.

**Table 3.3-5**
**Frequency of Detected Inorganic Chemicals in Drum Storage Area Aggregate Verification Samples**

| Analyte | Media | Number of Samples Analyzed | Number of Detects | Concentration Range (mg/kg)[a] | BV (mg/kg) | Frequency of Detects Above BV[b] |
|---|---|---|---|---|---|---|
| Aluminum | Qbt4 | 4 | 3 | 1900–4600 | 7300 | 0/3 |
| Arsenic | Qbt4 | 4 | 3 | 2.2–2.5 | 2.79 | 0/3 |
| Barium | Qbt4 | 5 | 4 | 7–48 | 46 | 1/4 |
| Calcium | Qbt4 | 4 | 3 | 780–1100 | 2200 | 0/3 |
| Chromium (total) | Qbt4 | 5 | 4 | 0.48–91 | 7.14 | 3/4 |

**Table 3.3-5**
**Frequency of Detected Inorganic Chemicals in Drum Storage Area Aggregate Verification Samples (continued)**

| Analyte | Media | Number of Samples Analyzed | Number of Detects | Concentration Range (mg/kg)[a] | BV (mg/kg) | Frequency of Detects Above BV[b] |
|---|---|---|---|---|---|---|
| Copper | Qbt4 | 5 | 4 | 0.36–25 | 4.66 | 3/4 |
| Cyanide (total) | Qbt4 | 1 | 0 | [0.56] | 0.5[c] | (DL/BV) 0/1[d] |
| Iron | Qbt4 | 4 | 3 | 5500–7100 | 14,500 | 0/3 |
| Lead | Qbt4 | 4 | 3 | 2.1–4.1 | 11.2 | 0/3 |
| Magnesium | Qbt4 | 4 | 3 | 210–560 | 1690 | 0/3 |
| Manganese | Qbt4 | 4 | 3 | 180–250 | 482 | 0/3 |
| Mercury | Qbt4 | 4 | 0 | [0.11] | 0.1 | DL>BV (3/3)[d] |
| Nickel | Qbt4 | 5 | 3 | 1.2–22 | 6.58 | 2/4 |
| Potassium | Qbt4 | 4 | 3 | 600–960 | 3500 | 0/3 |
| Selenium | Qbt4 | 4 | 0 | [1.1] | 0.3 | DL>BV (3/3)[d] |
| Silver | Qbt4 | 4 | 0 | [2.1–2.2] | 1 | DL>BV (3/3)[d] |
| Sodium | Qbt4 | 4 | 3 | 230–670 | 2770 | 0/3 |
| Uranium | Qbt4 | 3 | 0 | [16.7–19.5] | 2.4 | DL>BV (3/3)[d] |
| | Soil | 1 | 1 | 1.0 | 1.82 | 0/1 |
| Vanadium | Qbt4 | 4 | 3 | 2.6–6.1 | 17 | 0/3 |
| Zinc | Qbt4 | 4 | 3 | 29–38 | 63.5 | 0/3 |

[a] Brackets indicate the value is below detection limits.

[b] Value is the ratio of values exceeding the BV to the number of non-rejected analyses.

[c] There is no BV for cyanide in soil.The listed value is a nominal BV obtained from the detection limit for cyanide analysis in the background study (Ryti et al. 1998, 59730).

[d] The detection limit for this analyte exceeded the BV.

**Table 3.3-6**
**Inorganic Chemicals with Concentrations at or Exceeding Soil BVs in Drum Storage Area Aggregate Verification Samples**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | BV (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|---|
| Barium | 16-5820 | RE16-98-0041 | 48 | 46 | Qbt 4 | 2–4 |
| Chromium (total) | 16-5820 | RE16-98-0041 | 14(J) | 7.14 | Qbt 4 | 2–4 |
| | 16-5820 | RE16-98-0042 | 91(J) | 7.14 | Qbt 4 | 4–6 |
| | 16-5820 | RE16-98-0045 | 36(J) | 7.14 | Qbt 4 | 4–6 |
| Copper | 16-5820 | RE16-98-0041 | 20(J) | 4.66 | Qbt 4 | 2–4 |
| | 16-5820 | RE16-98-0042 | 25(J) | 4.66 | Qbt 4 | 4–6 |
| | 16-5820 | RE16-98-0045 | 12(J) | 4.66 | Qbt 4 | 4–6 |
| Cyanide (total) | 16-5820 | RE16-98-0041 | [0.56][b] | 0.5 | Qbt 4 | 2–4 |
| Mercury | 16-5820 | RE16-98-0041 | 0.11(U) | 0.1 | Qbt 4 | 2–4 |
| | 16-5820 | RE16-98-0042 | 0.11(U) | 0.1 | Qbt 4 | 4–6 |
| | 16-5820 | RE16-98-0045 | 0.11(U) | 0.1 | Qbt 4 | 4–6 |

**Table 3.3-6**
**Inorganic Chemicals with Concentrations at or Exceeding Soil BVs in Drum Storage Area Aggregate Verification Samples (continued)**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | BV (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|---|
| Nickel | 16-5820 | RE16-98-0042 | 22(J) | 6.58 | Qbt 4 | 4–6 |
| | 16-5820 | RE16-98-0045 | 9.1(J) | 6.58 | Qbt 4 | 4–6 |
| Selenium | 16-5820 | RE16-98-0041 | 1.1(UJ) | 0.3 | Qbt 4 | 2–4 |
| | 16-5820 | RE16-98-0042 | 1.1(UJ) | 0.3 | Qbt 4 | 4–6 |
| | 16-5820 | RE16-98-0045 | 1.1(UJ) | 0.3 | Qbt 4 | 4–6 |
| Silver | 16-5820 | RE16-98-0041 | 2.2(UJ) | 1 | Qbt 4 | 2–4 |
| | 16-5820 | RE16-98-0042 | 2.1(UJ) | 1 | Qbt 4 | 4–6 |
| | 16-5820 | RE16-98-0045 | 2.1(UJ) | 1 | Qbt 4 | 4–6 |
| Uranium | 16-5820 | RE16-98-0041 | 17.7(U) | 2.4 | Qbt 4 | 2–4 |
| | 16-5820 | RE16-98-0042 | 16.7(U) | 2.4 | Qbt 4 | 4–6 |
| | 16-5820 | RE16-98-0045 | 19.5(U) | 2.4 | Qbt 4 | 4–6 |

[a] Data qualifier flags are defined in the glossary, Appendix A-2.

[b] Brackets indicate the value is below detection limits.

PRSs 16-029(g2) and C-16-074 were analyzed for TAL metals, cyanide, and boron. Boron was analyzed at these PRSs because boracitol, a boron-containing explosive, may have been used at this aggregate. Boron results were not validated during the routine validation process because boron is not a component of the TAL metal suite. Boron is analyzed in a manner similar to the rest of the TAL metals suite. All the inorganic analyses were acceptable with minor quality issues and no obvious QA/QC problems were associated with the boron analysis, so there is no reason to believe that the boron results would have different data quality than the rest of the inorganic analytes. Therefore, the boron results are considered acceptable for decision-making purposes.

Although no LANL-specific BV is available for boron, a general US BV was derived from literature values for US boron values in tuff. Boron values, taken from melt inclusions in the Plinian tephra of the Lower Bandelier Tuff, range from 7 to 32 mg/kg, with a mean value of 24 mg/kg (Dunbar and Hervig 1992, 62893). Samples 0316-98-0042 and 0316-98-0045 contain undetected amounts of boron at 27 mg/kg and 26 mg/kg respectively, which is within the range of average tuff boron concentrations.

Some of the inorganic results were qualified due to low spike recoveries. Silver, cobalt, nickel, selenium, zinc, manganese, chromium, and arsenic were qualified due to poor spike recoveries of 68–74%, although cobalt and arsenic had recoveries of 32% and 34%, respectively. Most of these results are close to the acceptable limit of 75%; therefore, the poor spike recoveries have little impact on the results. Although the cobalt and arsenic results have more error associated with them due to lower spike recoveries, all the elements were qualified because of the spike recovery results. Silver, cobalt, nickel, and selenium were undetected and qualified as UJ. The remaining elements were detected and qualified as estimated with a low bias.

Because of unacceptably low spike recoveries, antimony results were rejected. This is not an uncommon occurrence: antimony can be difficult to extract and analyze due to its chemical properties. All antimony results obtained from 1998 samples were rejected. So, in 1999, another sample was collected and analyzed for antimony. Antimony was detected at 0.17 mg/kg. This result was qualified as having a low bias because the spike recovery was 59%, below the acceptable limit of 75%. However, even if the low bias

were factored in, the result would still not be above the BV of 0.5 mg/kg. This suggests that antimony is not present at levels above BV at this aggregate.

Using a detection limit of 0.11, mercury was undetected in all samples. This detection limit is slightly higher than the BV value of 0.1, but not unreasonable for the method used. These results do not indicate that mercury has been released at this site, however mercury will be carried forward into screening assessment.

Using detection limits of 2.1 – 2.2 mg/kg, silver was undetected in all three 1998 samples. This range is higher than the silver BV of 1 mg/kg. The silver results were qualified as estimated because of deviation below the acceptable limit for spike recovery. This is not an uncommon problem because silver can be difficult to measure using this method. The detection limit of approximately 2 mg/kg is satisfactory. The data can be used to state that silver has not been released at this site; however, silver will be carried forward into screening assessment.

Only one sample was analyzed for cyanide. Cyanide was not detected and there were no QA/QC problems associated with the cyanide analysis, which had adequate detection limits based on the method used. There is no BV for cyanide in soils. The nominal BV for cyanide (0.5 mg/kg) is the detection limit for cyanide analysis in the background study (Ryti et al. 1998, 59730). The one cyanide result from a sample associated with the Drum Storage Area Aggregate was undetected at 0.56 mg/kg, a value which is very near the BV of 0.5 mg/kg. There have been no detected cyanide values at V-Site. This supports the data as they show that no leakage of cyanide occurred at this aggregate. However, cyanide will be carried forward into screening assessment because the detection limit of one cyanide analysis that was greater than the nominal BV.

Selenium was undetected in all samples. However, the detection limit was 1.1 mg/kg, which is above the BV for selenium of 0.3. These data were qualified as UJ indicating that there is some error associated with the result. This is because the chemical properties of selenium can make it difficult to measure using this method (EPA SW-846 Method 6010B/3050A). Difficulties during analysis can lead to elevated detection limits. Selenium was analyzed in accordance with the approved sampling plan and with approved method. There is no significant evidence that selenium was released at V-Site; however, selenium will be carried forward into the screening assessment.

Sample RE16-99-0006 (in request 5210R) was rejected because of very poor duplicate recoveries for almost every element.

Samples were analyzed for uranium using a partial sample digestion similar to SW-846 Method 3050 and analysis method SW-846 Method 6020. There were no QA/QC problems associated with the analysis. All uranium results were undetected. However, the analytical laboratory used the inductively coupled plasma emission spectroscopy method (ICPES) with detection limits approximately 20–50 times higher than contractually required. As a result, the uranium values obtained in 1998 did not provide sufficient information for locating and characterizing a potential release. In 1999, uranium analyses with better detection limits were performed. These results show that the uranium concentration in V-Site samples does not differ statistically from other samples collected around TA-16. Therefore, uranium will not be carried forward into screening assessment.

With the exception of the rejected results, all inorganic results are usable for determining if contamination releases occurred at this site. Table 3.3-7 lists the inorganic chemicals that will be carried forward into screening assessment. Figure 3.3-4 indicates the locations of the samples containing these chemicals.

**Table 3.3-7**
**Results of Inorganic Data Review of Drum Storage Area Aggregate Samples**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Antimony | Qbt 4 | Eliminated | The only non-rejected result was below the BV. |
| Barium | Qbt 4 | Retained | Two of four samples had values above the BV. |
| Boron | Qbt 4 | Eliminated | All results are undetected within the range of average boron concentrations in tuff found in the US. |
| Chromium | Qbt 4 | Retained | One sample significantly exceeded BV. |
| Copper | Qbt 4 | Retained | All samples were above the BV. |
| Cyanide | Qbt 4 | Retained | The only cyanide analytical result was undetected at a level above the BV. |
| Mercury | Qbt 4 | Retained | Not detected in any sample at levels very near the BV |
| Nickel | Qbt 4 | Retained | One sample exceeded the BV. |
| Selenium | Qbt 4 | Retained | Undetected in all samples, although the detection limit was above the BV |
| Silver | Qbt 4 | Retained | Undetected in all samples although the detection limit was above the BV. |
| Uranium | Qbt 4 | Eliminated | The 1999 sample indicates uranium levels are below the BV. |

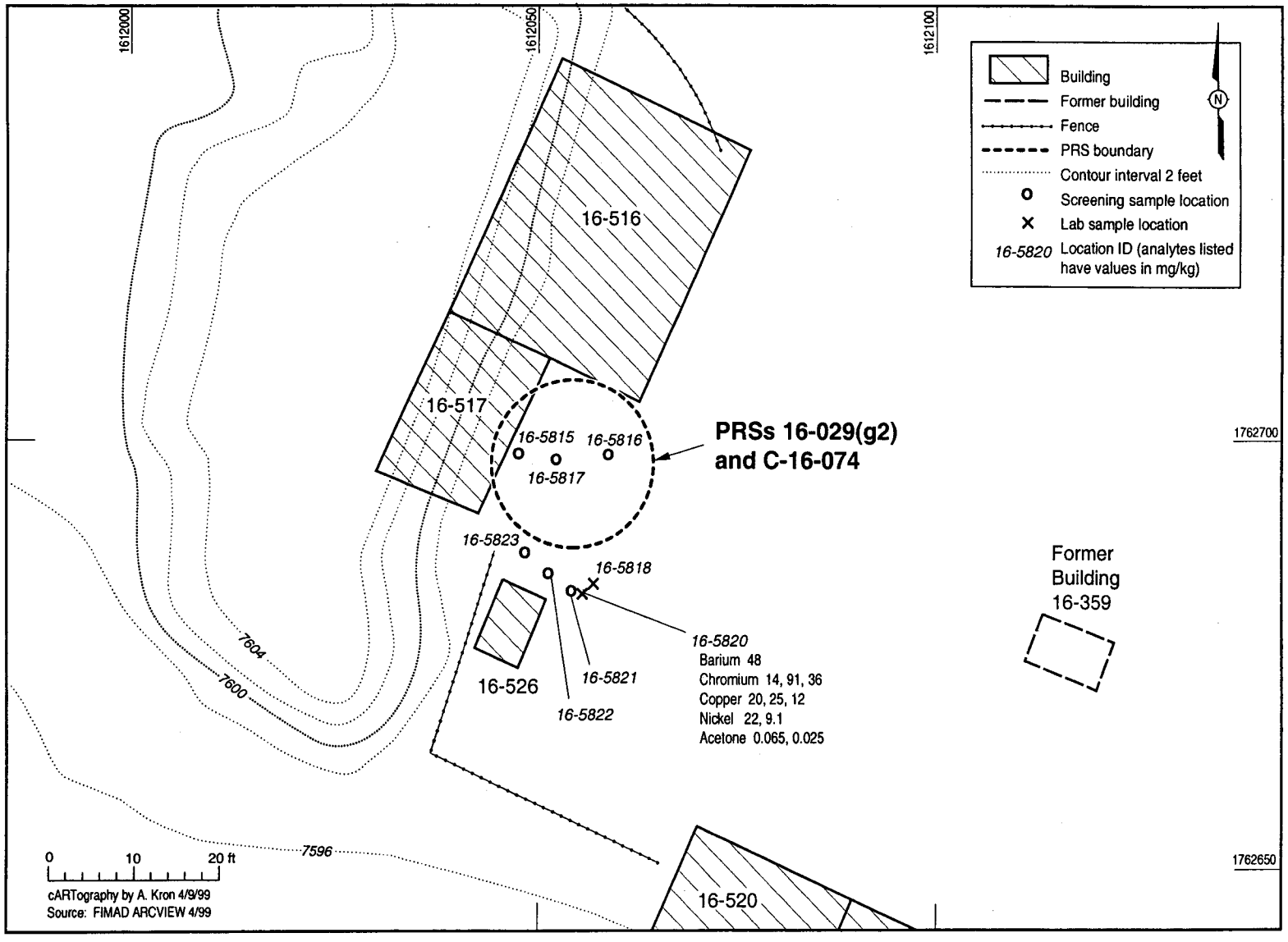


Figure 3.3-4. Sampling locations and detected analytes for PRSs 16-029(g2) and C-16-074

### (b) Radionuclide Comparison with Background

Uranium was the only radionuclide analyzed at this PRS. Because uranium was analyzed in a manner similar to inorganic chemicals, it is discussed in Section 3.3.4.5 (a).

### (c) Evaluation of Organic Chemicals

Samples were analyzed for SVOCs, VOCs, and HE. No QA/QC problems were associated with the VOC and SVOC data. The HE samples exceeded their holding times by two days (the recommended holding time is 14 days). The samples were preserved. Exceeding the holding time by such a small amount is not expected to significantly affect the analytical results. The results were not qualified on the basis of holding times.

None of the organic data were qualified and all organic data are usable to determine if a potential release occurred. Acetone was the only organic compound detected (see Tables 3.3-8 and 3.3-9).

**Table 3.3-8**
**Frequency of Detected Organic Chemicals in Drum Storage Area Aggregate Verification Samples**

| Analyte | Media | Number of Samples Analyzed | Contract-Required EQL (mg/kg) | Concentration Range (mg/kg)[a] | Frequency of Detects[b] |
|---|---|---|---|---|---|
| Acetone | Qbt 4 | 3 | 0.02 | [0.021]–0.065 | 2/3 |

[a] Brackets indicate the value is below detection limits.

[b] Value is the ratio of values above the detection limit to the number of analyses.

**Table 3.3-9**
**Detected Organic Chemicals in Drum Storage Area Aggregate Verification Samples**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|
| Acetone | 16-5820 | RE16-98-0041 | 0.065 | Qbt 4 | 2–4 |
| | 16-5820 | RE16-98-0045 | 0.025 | Qbt 4 | 4–6 |

The organic constituent data were reviewed in comparison with the contract-specified EQLs. The procedures used by each analytical laboratory result in organic constituent EQLs that are somewhat higher than the contract-specified EQLs. However, a comparison of the data with the contract-specified EQLs found no data qualified as undetected with concentrations greater than twice the contract-specified EQLs.

Table 3.3-10 summarizes the data review for any organic chemicals to be carried forward into screening assessment. Figure 3.3-4 indicates the location of the samples containing this compound.

**Table 3.3-10**
**PRSs 16-029(g2) and C-16-074 Results of Organic Data Review of Drum Storage Area Aggregate Samples**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Acetone | Qbt 4 | Retained | Detected in two samples |

### 3.3.5 Revised Site Conceptual Model

Evaluation of sampling results in the context of the preliminary conceptual model (Section 3.3.3) does not disclose required changes to that model.

#### 3.3.5.1 Nature and Extent of Contamination in the Drum Storage Area Aggregate

The PRSs in the Drum Storage Area Aggregate were sampled to detect the presence of contamination and, when detected, to establish its nature and extent. Suspected contaminants at the aggregate included VOCs, SVOCs, metals, HE and HE-degradation products. Eight locations across and down-gradient from the Aggregate were sampled to check for vertical and lateral distribution of contaminants. The distribution of samples through and beneath each PRS enabled a comprehensive assessment of any contamination within the PRS, as well as providing an indication of potential migration within the PRS.

Fifteen samples were collected and screened for HE, metals, and radioactivity. A total of five samples were submitted for fixed-laboratory analyses. In accordance with the VCM Plan, all of these samples were collected at location 16-5820.

Although minor data quality concerns were identified, the data quality is adequate for site assessment and to evaluate any potential release.

The VCM plan stated, "Should screening results indicate that contaminants are below 50% of the cleanup levels, two biased samples will be collected from one of the borings for off-site laboratory analysis. The samples will be biased to soil that has screened above detection limits but below 50% of the cleanup levels for HE or metals. If no HE or metals are detected based on screening, the samples will be collected from the downgradient location." (1998, 63069, p. 24)

Evaluation of the HE screening results showed no indications of the presence of HE. Screening results for metals from samples taken within the PRSs were close to BVs. In the absence of metals detection in screening samples, sample location 16-5820, approximately 10 ft downgradient of the Drum Storage Area Aggregate, was selected for confirmation sampling.

Sample location 16-5820 was extensively sampled. Barium was detected in sample RE16-98-0041 at 48 mg/kg collected at 2 to 4 ft depth; however, barium analysis in sample RE16-98-0022 collected at the 7.5 to 8 ft depth was below the BV at 7.0 mg/kg. Chromium was detected at 14 mg/kg in sample RE16-98-0041 at depth of 2 to 4 ft, and detected at 91 mg/kg and 36 mg/kg in samples RE16-98-0042 and RE16-98-0045, respectively, in samples collected at 4 to 6 ft depth. Sample RE16-99-0022 contained chromium at 0.48 mg/kg. Copper concentrations were measured at 20 mg/kg at a depth of 2 – 4 ft, and at 25 mg/kg and 12 mg/kg at 4 to 6 ft. Sample RE16-99-0022 contained copper at 0.36 mg/kg. Nickel was detected in two samples taken at 4 ft to 6 ft depth at concentrations of 22 mg/kg and 9.1 mg/kg. Sample RE16-98-0022 contained nickel at 1.2 mg/kg.

Acetone concentrations diminished from 0.065 mg/kg at 2-4 ft depth to 0.025 mg/kg at 4-6 ft depth.

The Drum Storage Area Aggregate is located in a relatively flat area in V-Site without a source of water to saturate the soil–tuff interface (a requirement for lateral translocation of contamination) or to produce sufficient hydraulic head for vertical migration.

Fixed-laboratory analyses of samples taken from Location 16-5820 show metals and acetone concentrations diminishing with depth and confirm that cleanup levels were achieved.

As shown in Table 3.3-7 barium, chromium, copper, nickel, and acetone, will be retained for further evaluation.

### 3.3.5.2 Environmental Fate

This section evaluates the environmental fate of the one organic chemical and eight metals retained for further evaluation from Section 3.3.4.5. The evaluation of environmental fate addresses the chemical processes that affect the persistence of a constituent along its migration pathway. The evaluation of transport addresses the physical processes that affect mobility along a migration pathway. Physicochemical properties such as vapor pressure, solubility in water, and the tendency to adsorb on soils are important for evaluating constituent mobility. The transport and mobility of the nine retained contaminants are discussed below, and their physicochemical properties are listed in Table 3.3-11.

**Table 3.3-11**
**Physicochemical Properties for COPCs at the Drum Storage Area Aggregate**

| COPC Name | Vapor Pressure mm Hg@20C | Solubility mg/l@25C | Kd | Koc |
|---|---|---|---|---|
| Acetone | 2.99[a] | 604,000[a] | 0.0095[a] | 0.95[a] |
| Barium | 0[a] | 0[a] | 41[a] | NA[b] |
| Chromium | 0[a] | 0[a] | 1,800,000[a] | NA |
| Copper | NA | NA | 63[b] | NA |
| Cyanide | 1.82E-02[a] | NA[c] | NA | NA |
| Mercury | 2.63E-06[a] | 5.6E-02[a] | 1000[a] | NA |
| Nickel | 0[a] | 0[a] | 65[a] | NA |
| Selenium | 0[a] | 0[a] | 5.0[a] | NA |
| Silver | 0[a] | 0[a] | 8.3[a] | NA |

[a] EPA 1999, 63062; acetone from Table A-3-3, pp. 8–10; barium from Table A-3-16, chromium from Table A-3-52, pp. 5–7; cyanide from Table A-3-59; mercury from Table A-3-131, pp. 104–106; nickel from Table A-3-145, pp. 148–150; selenium from Table A-3-172; silver from Table A-3-173, pp. 79–81

[b] NA = Not available

[c] MEPAS 1995, 63179

Water solubility is perhaps the most important chemical characteristic to consider when assessing chemical mobility. Soil sorption, chemical sorption, and chemical binding in soil—each may limit the transport of a chemical. These properties can be expressed as ratios of an organic chemical's concentration to either solid or liquid phases. The partitioning ratio of an organic material to water is the carbon-water sorption coefficient (Koc). The partitioning ratio between soils and water is the distribution coefficient (Kd). For metals, the Kd is assumed to be independent of the organic carbon in the partitioning media and is governed by other factors such as pH, redox potential, iron content, and ion-chemistry (EPA 1999, 63062). Volatilization of an organic chemical will enhance its diffusion through the soil pore gas and any potential release to the atmosphere. Metals are considered nonvolatile at ambient temperatures (EPA 1999, 63062).

The following information, summarized from Ney (1995, 58210), gives an indication of the fate and transport tendencies of organic chemicals. The higher the water solubility of a chemical, the more likely it is to be mobile and the less likely it is to accumulate, bioaccumulate, volatilize, and persist in the environment. However, a highly soluble chemical (greater than 1000 mg/l) is also more prone to biodegradation and metabolism. The lower the water solubility of a chemical (less than 10 mg/l), the more likely it is to be immobilized by adsorption. Chemicals with a Koc of greater than 10,000 tend to remain immobile on soil particles. Chemicals with a Koc of 1000 or less tend to be more mobile in soil water. A chemical with a low vapor pressure (less than 0.000001 mm Hg) is less likely to volatilize. A chemical with a high vapor pressure (greater than 0.01 mm Hg) is more likely to volatilize.

The fate and transport of metals is primarily dependent on Kd. In general, the metals mobility is limited, and they tend to remain in the places where they have been deposited.

**(a) Organic Chemicals**

Acetone is highly soluble in water, indicating that the chemical is highly mobile within water percolating from rainfall infiltration. Acetone also has a high vapor pressure, which indicates that the dominant phase of this chemical is gaseous. The relatively low Koc for acetone indicates that it does not tend to be highly adsorbed.

Although acetone is very soluble and not strongly sorbed on soil particles, the source term and the limited amount of soil water percolating through the soil at this aggregate will limit translocation. Acetone will biodegrade readily and will be present primarily in soil gas. Based on this information and site conditions, it seems unlikely that acetone will be transported off-site.

**(b) Inorganic Chemicals**

Metals can be transported as colloidal and dissolved phases. Because of sorption and precipitation, inorganic chemicals can have long residence times. The mobility of inorganic chemicals is governed largely by the Eh and pH conditions of the water, soil, sediment, and tuff. The Eh and pH conditions exert a strong influence on the speciation of inorganic chemicals, which affects the solubility and sorption of inorganic phases. Soil sorption, chemical sorption, or chemical binding in soil is expressed as the adsorption coefficient (Kd). In general, metallic cations are strongly adsorbed to soil particles, especially if the soil is not highly acidic. Adsorption to particulate matter is a major mechanism by which chemicals are removed from solution and it is dependent, in part, upon the type of soil (Brady 1974, 58203, pp. 563–566).

The reaction of copper and nickel in soils is affected by the pH, the organic matter content, and the oxidation-reduction status of the soil. Ordinarily at pH values of 6.5 and above, these inorganic chemicals tend to be so highly adsorbed that their availability for uptake in plants is limited, especially if the chemicals are present in their high-valence or oxidized forms. Consequently, most soils will bind relatively large quantities of these elements, if the pH is high and the drainage is good. Copper and nickel are relatively insoluble in water and have very low volatility.

The other inorganic chemicals present at this site aggregate have Kds similar to the inorganic chemicals discussed above and would be expected to have the same low potential for translocation. These chemicals would most likely be bound to the soil and so would move primarily with the transport of soil particles by water rather than as dissolved chemicals in water. However, at high concentrations, barium precipitates as phases: barite ($BaSO_4$) and witherite ($BaCO_3$) (LANL 1998, 59891). The precipitated barium phases should have an even lower potential for translocation than the adsorbed barium. Because contamination at this site is only present in the subsurface and source terms are low, the water-driven transport of inorganic chemicals adsorbed on soil particles will be very limited. Based on this information and on site conditions, it seems unlikely that inorganic contamination will be transported outside the PRSs.

## 3.4 Site Assessments

### 3.4.1 Summary

Section 3.3.4.5 of this report provided an extensive data evaluation which identified those constituents at the Drum Storage Area Aggregate that should be carried forward to a screening-level assessment of human health and ecological effects. Tables 3.4-1 and 3.4-2 present all the COPCs that have been retained for analysis in the assessments. In addition, these tables identify whether any of the COPCs are retained as COCs or COECs.

A human health screening assessment is provided in Section 3.4.2.1. The screening assessment contains the following sections: (a) scoping, (b) screening evaluation, (c) uncertainty analysis, and (d) interpretation. General methods for the human health screen are presented in Section 3.4.1.1, and additional information is provided in Appendix F, Section F-1.0.

An investigation of potential ecological effects is provided in Section 3.4.2.2. The ecological screening assessment contains the following sections: (a) scoping, (b) screening evaluation, (c) uncertainty analysis, and (d) interpretation. General methods for the ecological scoping and data screening are presented in Section 3.4.1.2. Additional ecological information is provided in Appendix F, Section F-2.0.

#### 3.4.1.1 Human Health Screening General Approach

A human health screening assessment was used in this VCM to determine which COPCs, if any, would contribute the greatest amount of risk to potential human receptors. COPCs were evaluated by comparing actual contaminant levels in surface and subsurface soil with human health risk-based concentrations of contaminants in soil. The human health risk-based concentrations used for this evaluation were derived from EPA, Region 9, as reported in "Region 9 PRGs" (EPA 1998, 58751). This document provides remediation goals for both residential and industrial receptors. For this report's evaluation, industrial receptor PRGs were used to evaluate COPCs according to the following rationale:

- No change in the industrial land-use designation for this area of the Laboratory is expected, according to the land use master plan and future land use map for the Laboratory. These documents are a part of the LANL Site Development Plan—Annual Update 1995 (LANL 1995, 57224, pp. 14, 16).
- At this aggregate, the potential for human exposure to contaminants in the environment is very low. This is a highly secure area of the Laboratory and public access is not allowed. Therefore, use of an industrial receptor is appropriate.

Use of Region 9 industrial receptor PRGs as cleanup levels was approved by NMED in the V-site VCM plan (LANL 1997, 55653.2, p. 50). For each COPC, the maximum detectable concentration in surface and subsurface soils was compared to the Region 9 industrial PRG (see Table 3.4-1). These PRGs are provided in Appendix F, Section F-1.0. Those analytes whose maximum concentrations exceeded their PRGs were retained for further evaluation as COCs.

#### 3.4.1.2 Ecological Screening General Approach

An ecological screening assessment was used in this VCM to determine (1) if COECs are present at V-Site and (2) if a quantitative ecological risk assessment was required (to determine if the COECs posed risks to ecological receptors).

The ecological screening methodology followed general guidance provided by EPA, NMED (NMED 1998, 57761), and the Laboratory (Kelly et al. 1998, 57916). Other guidance documents that contributed to the ecological screening assessment include:

- Framework for Ecological Risk Assessment (EPA 1992, 48847.1)
- Guidelines for Ecological Risk Assessment (EPA 1998, 59600.1)

### 3.4.2 Screening Assessments

This section presents the human health and ecological screening assessments.

#### 3.4.2.1 Human Health

The human health screening assessment for the Drum Storage Area Aggregate is provided in this section.

**(a) Scoping**

As previously stated, the current land use for this area is industrial, and TA-16 is dedicated to continued industrial laboratory operations. Therefore, the use of industrial PRGs is appropriate for screening purposes, for both current and reasonable future land use.

**(b) Screening Evaluation**

For PRSs 16-029(g2) and C-16-074, no COCs were identified because no industrial PRGs were exceeded. This evaluation is shown in Table 3.4-1. Because no COCs were identified, no human health risk assessment was performed.

**Table 3.4-1**
**Human Health Screening for the Drum Storage Area Aggregate**

| COPC Name | Location ID | Sample ID | Maximum Concentration (mg/kg) | Depth (ft) | VCM Plan Cleanup Level (mg/kg) | Current Region 9 PRG (mg/kg) | Result | Rationale |
|---|---|---|---|---|---|---|---|---|
| Acetone | 16-5820 | RE16-98-0041 | 0.065 | 2–4 | NA[a] | 610[b] | Eliminated | Maximum concentration is less than the PRG. |
| Barium | 16-5820 | RE16-98-0041 | 48 | 2–4 | 11,000 | 10,000[b] | Eliminated | Maximum concentration is less than the PRG. |
| Chromium | 16-5820 | RE16-98-0042 | 91(J-)[c] | 4–6 | 450 | 450 | Eliminated | Maximum concentration is less than the PRG. |
| Copper | 16-5820 | RE16-98-0042 | 25(J-) | 4–6 | 6300 | 7000[b] | Eliminated | Maximum concentration is less than the PRG. |
| Cyanide | 16-5820 | RE16-98-0041 | [0.56] | 2–4 | 1400 | 2100[b] | Eliminated | Maximum concentration is less than the PRG. |
| Mercury | 16-5820 | RE16-98-0041 | 0.11(U)[d] | 2–4 | NA | 56[b] | Eliminated | Maximum concentration is less than the PRG. |
| Nickel | 16-5820 | RE16-98-0042 | 22(J-) | 4–6 | 3400 | 3700[b] | Eliminated | Maximum concentration is less than the PRG. |

**Table 3.4-1**
**Human Health Screening for the Drum Storage Area Aggregate (con-**

| COPC Name | Location ID | Sample ID | Maximum Concentration (mg/kg) | Depth (ft) | VCM Plan Cleanup Level (mg/kg) | Current Region 9 PRG (mg/kg) | Result | Rationale |
|---|---|---|---|---|---|---|---|---|
| Selenium | 16-5820 | RE16-98-0041 | 1.1(UJ)[e] | 2–4 | NA | 940[b] | Eliminated | Maximum concentration is less than the PRG. |
| Silver | 16-5820 | RE16-98-0041 | 2.2(UJ) | 2–4 | 940 | 940[b] | Eliminated | Maximum concentration is less than the PRG. |

[a] NA = Not available.

[b] These COPCs are non-carcinogenic; therefore, one-tenth of the PRG is used for comparison.

[c] J- = The analyte was positively identified, and the result is likely biased low.

[d] U = The analyte was analyzed for but not detected.

[e] UJ = The analyte was not positively identified in the sample, and the associated value is an estimate of the sample-specific detection or quantitation limit.

### (c) Uncertainty Analysis

As we stated for PRS 16-006(g), given the past and probable future uses of V-Site, it is unlikely that using industrial PRGs would underestimate any potential effects of chemical constituents at this aggregate. The exposure pathways —incidental ingestion of soil, inhalation of particulates, inhalation of volatiles, and dermal exposure— that were evaluated in the Region 9 PRG document are sufficiently conservative, resulting in equally conservative PRGs for screening purposes.

Concerning use of "Region 9 PRGs" (EPA 1998, 58751), it should be noted that not all toxicity values used in Region 9's database are approved for use by the EPA headquarters workgroup for toxicity criteria. Some are flagged as derived from alternative sources of information (e.g., HEAST, EPA's NCEA, and other sources). These sources are considered valid secondary sources and their values are used as listed in the Region 9 document. All constituents retained for this analysis had acceptable toxicity criteria and PRGs.

### (d) Interpretation

No COCs are identified for the Drum Storage Area Aggregate. Maximum concentrations were either below background levels for inorganics or below PRGs. Based on this screening evaluation for human health, PRSs 16-029(g2) and C-16-074 are recommended for NFA.

### 3.4.2.2 Ecological

The ecological screening assessment for the Drum Storage Area Aggregate is provided in this section.

### (a) Scoping

The scoping phase of the ecological screening assessment included a site visit and completion of an Ecological Scoping Checklist and an Ecological Pathways CEM, if complete exposure pathways exist. The site visit, checklist, and CEM were used to determine the presence of ecological receptors and completeness of exposure pathways for ecological receptors. The scoping checklist is included in Appendix F Section F-2.0.

V-Site, an area that includes the Drum Storage Area Aggregate, is mixed grassland and ponderosa pine habitat. V-Site borders areas of natural habitat with few developments, although the immediate vicinity of the aggregate is centrally located in the most developed portion of V-Site. The Drum Storage Area Aggregate itself has no vegetation, as PRS C-16-074 is a concrete pad that covers the soil-filled concrete vault of the Shaker Pit, PRS 16-029(g2). The aggregate abuts an asphalt-covered courtyard (PRS 16-013) and Buildings TA-16-516 and -517. No nesting habitat for threatened or endangered (T&E) species is on or near V-Site, although the area may be considered as within the medium frequency foraging range of the peregrine falcon (LANL 1999, 63130). This is not likely to present any risk to the falcon as the potential contamination is subsurface and complete exposure pathways are unlikely.

There are no complete exposure pathways at the Drum Storage Area Aggregate because of habitat unsuitability (see Figure 3.3-1). This unsuitability is related to the lack vegetation and predominance of concrete, asphalt, and buildings. Given their historical significance, the buildings are likely to remain at V-Site indefinitely. See the Ecological Scoping Checklist for the drum storage area aggregate in Appendix F, Section F-2.0.

**(b) Screening Evaluation**

None of the COPCs shown in Table 3.4-2 were identified as COECs in the ecological screening assessment because there are no complete exposure pathways for ecological receptors at the aggregate. As noted above, the lack of complete pathways is a function of the lack of suitable receptor habitat.

**Table 3.4-2**
**Ecological COPC Analysis at the Drum Storage Area Aggregate**

| COPC Name | Location ID | Sample ID | Depth (ft) | Maximum Concentration (mg/kg)[a] | Rationale for Elimination / Retention |
|---|---|---|---|---|---|
| Barium | 16-5820 | RE16-98-0041 | 2–4 | 48 | Eliminated; no exposure pathways |
| Chromium | 16-5820 | RE16-98-0042 | 4–6 | 91(J-) | Eliminated; no exposure pathways |
| Copper | 16-5820 | RE16-98-0042 | 4–6 | 25(J-) | Eliminated; no exposure pathways |
| Cyanide | 16-5820 | RE16-98-0041 | 2–4 | 0.56(U) | Eliminated; no exposure pathways |
| Mercury | 16-5820 | RE16-98-0041 | 2–4 | 0.11(U) | Eliminated; no exposure pathways |
| Nickel | 16-5820 | RE16-98-0042 | 4–6 | 22(J-) | Eliminated; no exposure pathways |
| Selenium | 16-5820 | RE16-98-0041 | 2–4 | 1.1(UJ) | Eliminated; no exposure pathways |
| Silver | 16-5820 | RE16-98-0041 | 2–4 | 2.2(UJ) | Eliminated; no exposure pathways |
| Acetone | 16-5820 | RE16-98-0041 | 2–4 | 0.065 | Eliminated; no exposure pathways |

[a] Data qualifier flags are defined in the Glossary, Appendix A-2.

**(c) Uncertainty Analysis**

There are uncertainties inherent in all phases of ecological risk screening and assessment. Generally, these uncertainties are related to field sampling, laboratory analysis, the use of ESLs for data screening, and the subjective analyses of exposure pathways.

Both the sampling plan and the execution of field sampling were intended to characterize the nature and extent of potential contamination at the site. Sampling only in areas with less-than-maximum concentrations would result in an underestimate of potential risk; conversely, sampling only in areas exhibiting maximum concentrations would result in an overestimate of true ecological risk. Biasing the selection of sampling locations with field-screening helped ensure that samples were taken at locations with maximum contaminant concentrations. These sampling-related uncertainties have had no significant effect on the confidence of this ecological screening assessment.

The uncertainties associated with the laboratory analyses and/or the use of ESLs for data screening had no significant effect on the confidence of this ecological screening assessment primarily because there are no complete exposure pathways for ecological receptors, which eliminated the need for an ecological data screening.

The primary exposure pathways for ecological receptors are dietary intake, incidental ingestion of soil, plant uptake, and food web transport. Additional potential pathways include dermal contact with contaminated soil, inhalation of volatile constituents, inhalation of fugitive dust, and external irradiation. Of all these potential pathways, none were considered to be complete at the Drum Storage Area Aggregate. Any uncertainty related to the subjective opinion regarding complete pathways is not likely to significantly affect interpretations made in this assessment.

**(d) Interpretation**

No complete exposure pathways for ecological receptors were identified at the Drum Storage Area Aggregate. From an ecological risk perspective, and based on this ecological screening assessment, this aggregate is recommended for NFA.

### 3.4.3 Risk Assessments

No risk assessments are necessary or required because no COPCs exceeded human health and/or ecological screening criteria at the drum storage area aggregate.

### 3.4.4 Other Applicable Assessments

#### 3.4.4.1 Surface Water

Because PRS 16-029(g2) was a subsurface structure and received no surface water run-on or run-off, it was not evaluated for surface water concerns. However, this PRS is aggregated with C-16-074 which was evaluated for surface water concerns using LANL-ER-SOP 2.01, Surface Water Site Assessment, and received an erosion matrix score of 3.6. There are no surface features of the aggregate other than a level concrete pad. There is no evidence of erosion occurring at the site due to the concrete and asphalt surface. Surface water drainage over the Drum Storage Area Aggregate is to the southeast.

#### 3.4.4.2 Groundwater

Groundwater was not directly assessed as part of the VCM conducted at PRSs 16-029(g2) and C-16-074; however, it is unlikely that releases from these PRSs affected the uppermost perched horizon or any deeper groundwater zones. Contamination is confined to locations immediately beneath the PRSs and all locations show a decreasing trend in contamination with depth. Also, a persistent hydrologic driver to the spread of contamination was never present at any of the PRSs in this aggregate.

#### 3.4.4.3 Underground Storage Tanks

There were no underground storage tanks associated with this Aggregate.

### 3.5 Conclusions and Recommendations

The objectives of the VCM plan at the Drum Storage Area Aggregate were (1) to characterize the site by sampling appropriate locations to detect the presence of any contamination, (2) to determine whether detected contamination existed at levels greater than PRGs, and (3) to bound the spatial extent of detected contamination. The VCM plan required taking confirmation samples, which were analyzed in fixed-laboratories, to ensure that PRGs had been achieved.

Site investigation included initial screening/characterization sampling to define the nature of contamination and, upon evaluation of initial analytical results, sampling to bound the extent of contamination. Screening sample locations were distributed approximately uniformly across the shaker table pit. When ER Project field crews discovered that sampling augers could not penetrate the bottom of the concrete shaker table pit, they initiated 45° drilling from the south side of the pit to sample below the pit.

Per the addendum to the sampling plan, when field-screening did not detect HE or metals, samples were collected for laboratory analysis from location 16-5820, which is downgradient from the aggregate. The data is considered adequate to define the nature and extent of contamination and to determine the need for any further action at the site. Analyses for inorganics, including boron and cyanide, HE, VOCs, SVOCs, and uranium showed that four inorganics (barium, chromium, copper, and nickel) were detected above the Laboratory BVs at the downgradient sample location. A bounding sample, which was collected below and beside this sampling location, did not contain inorganics above BVs; thus, all detected inorganic contaminants were bounded. HE was not detected in any samples. Acetone was detected and vertically bounded.

In the human health screening assessment, contaminants above BVs or EQLs were compared to EPA's Region 9 PRGs for industrial workers. COPCs were compared to PRGs and it was determined that all were below the PRGs; a human health risk assessment was not performed.

As a result of the ecological screening assessment, all of the COPCs identified in the Drum Storage Area Aggregate were eliminated as COPECs because no complete exposure pathways exist for ecological receptors at this aggregate.

In conclusion, the fundamental requirement of the VCM plan was met: to confirm that any remaining contaminants at the Drum Storage Area Aggregate are below PRGs. The low levels of organic and inorganic contaminants remaining in the soil have been bounded. In other words, sampling data indicate that maximum concentrations at the contamination source were characterized and that remaining contaminant concentrations diminish with distance from the source. Therefore, the Drum Storage Area Aggregate—PRSs 16-029(g2) and C-16-074—is recommended for NFA.

# 4.0 PRS 16-005(d)

## 4.1 Summary

PRS 16-005(d) was septic tank TA-16-177 and its 6-in. drainline, which served lavatories in building 16-27. Based on the history of operations, ER Project personnel suspect the COPCs at this site to be HE (specifically RDX and TNT), uranium, metals (especially barium and silver), VOCs, and SVOCs.

The objectives of the VCM were to characterize this PRS and to implement an accelerated cleanup in conjunction with D&D of the septic tank and drainline. The cleanup strategy for the site included (1) sampling appropriate locations to detect the presence of any contamination, (2) removing contamination if it were present at levels greater than PRGs, (3) bounding the spatial extent of contamination, and (4) determining decreasing trends in remaining contaminant concentrations. Additional details about characterization and cleanup objectives are contained in Section 4.3.3, "Preliminary Conceptual Model."

At 16-005(d), septic tank 16-177 had been removed previously; D&D activities were limited to removal of the drainline. After D&D exposed and removed the drainline, the ER Project field team collected 27 samples from 8 locations, with preferential samples taken at noted joints or breaks in the line. These samples were screened for HE, radioactivity, metals and VOCs. Based on screening results that indicated the potential presence of contaminants, eight samples were submitted for laboratory analyses of HE, inorganics, SVOCs, VOCs, and uranium. After receiving the analytical results, the field team collected two additional samples: one upgradient of the septic tank (location 16-3345) and one at the discharge from the septic tank (location 16-5793). The purpose was to bound detected contamination. The bounding sample above the septic tank was analyzed for antimony, uranium, and HE; the sample at the septic tank discharge was analyzed for thallium and antimony. Details of the sampling campaign are included in Section 4.3.2, "Field Investigation and Remediation."

Early sampling confirmed the presence of very low levels of HE and HE-degradation products at location 16-3345; however, HE was not detected in the analysis of a subsequent sample collected from a greater depth at this location. Similarly, subsequent deeper sampling at location 16-3341 yielded no inorganics above BVs. The isolated pockets of subsurface contaminants near BVs, the limited amounts of soil water for dissolving and dispersing contaminants, and the absence of a persistent hydrologic driver to spread contamination — all indicate minimal potential for contaminant migration. Details are included in Section 4.3.5, "Revised Site Conceptual Model."

During the human health screening assessment, contaminants above BVs or EQLs were compared to EPA's Region 9 PRGs for industrial workers. The COPCs were below industrial PRGs; a human health risk assessment was not performed.

An ecological screening assessment was also conducted: the inorganic, organic, and radionuclide constituents in samples collected at less than 5 ft whose maximum concentrations exceeded BVs (or EQLs) were identified as COPCs. These COPCs were compared to a set of ESLs for nine ecological receptors at V-Site. All COPCs were eliminated as COPECs, usually because the COPC level was below the ESL. Details of the human health screening assessment are reported in Section 4.4.2.1. Details of the ecological screening assessment are reported in Section 4.4.2.2.

Based on the human health and ecological screening assessments, PRS 16-005(d) is recommended for NFA.

## 4.2 Description and Operational History

PRS 16-005(d) is a SWMU listed in Module VIII of the Laboratory's Hazardous Waste Facility Permit (EPA 1990, 01585).

### 4.2.1 Site Description

PRS 16-005(d) was septic tank TA-16-177 and its drainline. It was part of the TA-16-27 complex, which was located approximately 800 ft west of V-Site. The area is relatively level, sloping less than 10 ft from north to south and roughly 20 ft from west to east. The primary drainage in this region is eastward to a north-south ditch ("main drainage") that empties into a tributary of Water Canyon roughly 0.25 mi south of the World War II–era S-Site complex.

### 4.2.2 Operational History

Septic Tank TA-16-177 served lavatories in former building TA-16-27. The septic tank was constructed of reinforced concrete with a wooden cover. It discharged to a 6-in. VCP located southeast of the tank (engineering drawing ENG-R 289).

## 4.3 Investigatory and Remediation Activities

### 4.3.1 Summary

Section 4.3 describes the investigatory activities for PRS 16-005(d), a former drainline. This section includes previous investigations (Section 4.3.2), the preliminary conceptual model that guided the VCM fieldwork (Section 4.3.3), and the VCM field activities (Section 4.3.4). Section 4.3.4 contains information about D&D activities, VCM plan requirements, remediation stages, and a review of the data. The site conceptual model will be revised, if appropriate, in Section 4.3.5, using the information gained during the VCM.

### 4.3.2 Previous Investigations

No previous investigations have been performed at PRS 16-005(d).

### 4.3.3 Preliminary Conceptual Model

This section presents the preliminary conceptual model of contaminant occurrence and distribution at PRS 16-005(d). The conceptual model provides our best understanding of what contamination was released, if any; the distribution and location of releases; the potential transformation of the contaminants; and the potential translocation of the contaminants based on transport mechanisms, pathways, and chemical properties. The objectives of the model are (1) to ensure that samples are collected in appropriate locations, (2) that samples are analyzed for the correct potential contaminants, and (3) that all characterization and remediation objectives of the VCM are appropriate.

The conceptual model contains the assumptions used to guide the VCM sampling and cleanup design. The objectives of the sampling design are (1) to sample in appropriate locations for detecting contamination, if it is present; (2) to bound the contamination; and (3) to determine decreasing trends in contaminant concentrations.

Based on the history of operations at this PRS, and on the source of contamination, the suspected COCs at this PRS include VOCs, SVOCs, inorganic chemicals (specifically barium and silver), HE (RDX and TNT), and uranium. Constituents of the potentially released VOCs, SVOCs, and HE may have partially degraded into other constituents that could be potential contaminants.

We hypothesize that the primary mechanism for contaminant transport would be liquid leaking from joints or breaks in the VCP drainlines and from leaks in the septic tank while the systems were active. Snowmelt and rainfall may percolate to the subsurface and help move the liquid (with its dissolved contaminants) that leaked from the pipes or the tank. The secondary transport mechanism would be liquid and gaseous diffusion through the porous soil matrix.

The major (preferential) pathway for contaminant migration is vertical movement down from the drainpipes and tank and horizontal migration along the soil/tuff interface. Contamination, if present, should be found directly beneath the broken or cracked pipes and the tank. The drainlines were installed close to or at the soil/tuff interface. Downward migration of contaminants may naturally slow at the interface. The interface itself should serve as a preferential channel for the leaked fluid because of the low permeability of tuff and the much greater permeability of the soil. Transport would then be dominated by flow along the soil/tuff interface in the same directions as the flow drainline. Vertical infiltration of liquids through the tuff would be more likely if the tuff is highly fractured.

The extent of potential translocation of contaminants is based mainly on solubility, adsorptivity, and transport mechanism flow rate. We assume that any contaminants released at this PRS were primarily solubilized in the drainline fluid. The contaminants may have precipitate from solution or have been adsorbed onto silts, clays, and organic matter. The limiting factor for contaminant translocation is the mechanism flow rate and the diffusion rate. Flow rates (permeability) into the soil and tuff material are low compared to the high flow rates internal to the drainlines. The potential vertical translocation of contaminants through the soil is less than a few feet; the potential horizontal translocation along the drainlines is the entire length of the drainlines. The typically unsaturated flow conditions at the site result in lowered infiltration, lowered flow rates, and lowered diffusion rates. Given the potential differences between the effluent in the drainlines and the underlying soil and tuff, and given the unsaturated conditions at this site, we believe contaminants are not likely to move quickly or to travel far.

### 4.3.4 Field Investigation and Remediation

The goals of the VCM at PRS 16-005(d) were to conduct the investigation and to implement an accelerated cleanup in conjunction with D&D activities. D&D personnel removed the underground drainline at PRS 16-005(d). (The septic tank had been removed previously.) ER Project personnel conducted all soil removals and characterization and verification sampling activities.

Following the conceptual model, the field team collected samples from beneath cracks and breaks in the drainline and from beneath the former tank. The samples were characterized by analysis for suspected COCs. The potential translocation of contamination was evaluated by sampling at vertical depths (beneath locations with suspected contamination) to determine decreasing trends in contamination.

The field team used the following sampling equipment and SOPs:

- Excavations were conducted using a Cat 416B backhoe. Soil and tuff samples were collected at approximately 0–0.5 ft below the excavated structures. Soil and tuff samples were collected from the trenches and the backhoe bucket using LANL-ER-SOP-6.09, "Spade and Scoop Method for Collection of Soil Samples".

- Samples were screened in the field for HE and beta/gamma radioactivity using an HE spot test kit with modified Griess reagents (LANL-ER-SOP-10.06,R1, "High Explosive Spot Test") and a Ludlum 12 survey meter with pancake and air proportional detector (LANL-ER-SOP-10.07, R1, "Field Monitoring for Surface and Volume Radioactivity Levels").

- In the field chemistry trailer, the samples were analyzed further for RDX and TNT using the D-Tech immunoassay HE field-screening kit (EPA SW-846 Methods 4051 and 4050) and for 24 metals (listed in Appendix C) using a Tracor Northern Spectrace 9000 XRF (LANL-ER-SOP-10.08, R0, "Operation of the Spectrace 9000 Field-Portable X-Ray Fluorescence Instrument").

- The soil and tuff samples were described and logged in on the sample collection log forms (LANL-ER-SOP-01.04, R3, "Sample Control and Field Documentation"). Drilling activities were conducted in accordance with LANL-ER-SOP-04.01, R1, "Drilling Methods and Drill Site Management".

- Samples were collected from boreholes using stainless steel split-spoon samplers according to LANL-ER-SOP-06.24, R0, "Sample Collection from Split Spoon and Shelby Tube Samplers".
- Drilling was conducted with the Acker II drill rig.

#### 4.3.4.1 D&D Activity

The location of the former septic tank and associated drainline at PRS 16-005(d) was not well known at the start of the investigation. To help the D&D contractor locate the structures, ER Project personnel conducted a ground penetrating radar (GPR) survey on all sides of former building TA-16-27. A shallow rectangular reflector anomaly was located near the suspected location of the former tank. The ER Project field team staked this location for further evaluation and excavated exploratory trenches (based on the survey work) in order to locate the structures. They discovered the drainline on the southeast side of former building TA-16-27 and showed it to D&D personnel so they could remove the structure.

The drainline at PRS 16-005(d) did not follow the schematic provided in the VCM plan, rather, the drainlines followed paths as presented in Figure 4.3-1.The drainline trended southeast from the shower area of former building TA-16-27 to a point approximately 125 ft from the building where it forked. One branch headed due south for approximately 150 ft and dead-ended near the road. The other branch continued southeast to a point 145 ft from the shower area where it then forked in two directions. Both of these branches extended southward for approximately 75 ft in parallel. The depth of the drainlines ranged from approximately 2- to 4-ft.

At the first fork in the drainline near the suspected location of the septic tank, a 15 × 20 ft concrete slab was encountered at a depth of 9 ft. This concrete slab was assumed to be the remnants of the septic tank. The concrete appeared to have been poured into the tuff and was extremely difficult to remove; it was therefore left in place.

The D&D contractor excavated the drainline at PRS 16-005(d) from March 11 to March 13, 1998. Excavation activities were performed using a trackhoe and a backhoe. Overburden soil was stockpiled along the excavation within the PRS. It was later screened by the ER Project field team. The excavated VCP lines were placed on plastic sheeting until they were disposed of by D&D. The D&D contractor field screened material within the drainline using the HE spot test kit. There were no positive HE results. ER Project personnel documented the D&D activities and noted the locations of cracks and broken joints along the drainline. These potential contamination locations were flagged and later sampled by the ER Project field team.

#### 4.3.4.2 VCM Plan Requirements

The VCM plan specified the collection of 20 screening samples from 5 locations. Four samples were to be collected from each of the 5 locations at 1–2 ft intervals to a maximum depth of 5 ft below the bottom of the drainage trench. All samples were to be screened using in situ field-screening, which consisted of screening at the sample location for HE (with an HE spot test kit), for radioactivity (with a direct reading beta/gamma analyzer), and VOCs (with a PID 10.2 evbulb). The samples were also to be screened in the on-site field chemistry trailer for metals (with an XRF). Ten of these screening samples were to be screened further in the field trailer for HE (with a D-Tech kit). Three laboratory samples were to be selected from the screening samples for off-site analysis. If more than three samples showed positive field-screening results, the samples closest to the septic tank were to be selected for laboratory analysis to ensure that all suspect chemicals were detected and analyzed.

Selection of the laboratory samples from the screening samples was to be biased using the following prioritized scheme: (1) samples with RDX or TNT values greater than detection limits per the D-Tech field kit (0.5 ppm) but less than 50% of the cleanup level; (2) metals (50% of the cleanup levels listed in

Table 4.3-1) based on XRF screening results; (3) radioactivity (greater than two times background) based on in situ field-screening; and (4) VOCs (greater than 0 ppm) based on in situ field-screening.

If the field-screening results indicated that contaminants were present above 50% of the cleanup levels for HE and metals (as shown in Table 4.3-1), greater than two times background radioactivity, or greater than 0 ppm VOCs, that soil was to be excavated until results were no longer above 50% of these criteria. Table 4.3-1 presents the soil cleanup levels according to the approved VCM plan (LANL 1997, 55653.2). The EPA Region 9 PRGs for industrial soil were used as cleanup levels for the VCM activities. Note that some of the PRGs have changed since they were included in the approved VCM plan.

**Table 4.3-1**
**Approved Soil Cleanup Levels for V-Site VCM**

| Chemical | Cleanup Level (mg/kg) | Rationale |
|---|---|---|
| Barium | 11,000 | HI[a] = 0.1 |
| Beryllium | 11 | Risk = $10^{-5}$[b] |
| Cadmium | 85 | HI = 0.1 |
| Chromium (total) | 450 | Risk = $10^{-6}$ |
| Copper | 6300 | HI = 0.1 |
| Cyanide | 1400 | HI = 0.1 |
| DNB mixture | 6.8 | HI = 0.1 |
| DNT mixture | 2.8 | Risk = $10^{-6}$ |
| HMX | 3400 | HI = 0.1 |
| Lead | 1000 | EPA Region 6 guidance |
| Nickel | 3400 | HI = 0.1 |
| RDX | 17 | Risk = $10^{-6}$ |
| Silver[c] | 940 | HI = 0.1 |
| TNB | 3.4 | HI = 0.1 |
| TNT | 64 | Risk = $10^{-6}$ |

[a] HI = Hazard index for noncarcinogens

[b] The VCM Plan states that, for beryllium, the 10-5 risk level is used "...to establish a threshold above the background concentration range for this metal." (LANL 1997, 55653.2)

[c] Cleanup level was not listed in the V-site VCM plan. Information is included here for completeness.

The VCM plan addendum called for screening the stockpiled overburden soil (the soil overlying the drain-line and tank) prior to returning it to the excavation from which it originated. The soil was to be screened because it was possible that contamination could have spread to the stockpiled soil during D&D activities. This overburden soil was to be screened using an HE spot test kit or a D-Tech kit. Any overburden soil that was determined to contain HE above levels of concern (based on screening) was to be managed as waste. Overburden soil that did not screen positive for HE was to be returned to its place of origin. These screening results are not presented in Table 4.3-3 because the results were used solely for the purpose of determining whether soil could be returned to the site. They were not used to make decisions associated with the VCM cleanup activities.

#### 4.3.4.3 Remediation Stage I

This section presents a discussion of remedial activities including field-screening, characterization, and sampling for nature and extent. Table 4.3-2 lists all analytical samples and the analytical suites associated with each sample. The individual analytes that make up each suite can be found in Appendix D.

**Table 4.3-2**
**Summary of PRS 16-005(d) Samples Collected for Fixed-Laboratory Analysis[a]**

| Location ID | Sample ID | Sample Type | Depth (ft) | Media | HE | Inorganic Chemicals | SVOCs | Uranium | VOCs |
|---|---|---|---|---|---|---|---|---|---|
| 16-3341 | 0316-98-0096 | grab | 3–4 | soil | 4186R | 4187R | NA[b] | 4188R | NA |
| 16-3341 | RE16-98-0003 | grab | 3.5–4.5 | soil | 4216R | 4215R | 4214R | 4217R | 4214R |
| 16-3343 | 0316-98-0097 | grab | 3.2–4.2 | soil | 4186R | 4187R | NA | 4188R | NA |
| 16-3343 | RE16-98-0004 | grab | 3–4 | soil | 4216R | 4215R | 4214R | 4217R | 4214R |
| 16-3345 | 0316-98-0098 | grab | 2.4–3.4 | soil | 4186R | 4187R | 4185R | 4188R | 4185R |
| 16-5791 | RE16-98-0001 | grab | 2–3 | soil | 4216R | 4215R | 4214R | 4217R | 4214R |
| 16-5792 | RE16-98-0002 | grab | 2–3 | soil | 4216R | 4215R | 4214R | 4217R | 4214R |
| 16-5793 | RE16-98-0005 | grab | 9–9.5 | soil | 4236R | 4235R | 4234R | 4237R | 4234R |
| 16-3341 | RE16-99-0001 | grab | 5.5–6.5 | Qbt4 | NA | 5198R | NA | NA | NA |
| 16-3345 | RE16-99-0002 | grab | 5–5.5 | Qbt4 | 5199R | 5198R | NA | 5200R | NA |

[a] Numbers in the cells for each analytical suite are request numbers.

[b] NA = Not applicable.

Sampling activities were conducted at PRS 16-005(d) on October 30, 1997; March 13, 1998; and April 15, 1998, following D&D activities. Soil samples were collected from locations beneath the former septic tank and VCP drainlines. Selection of the locations was based on noted joints or breaks in the line, as documented during D&D removal. 27 samples in total were collected from 8 locations for in situ and XRF screening. Sixteen of these samples were further screened for HE using a D-Tech kit. Ten laboratory samples were collected and submitted for off-site analysis. Eight of these ten laboratory samples had been selected from the screening samples based on screening results. Two of these laboratory samples had been collected as bounding samples based on off-site analytical results of the initial eight laboratory samples. Figure 4.3-1 presents the sample locations.

A total of eight samples were initially collected, including six from locations beneath the drainline and two from locations beneath the former septic tank (0316-98-0096, 0316-98-0097, RE16-98-0003, RE16-98-0004, 0316-98-0098, RE16-98-0001, RE16-98-0002, and RE16-98-0005). Screening indicated that contaminants were not above 50% of the cleanup levels. Two samples (0316-98-1343, location 16-3343 and RE16-98-1003, location 16-5792) with elevated concentrations of barium (based on screening) were submitted to the laboratory for analyses. The laboratory sample numbers were 0316-98-0097 and RE16-98-0002. Two laboratory samples (0316-98-0096 and 0316-98-0097) missed their holding times for organics at the laboratory. New samples were collected at the same locations (RE16-98-0003 and RE16-98-0004).

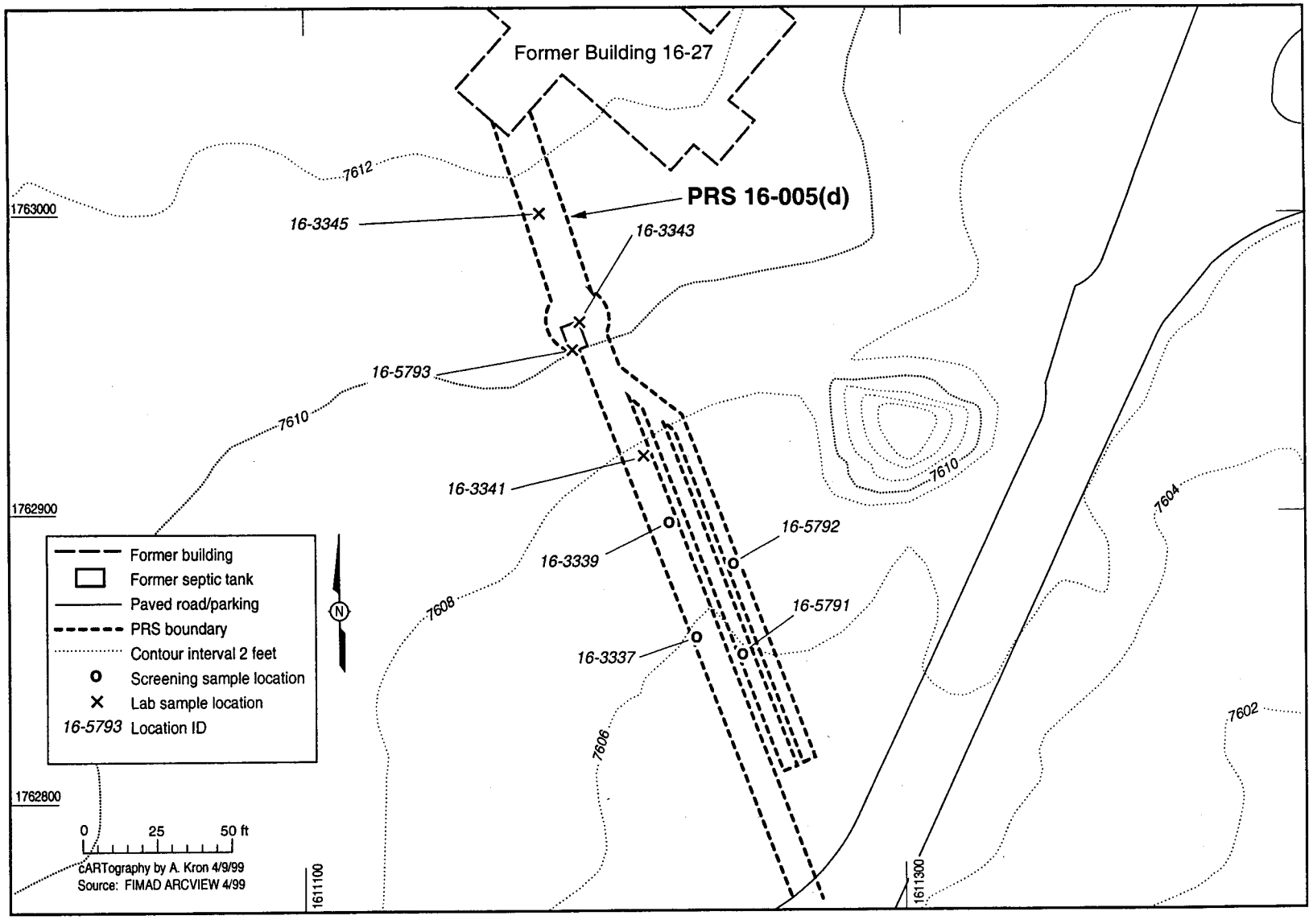


**Figure 4.3-1. Sampling locations at PRS 16-005(d)**

After evaluation, the laboratory results from the initial eight samples, ER Project personnel determined that bounding samples needed to be collected at two locations (16-3341 and 16-3345) to show decreasing trends in contaminant concentrations. Contaminants were detected above background concentrations but below levels 50% of PRGs. Vertical bounding samples (RE16-99-0001 and RE16-99-0002) were collected from locations 16-3341 and 16-3345 to bound the contaminants. The initial eight laboratory samples were analyzed for HE, inorganics, SVOCs, VOCs, and uranium. The additional two bounding laboratory samples were analyzed for selected contaminants in order to bound the contaminants at each location. Tables 4.3-3 and 4.3-4 present the sample information and screening results. The metals listed in Table 4.3-4 are the COCs that were identified and presented in the VCM plan. Note that beryllium is a COC, however, this metal is not detected by the XRF.

**Table 4.3-3**
**Sampling Information for PRS 16-005(d)**

| Screening Sample ID | Location ID | Depth (ft)[a] | Media | Sample Location | Date Collected | Lab Sample ID |
|---|---|---|---|---|---|---|
| 0316-98-1337 | 16-3337 | 3–4 | Soil/Qbt | Under break in pipe | 3/13/98 | NA[b] |
| 0316-98-1338 | 16-3337 | 4–5 | Soil/Qbt | Under break in pipe | 3/17/98 | NA |
| 0316-98-1339 | 16-3339 | 2–3 | Soil/Qbt | Under break in pipe | 3/17/98 | NA |
| 0316-98-1340 | 16-3339 | 3–4 | Qbt | Under break in pipe | 3/17/98 | NA |
| 0316-98-1341 | 16-3341 | 3–4 | Soil/Qbt | Under break in pipe | 3/17/98 | 0316-98-0096 |
| RE16-98-1006 | 16-3341 | 3.5–4.5 | Clay/Qbt | Below repair along western drainline | 4/07/98 | RE16-98-0003 |
| RE16-99-0001 | 16-3341 | 5.5– 6.5 | Qbt | Bounding sample for 16-3341 | 2/4/99 | RE16-99-0001 |
| 0316-98-1342 | 16-3341 | 4–5 | Qbt | Under break in pipe | 3/17/98 | NA |
| 0316-98-1343 | 16-3343 | 3.2–4.2 | Soil/Qbt | South end, septic tank excavation | 3/17/98 | 0316-98-0097 |
| 0316-98-1344 | 16-3343 | 4.2–5.2 | Qbt | South end, septic tank excavation | 3/17/98 | NA |
| RE16-98-1007 | 16-3343 | 3.0–4.0 | Soil/Qbt | South end, septic tank excavation | 4/07/98 | RE16-98-0004 |
| 0316-98-1345 | 16-3345 | 2.4–3.4 | Soil/Qbt | Under missing section of pipe | 3/17/98 | 0316-98-0098 |
| 0316-98-1346 | 16-3345 | 3.5–4.5 | Soil/Qbt | Under missing section of pipe | 3/17/98 | NA |
| 0316-98-1347 | 16-3345 | 4.5–5.5 | Soil/Qbt | Under missing section of pipe | 3/17/98 | NA |
| 0316-98-1348 | 16-3345 | 5.5–6.5 | Qbt | Under missing section of pipe | 3/17/98 | NA |
| 0316-98-1349 | 16-3345 | 6.5–7.5 | Qbt | Under missing section of pipe | 3/17/98 | NA |
| RE16-99-0002 | 16-3345 | 5 – 5.5 | Qbt | Under missing section of pipe | 2/4/99 | RE16-99-0002 |
| RE16-98-1000 | 16-5791 | 2.0–3.0 | Soil/Qbt | Below patch along middle drainline | 4/06/98 | RE16-98-0001 |

**Table 4.3-3**
**Sampling Information for PRS 16-005(d) (continued)**

| Screening Sample ID | Location ID | Depth (ft)[a] | Media | Sample Location | Date Collected | Lab Sample ID |
|---|---|---|---|---|---|---|
| RE16-98-1001 | 16-5791 | 4.0–5.0 | Clay/Qbt | Below patch along middle drainline | 4/06/98 | NA |
| RE16-98-1002 | 16-5791 | 5.0–6.0 | Qbt | Below patch along middle drainline | 4/06/98 | NA |
| RE16-98-1003 | 16-5792 | 2.0–3.0 | Soil/Qbt | Below break along eastern drainline | 4/06/98 | RE16-98-0002 |
| RE16-98-1004 | 16-5792 | 4.0–5.0 | Soil/Qbt | Below break along eastern drainline | 4/06/98 | NA |
| RE16-98-1005 | 16-5792 | 5.0–5.5 | Qbt | Below break along eastern drainline | 4/06/98 | NA |
| RE16-98-1008 | 16-5793 | 5.0–6.0 | Debris/soil/ Qbt | North end, septic tank excavation | 4/07/98 | NA |
| RE16-98-1009 | 16-5793 | 7.0–8.0 | Debris/soil/ Qbt | North end, septic tank excavation | 4/07/98 | NA |
| RE16-98-1010 | 16-5793 | 8.5–9.0 | Debris/soil/ Qbt | North end, septic tank excavation | 4/07/98 | NA |
| RE16-98-1011 | 16-5793 | 9.0–9.5 | Debris/soil/ Qbt | North end, septic tank excavation | 4/15/98 | RE16-98-0005 |
| RE16-98-1001 | 16-5791 | 4.0–5.0 | Clay/Qbt | Below patch along middle drainline | 4/06/98 | NA |
| RE16-98-1002 | 16-5791 | 5.0–6.0 | Qbt | Below patch along middle drainline | 4/06/98 | NA |

[a] Depths are from surface grade.

[b] NA = Not applicable.

**Table 4.3-4**
**Field-Screening Results for PRS 16-005(d)**

| Sample # | HE Spot Test | D-Tech RDX (mg/kg) | D-Tech TNT(mg/kg) | Silver (mg/kg) | Barium (mg/kg) | Chromium (mg/kg) | Copper (mg/kg) | Nickel (mg/kg) | Lead (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|
| 0316-98-1334 | negative | NA[a] | NA | NA | NA | NA | NA | NA | NA |
| 0316-98-1337 | negative | < 0.5 | < 0.5 | 90 | 449 | ND[b] | ND | ND | ND |
| 0316-98-1338 | negative | NA | NA | 78±17 | 353±6 | ND | ND | ND | ND |
| 0316-98-1339 | negative | < 0.5 | < 0.5 | 54 | 510 | ND | ND | ND | ND |
| 0316-98-1340 | negative | NA | NA | 50±16 | 560±8 | ND | ND | ND | ND |
| 0316-98-1341 | negative | < 0.5 | < 0.5 | 63 | 509 | ND | ND | ND | 17 |
| RE16-99-0001 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 0316-98-1342 | negative | < 0.5 | < 0.5 | 36 | 223 | ND | ND | ND | 69 |
| 0316-98-1343 | negative | < 0.5 | 0.7 | ND | 1328±12 | ND | ND | ND | ND |
| 0316-98-1344 | negative | NA | NA | 45±14 | 396±7 | ND | ND | ND | ND |
| 0316-98-1345 | negative | < 0.5 | < 0.5 | 86±17 | 474±7 | ND | ND | ND | ND |
| RE16-99-0002 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 0316-98-1346 | negative | NA | NA | 80±16 | 382±7 | ND | ND | ND | ND |

**Table 4.3-4**
**Field-Screening Results for PRS 16-005(d) (continued)**

| Sample # | HE Spot Test | D-Tech RDX (mg/kg) | D-Tech TNT(mg/kg) | Silver (mg/kg) | Barium (mg/kg) | Chromium (mg/kg) | Copper (mg/kg) | Nickel (mg/kg) | Lead (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|
| 0316-98-1347 | negative | < 0.5 | < 0.5 | 68±15 | 369±6 | ND | ND | ND | ND |
| 0316-98-1348 | negative | NA | NA | 84±16 | 281±6 | ND | ND | ND | ND |
| 0316-98-1349 | negative | < 0.5 | < 0.5 | 48±14 | 209±5 | ND | ND | ND | ND |
| RE16-98-1000 | negative | < 0.5 | < 0.5 | 87±17 | 694 ±9 | ND | ND | ND | ND |
| RE16-98-1001 | negative | NA | NA | 74±17 | 440±7 | ND | ND | ND | ND |
| RE16-98-1002 | negative | < 0.5 | < 0.5 | 46±15 | 269±6 | ND | ND | ND | ND |
| RE16-98-1003 | negative | < 0.5 | < 0.5 | 87±17 | 770±9 | ND | 44±20 | ND | ND |
| RE16-98-1004 | negative | < 0.5 | < 0.5 | 64±15 | 317±6 | ND | ND | ND | ND |
| RE16-98-1005 | negative | < 0.5 | < 0.5 | 43±14 | 374±6 | ND | ND | ND | ND |
| RE16-98-1006 | negative | < 0.5 | < 0.5 | 49±14 | 529±8 | ND | ND | ND | 22±8 |
| RE16-98-1007 | negative | < 0.5 | 2.2 | 60±15 | 1238±12 | ND | ND | ND | ND |
| RE16-98-1008 | negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-1009 | negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-1010 | negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-1011 | negative | < 0.5 | < 0.5 | 77±16 | 352±6 | ND | ND | ND | ND |

[a] NA = Not applicable.

[b] ND = Non-detect.

The overburden soil was screened per the VCM addendum. The soil was screened at 10 to 15 ft intervals (approximately 50–100 $y^3$ of soil per interval) at locations that coincided with previously sampled soil underlying the excavated drainline and tank. These previously sampled locations are the locations most likely to have been contaminated. There were no positive HE-screening results, and all the soil was returned to the excavation from which it originated. Figure 4.3-2 shows the PRS after the overburden soil was returned and following the VCM activities.

The concentrations of silver based on XRF screening are reported in Table 4.3-4. These silver results are greater than three times the standard deviations; however, these values are considered to be artifacts due to fluorescence of the mercury iodide detector. The peak associated with the iodine (from the detector) is very close to that of silver, resulting in an overlap of the two peaks. This results in a decrease in resolution and a higher detection limit for silver. Because these values are close to the reported detection limit for silver (50 mg/kg), the values may not be reliable.

All field screening results for radionuclides were two times below background and VOCs were not detected. The field screening results indicate that there are no radioactivity and no vapor phase VOC plume at the site. In addition, there are no indications of staining or organic odors that might suggest leaks or spills of solvents.

**Figure 4.3-2. Photograph of PRS 16-005(d) following VCM activities**

Four deviations were made from the approved VCM work plan:

1. The field team collected 27 samples from 8 locations, rather than the required 20 samples from 5 locations for in situ and XRF screening. Because the drainline system was more extensive than anticipated, extra samples were collected to better characterize the PRS.

2. The field team further screened 16 samples, rather than the required 10 samples for HE using a D-Tech kit. The extra samples were collected to better characterize the PRS.

3. The field team collected 10 laboratory samples (including the two samples with exceeded holding times for organics) rather than the required three. The extra samples were collected to better characterize the PRS.

4. The field team collected bounding samples from two locations to better determine trends in the concentrations of contaminants.

#### 4.3.4.4 Remediation Stage II

There was no removal of contaminated soil, so verification samples were not collected from this aggregate.

#### 4.3.4.5 Data Review

All data discussed in the body of this report are also discussed in Appendixes C and D of this report. Appendix C provides an assessment of the data quality. Appendix D provides a list of analytical results and the analytes that make up the analytical suites. The complete data set has been submitted to the AA in electronic format. Tables in this section include all detected values and some undetected values. All analytical results were validated by the Laboratory's ER Project routine validation protocol. All non-rejected data are usable for decision-making purposes and adequate for evaluating a potential release. Qualifiers on the

data indicate if error or bias on the data must be considered while using the data. Qualified data are acceptable to use, as long as the qualifications on the data are considered.

### (a) Inorganic Chemical Comparison with Background

All inorganic results are compared to the LANL background data set (Ryti et al. 1998, 59730). BVs are applied to the data based upon the soil horizon the sample was collected from. Table 4.3-5 lists the frequency of detected analytes at PRS 16-005(d), the range of detected levels, and what soil horizons the samples originated in. Table 4.3-6 compares detected inorganic chemicals against the associated BV.

**Table 4.3-5**
**Frequency of Detected Inorganic Chemicals in PRS 16-005(d) Verification Samples**

| Analyte | Media | Number of Samples Analyzed | Number of Detects | Concentration Range (mg/kg)[a] | BV (mg/kg) | Frequency of Detects Above BV[b] |
|---|---|---|---|---|---|---|
| Aluminum | Soil | 8 | 8 | 6780–23,000 | 29,200 | 0/8 |
| Antimony | Qbt4 | 2 | 2 | 0.1–0.14 | 0.5 | 0/2 |
| | Soil | 8 | 0 | [1.2–13] | 0.83 | DL>BV[c] (8/8) |
| Arsenic | Soil | 8 | 8 | 3.2–6.9 | 8.17 | 0/8 |
| Barium | Soil | 8 | 8 | 111–2000 | 295 | 2/8 |
| Beryllium | Soil | 8 | 8 | 0.57–1.1 | 1.83 | 0/8 |
| Cadmium | Soil | 8 | 1 | 0.19–[0.64] | 0.4 | DL>BV[c] (7/8) |
| Calcium | Soil | 8 | 8 | 1200–12,000 | 6120 | 1/8 |
| Chromium (total) | Soil | 8 | 8 | 5–9.9 | 19.3 | 0/8 |
| Cobalt | Soil | 8 | 8 | 1.7–6.3 | 8.64 | 0/8 |
| Copper | Soil | 8 | 8 | 3.8–8.9 | 14.7 | 0/8 |
| Iron | Soil | 8 | 8 | 6500–12,000 | 21,500 | 0/8 |
| Lead | Soil | 8 | 8 | 8.3–21 | 22.3 | 0/8 |
| Magnesium | Soil | 8 | 8 | 1010–2000 | 4610 | 0/8 |
| Manganese | Soil | 8 | 8 | 96–400 | 671 | 0/8 |
| Mercury | Soil | 8 | 1 | 0.04–[0.13] | 0.1 | DL>BV[c] (7/8) |
| Nickel | Soil | 8 | 8 | 5–9.4 | 15.4 | 0/8 |
| Potassium | Soil | 8 | 8 | 956–1500 | 3460 | 0/8 |
| Silver | Soil | 8 | 0 | [0.28–2.6] | 1 | DL>BV[c] (7/8) |
| Sodium | Soil | 8 | 7 | 80–140 | 915 | 0/7 |
| Thallium | Qbt4 | 1 | 1 | 0.14 | 1.1 | 0/1 |
| | Soil | 8 | 6 | [0.31]–1.6 | 0.73 | 1/8 DL>BV[c] (1/8) |
| Uranium | Soil | 8 | 7 | 1.85–[28.5] | 1.82 | 7/8 DL>BV[c] (1/8) |
| Vanadium | Soil | 8 | 8 | 7.9–19.4 | 39.6 | 0/8 |
| Zinc | Soil | 8 | 8 | 17–30 | 48.8 | 0/8 |

[a] Brackets indicate the value is below detection limits.

[b] Value is the ratio of values exceeding the BV to the number of analyses.

[c] The detection limit for this analyte exceeded the BV.

**Table 4.3-6**
**Inorganic Chemicals with Concentrations Exceeding Soil BVs in PRS 16-005(d) Verification Samples**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | BV (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|---|
| Antimony | 16-3341 | 0316-98-0096 | 13(UJ) | 0.83 | Soil | 3–4 |
| | 16-3341 | RE16-98-0003 | 13(UJ) | 0.83 | Soil | 3.5–4.5 |
| | 16-3343 | 0316-98-0097 | 12(UJ) | 0.83 | Soil | 3.2–4.2 |
| | 16-3343 | RE16-98-0004 | 12(UJ) | 0.83 | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 13(U) | 0.83 | Soil | 2.4–3.4 |
| | 16-5791 | RE16-98-0001 | 11(UJ) | 0.83 | Soil | 2–3 |
| | 16-5792 | RE16-98-0002 | 11(UJ) | 0.83 | Soil | 2–3 |
| | 16-5793 | RE16-98-0005 | 1.2(U) | 0.83 | Soil | 9–9.5 |
| Barium | 16-3343 | 0316-98-0097 | 2000 | 295 | Soil | 3.2–4.2 |
| | 16-3343 | RE16-98-0004 | 1200 | 295 | Soil | 3–4 |
| Cadmium | 16-3341 | 0316-98-0096 | 0.63(U) | 0.4 | Soil | 3–4 |
| | 16-3341 | RE16-98-0003 | 0.64(U) | 0.4 | Soil | 3.5–4.5 |
| | 16-3343 | 0316-98-0097 | 0.62(U) | 0.4 | Soil | 3.2–4.2 |
| | 16-3343 | RE16-98-0004 | 0.6(U) | 0.4 | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 0.63(U) | 0.4 | Soil | 2.4–3.4 |
| | 16-5791 | RE16-98-0001 | 0.57(U) | 0.4 | Soil | 2–3 |
| | 16-5792 | RE16-98-0002 | 0.57(U) | 0.4 | Soil | 2–3 |
| Calcium | 16-5793 | RE16-98-0005 | 12,000 | 6120 | Soil | 9–9.5 |
| Mercury | 16-3341 | 0316-98-0096 | 0.13(U) | 0.1 | Soil | 3–4 |
| | 16-3341 | RE16-98-0003 | 0.13(U) | 0.1 | Soil | 3.5–4.5 |
| | 16-3343 | 0316-98-0097 | 0.12(U) | 0.1 | Soil | 3.2–4.2 |
| | 16-3343 | RE16-98-0004 | 0.12(U) | 0.1 | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 0.13(U) | 0.1 | Soil | 2.4–3.4 |
| | 16-5791 | RE16-98-0001 | 0.11(U) | 0.1 | Soil | 2–3 |
| | 16-5792 | RE16-98-0002 | 0.11(U) | 0.1 | Soil | 2–3 |
| Silver | 16-3341 | 0316-98-0096 | 2.5(U) | 1 | Soil | 3–4 |
| | 16-3341 | RE16-98-0003 | 2.6(U) | 1 | Soil | 3.5–4.5 |
| | 16-3343 | 0316-98-0097 | 2.5(U) | 1 | Soil | 3.2–4.2 |
| | 16-3343 | RE16-98-0004 | 2.4(U) | 1 | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 2.5(U) | 1 | Soil | 2.4–3.4 |
| | 16-5791 | RE16-98-0001 | 2.3(U) | 1 | Soil | 2–3 |
| | 16-5792 | RE16-98-0002 | 2.3(U) | 1 | Soil | 2–3 |
| Thallium | 16-3341 | 0316-98-0096 | 1.6 | 0.73 | Soil | 3–4 |
| | 16-5793 | RE16-98-0005 | 1.2(U) | 0.73 | Soil | 9–9.5 |

**Table 4.3-6**
**Inorganic Chemicals with Concentrations Exceeding Soil BVs in PRS 16-005(d) Verification Samples (continued)**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | BV (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|---|
| Uranium | 16-3341 | 0316-98-0096 | 2.46 | 1.82 | Soil | 3–4 |
| | 16-3341 | RE16-98-0003 | 1.98 | 1.82 | Soil | 3.5–4.5 |
| | 16-3343 | 0316-98-0097 | 3.5 | 1.82 | Soil | 3.2–4.2 |
| | 16-3343 | RE16-98-0004 | 2.65 | 1.82 | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 3.98 | 1.82 | Soil | 2.4–3.4 |
| | 16-5791 | RE16-98-0001 | 1.85 | 1.82 | Soil | 2–3 |
| | 16-5792 | RE16-98-0002 | 1.89 | 1.82 | Soil | 2–3 |
| | 16-5793 | RE16-98-0005 | 28.5(U) | 1.82 | Soil | 9–9.5 |

[a] Data qualifier flags are defined in the Glossary, Appendix A-2.

For two of the three request numbers, the QA/QC analysis was conducted on a sample not associated with the request. In both cases the analysis was performed on a sample from TA-16. This did not affect the analytical results because QA/QC results do not appear to be location-sensitive within TA-16.

Two of the request numbers had poor spike recovery for antimony, causing antimony results to be qualified as UJ. Spike recoveries for antimony ranged from 36 to 51%, below the acceptable limit of 75%. Antimony can be difficult to extract and analyze due to its chemical properties so poor spike recovery is not uncommon. In five of the six samples, the detection limit for the antimony analysis ranged from 11 to 13 mg/kg, significantly above the BV of 0.83 mg/kg. One sample had a detection limit of 1.2, which is still above the BV and outside the background range. In February 1999, two supplemental samples from locations 16-3341 and 16-3345, (one upstream and one downstream from the septic tank) were analyzed for antimony. There were no QA/QC problems associated with these samples. Detection limits were sufficiently low (1.0 mg/kg and 0.92 mg/kg respectively), and antimony was not detected. Limited sampling data suggest that antimony is not present in soils surrounding the former drainline. Antimony will not be carried forward into screening assessment.

The spike recovery for manganese was 34% in one request; the spike recovery for aluminum was 72% in another request. These results are below the acceptable level of 75%. This caused these analytes to be qualified as J-. Due to the magnitude of the low spike recovery, the bias on the manganese results is larger than that for aluminum results by a factor of up to two.

For one request, a matrix spike duplicate was analyzed instead of a duplicate. This had no effect on the analytical results. Duplicate analyses indicate the reproducibility of the data and/or the homogeneity of the samples. Although matrix spike samples have larger concentrations of some contaminants than typical samples (because compounds are added to or "spiked into" the sample), the matrix spike duplicate is adequate to show the reproducibility. The matrix spike duplicate results were within acceptable limits for all analytes.

For a different request number, the duplicate results for lead varied by 62%, far above the acceptable level of 35%. Lead results were therefore qualified as estimated. The lead results for this request number may have a variability up to two times greater than the variability of other analytes in this request.

Cadmium was undetected in all seven soil samples submitted for analysis. Detection limits for these analyses ranged from 0.57 to 0.64 mg/kg, higher than the BV of 0.4 mg/kg. However, the cadmium concentration in these samples falls within the range of cadmium concentrations reported in the LANL background

data set (Ryti et. al. 1998, 58093). The absence of detected cadmium when using analytical methods with detection limits close to LANL BVs and within the background range suggests that cadmium was not released at this site and that it does not warrant further investigation as a COPC.

Mercury was undetected in seven samples. The detection limits ranged from 0.11 to 0.13, slightly higher than the BV value of 0.1. One sample (0316-98-0005) had mercury detected at 0.04 mg/kg, a level below the BV. Based on this one result and undetected results near the BV, it appears that mercury is not present at PRS 16-005(d). These results do not indicate that mercury has been released at this site; therefore, mercury will not be carried forward into screening assessment.

Silver was undetected in all eight samples with detection limits of 0.28–2.6 mg/kg. Seven of these samples have detection limits above the silver BV of 1 mg/kg. The silver results were qualified as estimated because the spike recovery results deviated from the acceptable limit. This is not uncommon because silver can be difficult to measure (due to its chemical properties). One sample (0316-98-0005) had a detection limit of 0.28, well below the BV. Because one sample had detection limits below the BV, and seven samples had detection limits near the BV, this data can be used to show that silver has not been released at this site and will not be carried forward as a COPC.

Uranium was the only radioactive metal analyzed at this PRS. Uranium was analyzed for by using a partial sample digestion similar to SW-846 Method 3050 and analysis method SW-846 6020. Although no QA/QC issues are associated with the radionuclide data that would require qualification of the data, some of the uranium analyses conducted at this site used QA/QC data taken from a sample not associated with this PRS. In all cases the QA/QC sample was a sample taken from TA-16. In many cases, that sample was located near this PRS. QA/QC results do not appear to be location-specific within TA-16; therefore, QA/QC samples located in TA-16 but not within the PRS boundary are acceptable. This fact did not significantly affect the quality of the analytical results and the data were not qualified on this basis.

A second QA/QC issue is associated with the uranium analysis at this PRS: a difference in analytical methods that results in unacceptably high detection limits. The samples collected for uranium analysis were analyzed by two analytical laboratories. One laboratory used ICPMS to analyze the samples. This method's detection limits are close to the range of background uranium values seen at LANL (approximately 1 mg/kg). The other laboratory used ICPES, which yields detection limits of 30–50 mg/kg. These detection limits are unacceptably high compared to the BV for LANL. No uranium was detected in the samples analyzed by ICPES (ICPES was used on only one sample). However, this does not provide very useful information for assessing the presence or absence of contamination. Although the data were not qualified based on the elevated detection limits, they should not be given as much weight in the decision-making process as the ICPMS results.

Generally, the uranium values measured in these samples, and in the rest of the samples in this report, are higher than the uranium BV 1.82 mg/kg. This is the BV for uranium prepared with an SW-846 Method 3050 extraction, which causes partial digestion of the sample. Elevated uranium levels might indicate that uranium was released at this PRS; however, Appendix E of this document shows that the samples in this report do not have uranium values that differ statistically from other samples collected at TA-16. TA-16 is not known to have significant uranium contamination. On the basis of this comparison, uranium will not be carried forward as a COPC. Further discussion of uranium issues at TA-16 can be found in Appendix E of this document.

Table 4.3-7 summarizes the inorganic chemicals that will be carried forward into screening assessment. Figure 4.3-3 indicates the locations of the samples containing these inorganic chemicals.

**Table 4.3-7**
**Results of Inorganic Data Review PRS 16-005(d) Samples**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Antimony | Soil | Eliminated | Three samples have antimony levels undetected below the BV. |
| Barium | Soil | Retained | Detected in a pair of collocated samples and in one other sample at levels above the BV. |
| Cadmium | Soil | Eliminated | Undetected in all samples; detection limits are within the background range. |
| Mercury | Soil | Eliminated | Undetected in all 7 samples at MDLs slightly above the BV; detected in one sample at 0.04 mg/kg. |
| Silver | Soil | Eliminated | Undetected in all 7 samples at levels above the BV; undetected in one sample below BV. |
| Thallium | Soil | Retained | Detected in only one of a pair of collocated samples and in one other sample at levels above the BV. |
| Uranium | Soil | Eliminated | All results are statistically indistinguishable from the range of TA-16 BVs. |

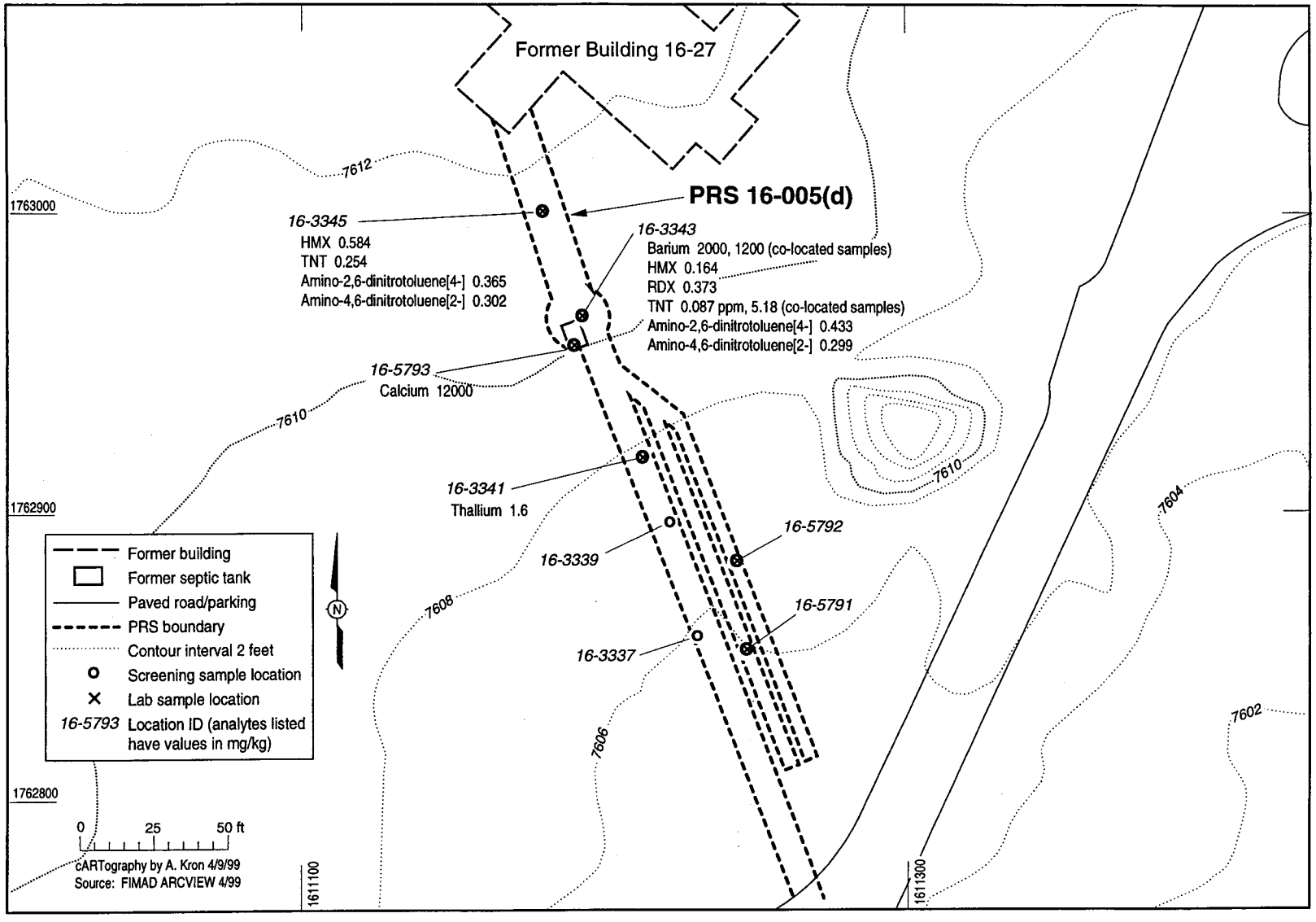


**Figure 4.3-3. Sampling locations and detected chemicals at PRS 16-005(d)**

### (b) Radionuclide Comparison with Background

Field screening for gross beta-gamma radioactivity showed no radioactivity above background levels. No radioactive elements, except for uranium, discussed above, are COPCs at this PRS and no samples were analyzed for radionuclides.

### (c) Evaluation of Organic Chemicals

Samples at PRS 16-005(d) were analyzed for VOCs, SVOCs, and HE. Tables 4.3-8 and 4.3-9 list the detected compounds.

**Table 4.3-8**
**Frequency of Detected Organic Chemicals in PRS 16-005(d) Verification Samples**

| Analyte | Media | Number of Samples Analyzed | Contract-Required EQL (mg/kg) | Concentration Range (mg/kg)[a] | Frequency of Detects[b] |
|---|---|---|---|---|---|
| Amino-2,6-dinitrotoluene[4-] | Soil | 9 | ND[c] | [0.086]–0.433 | 2/8 |
| Amino-4,6-dinitrotoluene[2-] | Soil | 9 | 0.26 | [0.084]–0.302 | 2/8 |
| Benzo(b)fluoranthene | Soil | 6 | 0.33 | 0.099c–[0.42] | 1/6 |
| Benzo(g,h,i)perylene | Soil | 6 | 0.33 | 0.15–[0.42] | 1/6 |
| HMX | Soil | 9 | 2.2 | 0.164–[2.2] | 2/8 |
| Dibenz(a,h)anthracene | Soil | 6 | 0.33 | 0.15–[0.42] | 1/6 |
| Indeno(1,2,3-cd)pyrene | Soil | 6 | 0.33 | 0.14–[0.42] | 1/6 |
| Methylene Chloride | Soil | 6 | 0.005 | 0.0048–[0.0063] | 1/6 |
| RDX | Soil | 9 | 1 | [0.164–1.0] | 1/8 |
| Trinitrotoluene[2,4,6-] | Soil | 9 | 0.25 | [0.083]–5.18 | 3/8 |

[a] Brackets indicate the value is below detection limits; data qualifier flags are defined in the Glossary, Appendix A-2.

[b] Value is the ratio of values above the detection limit to the number of analyses.

[c] ND = Non-detect.

**Table 4.3-9**
**Detected Organic Chemicals in PRS 16-005(d) Verification Samples**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | Media | Depth (ft) |
|---|---|---|---|---|---|
| Amino-2,6-dinitrotoluene[4-] | 16-3343 | RE16-98-0004 | 0.433 | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 0.365 | Soil | 2.4–3.4 |
| Amino-4,6-dinitrotoluene[2-] | 16-3343 | RE16-98-0004 | 0.299 | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 0.302 | Soil | 2.4–3.4 |
| Benzo(b)fluoranthene | 16-5793 | RE16-98-0005 | 0.099(J) | Soil | 9–9.5 |
| Benzo(g,h,i)perylene | 16-5793 | RE16-98-0005 | 0.15(J) | Soil | 9–9.5 |
| Dibenz(a,h)anthracene | 16-5793 | RE16-98-0005 | 0.15(J) | Soil | 9–9.5 |

**Table 4.3-9**
**Detected Organic Chemicals in PRS 16-005(d) Verification Samples**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | Media | Depth (ft) |
|---|---|---|---|---|---|
| HMX | 16-3343 | RE16-98-0004 | 0.164(J) | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 0.584 | Soil | 2.4–3.4 |
| Indeno(1,2,3-cd)pyrene | 16-5793 | RE16-98-0005 | 0.14(J) | Soil | 9–9.5 |
| Methylene Chloride | 16-5793 | RE16-98-0005 | 0.0048(J) | Soil | 9–9.5 |
| RDX | 16-3343 | RE16-98-0004 | 0.373 | Soil | 3–4 |
| Trinitrotoluene[2,4,6-] | 16-3343 | 0316-98-0097 | 0.087 | Soil | 3.2–4.2 |
| | 16-3343 | RE16-98-0004 | 5.18 | Soil | 3–4 |
| | 16-3345 | 0316-98-0098 | 0.254 | Soil | 2.4–3.4 |

[a] Data qualifier flags are defined in the Glossary, Appendix A-2.

No QA/QC issues were associated with the HE analyses; however, the HMX result was qualified as J by the analytical laboratory because the level at which it was detected was very near detection limits. Therefore, more error is associated with this quantity when compared to other detected results.

No QA/QC issues were associated with the SVOCs data; however, one SVOC sample (RE16-98-0005) had low levels of PAHs detected. The field notes that describe this sample indicate that chunks of asphalt were present at this location. Therefore, it is likely that a small piece of asphalt, a source of PAHs, was present in the analytical sample. Sample RE16-98-0005 does not accurately reflect the overall concentrations of SVOCs at PRS 16-005(d) because the results are skewed by contamination with asphalt. These PAHs will not be carried forward into the screening assessments because they do not result from activities associated with this PRS.

Trace amounts of methylene chloride were also present in this sample. Methylene chloride results were qualified as J because they were detected very close to the detection limit and therefore the results have more error associated with them than other results detected well above detection limits. Methylene chloride will not be carried into screening assessment because it is not clear that it derived from site activities. It was collocated with other organic compounds associated with asphalt and was not detected in any other samples. In addition, focused validation of the data showed that methylene chloride may be present in the blank, but at levels too low to quantify.

Some QA/QC issues affected the VOC data. In one VOC analysis, two common laboratory contaminants were detected in the blank and the sample (Smith 1997, 58478, p. 157). In the sample, the analytes were qualified as U because they were determined to be present due to laboratory, not environmental, contamination. No other QA/QC issues were associated with the organic chemical analyses.

The organic constituent data were reviewed in comparison with the contract-specified EQLs. The procedures used by each analytical laboratory result in organic constituent EQLs that are somewhat higher than the contract-specified EQLs. However, a comparison of the data with the contract-specified EQLs determined that no data was qualified as undetected with concentrations greater than twice the contract-specified EQLs.

Table 4.3.4-10 indicates which organic compounds will be carried forward into screening assessments. Figure 4.3-3 indicates the locations of the samples containing these compounds.

**Table 4.3-10**
**Results of Organic Data Review of PRS 16-005(d) Samples**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Amino-2,6-dinitrotoluene[4-] | Soil | Retained | Detected in two samples along with three other HE compounds. |
| Amino-4,6-dinitrotoluene[2-] | Soil | Retained | Detected in two samples along with three other HE compounds. |
| Benzo(b)fluoranthene | Qbt4 | Eliminated | Attributed to asphalt in the sample, not site activities. |
| Benzo(g,h,i)perylene | Qbt4 | Eliminated | Attributed to asphalt in the sample, not site activities. |
| Dibenz(a,h)anthracene | Qbt4 | Eliminated | Attributed to asphalt in the sample, not site activities. |
| HMX | Soil | Retained | Detected in two samples along with three other HE compounds. |
| Indeno(1,2,3-cd)pyrene | Qbt4 | Eliminated | Attributed to asphalt in the sample, not site activities. |
| Methylene Chloride | Qbt4 | Eliminated | Detected in one sample along with organic compounds attributed to asphalt and not attributed to site activities. |
| RDX | Soil | Retained | Detected in one sample along with four other HE compounds. |
| Trinitrotoluene[2,4,6-] | Soil | Retained | Detected in both samples of a collocated pair and in one other sample. |

### 4.3.5 Revised Site Conceptual Model

Evaluation of sampling results in the context of the preliminary conceptual model (Section 4.3.3) did not disclose required changes to that model.

#### 4.3.5.1 Nature and Extent of Contamination

PRS 16-005(d) is a septic tank and drainline that received liquid waste from lavatories in the southwest wing of former Building 16-27. The building was heavily contaminated with HE (RDX and HMX), which were the COPCs anticipated in the drainline cleanup. In addition, the field team conducted sampling and analyses for the presence of metals (including barium, silver and uranium), VOCs in subsurface soils, and SVOCs.

A total of 27 field-screening samples were collected during the cleanup of this PRS. After field-screening indicated the presence of contaminants, eight samples were submitted for fixed-laboratory analysis. Upon receipt of these analytical results, the field team collected two additional samples to bound the extent of contamination. The distribution of sample locations across the PRS and the analytical data quality are adequate to assess the effectiveness of the site cleanup.

Leaks from the drainline were thought to be the source of contamination at this site. Sampling and field-screening focused on the bottom and sides of the drainline trench, on the presumption that material above the drainline had not been contaminated with effluent.

As described in the approved VCM plan, cleanup was directed by sampling and field screening results. At PRS 16-005(d), as the D&D contractor removed the drainline, ER Project personnel observed and documented these activities, noting any evidence of leakage, broken clay pipe, and pipe joints and its location. The length of the potentially contaminated drainline trench was sampled at uniformly spaced intervals. "Worst-case" samples were collected from locations below the drainline where leaks would most likely have occurred. These worst-case samples were field screened for HE, metals, VOCs, and beta/gamma radioactivity. When contamination above cleanup levels was detected, the field team removed contaminated soils until field-screening instrumentation and techniques indicated that contamination levels in the remaining soils were 50% of PRGs. Following this procedure, the team defined boundaries for the regions of highest contamination. The contaminated soil within these boundaries was removed.

Following cleanup activities, confirmation sampling and analyses were conducted. These showed three inorganics were detected above BVs: barium, calcium, and thallium.

Barium was detected above its BV at location 16-3343, the northeast end of the septic tank excavation. It was detected in two samples taken from a depth of 3 to 4 ft, at levels of 2000 mg/kg and 1200 mg/kg. Barium was not detected above BV its in any other samples, including the downgradient sample collected at location 16-5793, the southeast end of the septic tank, at a depth of 9 to 9.5 ft. These two samples indicate that barium has been laterally and vertically bounded at this PRS.

Calcium was detected at 12,000 mg/kg at location 16-5793. Calcium is a nutrient and is not a RCRA hazardous constituent.

Thallium was detected at 1.6 mg/kg, at a depth of 3 to 4 ft at location 16-3341. This was the first sample taken in the drainline below the septic tank. Subsequent sampling at this location, at 5.5 to 6.5 ft depth, yielded a thallium concentration of 0.14 mg/kg. The data show diminishing thallium concentration with depth and, because it was not detected elsewhere, thallium is laterally bounded.

HE compounds are the major contaminants associated with PRS 16-005(d) and are assumed to have been carefully controlled during operations. They were detected at two locations: 16-3343 and 16-3345. At location 16-3345 HMX was detected at 0.584 mg/kg, TNT was detected at 0.254 mg/kg, and HE- degradation products were detected; amino-2,6-dinitrotoluene[4-] at 0.365 mg/kg and amino-4,6-dinitrotoluene[2-] at 0.302 mg/kg. However, HE was not detected in the analysis of a subsequent sample collected at greater depth (5–5.5 ft) at this location. At location 16-3343, these HE compounds and TNT were detected at 3–4 ft depth; however, the absence of detectable HE in the 5–5.5 ft depth sample collected at location 16-3345 effectively bounds the HE contamination.

Analytical results were compared to the EPA Region 9 PRGs for industrial soil. All analytical results confirm that the site was cleaned up to these PRGs.

#### 4.3.5.2 Environmental Fate

This section evaluates the environmental fate of the five organic chemicals and three metals retained for further evaluation from Section 4.3.4.5. The evaluation of environmental fate addresses the chemical processes that affect the persistence of a constituent along its migration pathway. The evaluation of transport addresses the physical processes that affect mobility along a migration pathway. Physicochemical properties such as vapor pressure, solubility in water, and the tendency to adsorb on soils are important for evaluating constituent mobility. The transport and mobility of the retained contaminants are discussed below and their physicochemical properties are listed in Table 4.3-11.

**Table 4.3-11**
**Physicochemical Properties for COPCs at PRS 16-005(d)**

| COPC Name | Vapor Pressure mm Hg@20C | Solubility mg/l@25C | Kd | Koc |
|---|---|---|---|---|
| Amino-2,6-Dinitrotoluene[4-][a] | 0.000000747[b] | 1050[b] | 0.419[b] | 41.9[b] |
| Amino-4,6-Dinitrotoluene[2-][a] | 0.000000747[b] | 1050[b] | 0.419[b] | 41.9[b] |
| HMX | 0.00084[c] | 2.63[c] | NA[d] | 2.4[c] |
| RDX | 0.000408[c] | 38.4[c] | NA | 1010[c] |
| Trinitrotoluene[2,4,6-] | 8.99E-08[c] | 480[c] | NA | 17.8[c] |
| Barium | 0[b] | 0[b] | 1800000[b] | NA |

**Table 4.3-11**
**Physicochemical Properties for COPCs at PRS 16-005(d) (continued)**

| | | | | |
|---|---|---|---|---|
| Calcium | NA | NA | 2209.7[c] | NA |
| Thallium | NA | NA | 716[c] | NA |

[a] Information for 2,6-dinitrotoluene used as surrogate.

[b] EPA 1999, 63062; amino-2,6-dinitrotoluene[4-] from Table A-3-91, pp. 134–136; amino-4,6-dinitrotoluene[2-] from A-3-91, pp. 134–136; barium from Table A-3-16, pp. 48–50; thallium from Table A-3-184, pp. 115–119.

[c] MEPAS 1995, 63179.

[d] NA = Not available

Water solubility is perhaps the most important chemical characteristic to consider when assessing chemical mobility. Soil sorption, chemical sorption, and chemical binding in soil —each may limit the transport of a chemical. These properties can be expressed as ratios of an organic chemical's concentration to either solid or liquid phases. The partitioning ratio of an organic material to water is the carbon-water sorption coefficient (Koc). The partitioning ratio between soils and water is the distribution coefficient (Kd). For metals, the Kd is assumed to be independent of the organic carbon in the partitioning media and is governed by other factors such as pH, redox potential, iron content, and ion-chemistry (EPA 1999, 63062). Volatilization of an organic chemical will enhance its diffusion through the soil pore gas and any potential release to the atmosphere. Metals are considered nonvolatile at ambient temperatures (EPA 1999, 63062).

### Organic Chemicals

The chemical properties of organic chemicals such as water solubility, adsorption coefficient, and vapor pressure, of organic chemicals help determine the fate and transport of such chemicals. Volatilization of a chemical may also be an important migration pathway. The vapor pressure of a chemical provides an indication of whether a chemical is likely to volatilize.

The following information, summarized from Ney (1995, 58210), gives an indication of the fate and transport tendencies of organic chemicals. The higher the water solubility of a chemical, the more likely it is to be mobile and the less likely it is to accumulate, bioaccumulate, volatilize, and persist in the environment. However, a highly soluble chemical (greater than 1000 mg/l) is also more prone to biodegradation and metabolism. The lower the water solubility of a chemical (less than 10 mg/l), the more likely it is to be immobilized by adsorption. Chemicals with a Koc of greater than 10,000 tend to remain immobile on soil particles. Chemicals with a Koc of 1000 or less tend to be more mobile in soil water. A chemical with a low vapor pressure (less than 0.000001 mm Hg) is less likely to volatilize. A chemical with a high vapor pressure (greater than 0.01 mm Hg) is more likely to volatilize.

HMX has low water solubility (2.63 mg/l), indicating that the chemical is highly mobile within water percolating from rainfall infiltration (MEPAS 1995, 63179). The other organic chemicals at this PRS have low to moderate solubilities. The vapor pressures of the organic chemicals are very low, indicating that they will not be highly mobile through soil pore gas diffusion. The organic chemicals present at this site have relatively low Koc values, indicating that they tend to be relatively available for transport along with percolating soil water. Since contamination at this site is only present in the subsurface, transport of organic chemicals adsorbed on soil particles by water will be very limited. Biodegradation of RDX and HMX is expected to occur very slowly in soil.

Although TNT, HMX, and RDX are moderately soluble and not strongly sorbed on soil particles, the small source terms, together with limited amount of soil water percolating through the soil at the site, will limit translocation. Based on this information and on the site conditions at this PRS, it seems unlikely that organic chemicals will be transported outside the PRS boundary.

**Inorganic Chemicals**

Metals can be transported as colloidal and dissolved phases. Because of sorption and precipitation, inorganic chemicals can have long residence times. The mobility of inorganic chemicals is governed largely by the Eh and pH conditions of the water, soil, sediment, and tuff. The Eh and pH conditions exert a strong influence on the speciation of inorganic chemicals, which affects the solubility and sorption of inorganic phases. Soil sorption, chemical sorption, or chemical binding in soil is expressed as the adsorption coefficient (Kd). In general, metallic cations are strongly adsorbed to soil particles, especially if the soil is not highly acidic. Adsorption to particulate matter is a major mechanism by which chemicals are removed from solution and it is dependent, in part, upon the type of soil (Brady 1974, 58203, pp. 563–566).

The reaction of most metals in soils is affected by pH, organic matter content, and the oxidation-reduction status of the soil. Ordinarily at pH values of 6.5 and above, they tend to be so highly adsorbed that their availability for uptake in plants is limited, especially if the chemicals are present in their high-valence or oxidized forms. Consequently, most soils will bind relatively large quantities of these elements, if the pH is high and the drainage is good.

The inorganic chemicals present at this site, except thallium, have Kds that indicate a low potential for translocation. These metals would most likely be bound to the soil and would therefore move primarily with the transport of soil particles by water rather than moving as dissolved chemicals in water. Because contamination at this site is only present in the subsurface, the transport of inorganic chemicals adsorbed on soil particles by water will be very limited. Although thallium is soluble and not strongly sorbed on soil particles, the low concentrations present and the limited amount of soil water percolating through the soil at the site will limit translocation. Based on this information, on the small source terms, and on the site conditions at this PRS, it appears unlikely that inorganic contamination will be transported off-site.

## 4.4 Site Assessment

### 4.4.1 Summary

Section 4.3.4.5 of this report provided an extensive data evaluation which identified those constituents at PRS 16-005(d) that should be carried forward to a screening level assessment of human health and ecological effects. Tables 4.4-1 and 4.4-2 present all the COPCs that have been retained for analysis in the assessments. In addition, these tables identify whether any of the COPCs are retained as COCs or COECs.

A human health screening assessment is provided in Section 4.4.2.1. The screening assessment contains the following sections: (a) scoping, (b) screening evaluation, (c) uncertainty analysis, and (d) interpretation. General methods for the human health screen are presented in Section 4.4.1.1, and additional information is provided in Appendix F, Section F-1.0.

An investigation of potential ecological effects is provided in Section 4.4.2.2. The ecological screening assessment contains the following sections: (a) scoping, (b) screening evaluation, (c) uncertainty analysis, and (d) interpretation. General methods for the ecological scoping and data screening are presented in Section 4.4.1.2. Additional ecological information is provided in Appendix F, Section F-2.0.

#### 4.4.1.1 Human Health Screening General Approach

A human health screening assessment was used in this VCM to determine which COPCs, if any, would contribute the greatest amount of risk to potential human receptors. COPCs were evaluated by comparing actual contaminant levels in surface and subsurface soil with human health risk-based concentrations of contaminants in soil. The human health risk-based concentrations used for this evaluation were derived by EPA, Region 9, and reported in "Region 9 PRGs" (EPA 1998, 58751). This document provides remediation

goals for both residential and industrial receptors. For this report's evaluation, industrial receptor PRGs were used to further evaluate COPCs, according to the following rationale:

- No change in the industrial land-use designation for this area is expected according to the land use master plan map and future land use map for the Laboratory. These maps are a part of the Site Development Plan, Annual Update, 1995 (LANL 1995, 57224, pp. 14, 16).
- At this PRS, the potential for human exposure to contaminants in the environment is very low. This is a highly secure area of the Laboratory and public access is not allowed. Therefore, use of an industrial receptor is appropriate.

Use of Region 9 industrial receptor PRGs as cleanup levels was approved by NMED in the V-Site VCM plan (LANL 1997, 55653.2, p. 50). For each COPC, the maximum detectable concentration in surface and subsurface soils was compared to the Region 9 industrial PRG (see Table 4.4-1). These PRGs are provided in Appendix F-1.0. Those COPCs whose maximum concentrations exceeded their PRGs were retained for further evaluation as COCs.

#### 4.4.1.2 Ecological Screening General Approach

An ecological screening assessment was used in this VCM to determine if (1) COECs are present at V-Site and (2) if whether a quantitative ecological risk assessment was required (to determine if the COECs posed risks to ecological receptors). The ecological screening methodology followed general guidance provided by EPA, NMED (NMED 1998, 57761), and the Laboratory (Kelly et al. 1998, 57916). Other guidance documents that contributed to the ecological screening assessment included:

- Framework for Ecological Risk Assessment (EPA 1992, 48847.1)
- Guidelines for Ecological Risk Assessment (EPA 1998, 59600.1)

### 4.4.2 Screening Assessments

This section presents the human health and ecological screening assessments.

#### 4.4.2.1 Human Health

The human health screening assessment for PRS 16-005(d) is provided in this section.

**(a) Scoping**

As previously stated, the current land use for this are is industrial and the area is dedicated to continued industrial laboratory operations. Therefore, the use of industrial PRGs is appropriate for screening both current and reasonable future land use.

**(b) Screening Evaluation**

For PRS 16-005(d), no COCs were identified (none of the constituents we screened exceeded industrial PRGs) as shown on Table 4.4-1 (Appendix F contains a list of the industrial PRGs). Because no human health COCs were identified, no human health risk assessment was performed.

**Table 4.4-1**
**Human Health Screening for PRS 16-005(d)**

| COPC Name | Location ID | Sample ID | Maximum Concentration (mg/kg) | Depth (ft) | VCM Plan Cleanup Level (mg/kg) | Current Region 9 PRG (mg/kg) | Result | Rationale |
|---|---|---|---|---|---|---|---|---|
| Amino-2,6-dinitrotoluene [4-] | 16-3343 | RE16-98-0004 | 0.433 | 3–4 | NA[a] | 100[b] | Eliminated | Maximum concentration is less than the PRG. |
| Amino-4,6-dinitrotoluene [2-] | 16-3345 | 0316-98-0098 | 0.302 | 2.4–3.4 | NA | 100[b] | Eliminated | Maximum concentration is less than the PRG. |
| Barium | 16-3343 | 0316-98-0097 | 2000 | 3.2–4.2 | 11,000 | 10,000 | Eliminated | Maximum concentration is less than the PRG. |
| Thallium | 16-3341 | 0316-98-0096 | 1.6 | 3–4 | NA | 15[c] | Eliminated | Maximum concentration is less than the PRG. |
| HMX | 16-3345 | 0316-98-0098 | 0.584 | 2.4–3.4 | 3400 | 5300[d] | Eliminated | Maximum concentration is less than the PRG. |
| RDX | 16-3343 | RE16-98-0004 | 0.373 | 3–4 | 17 | 27[d] | Eliminated | Maximum concentration is less than the PRG. |
| Trinitro toluene [2,4,6-] | 16-3343 | RE16-98-0004 | 5.18 | 3–4 | 64 | 100 | Eliminated | Maximum concentration is less than the PRG. |

[a] NA = Not available.

[b] Using trinitrotoluene as surrogate chemical.

[c] Using thallium carbonate toxicity criteria.

[d] These COPCs are noncarcinogenic; therefore, one-tenth of the PRG is used for comparison.

### (c) Uncertainty Analysis

Given the past and probable future uses of V-Site, it is unlikely that using industrial PRGs would underestimate any potential effects of chemical constituents at this PRS. The exposure pathways—incidental ingestion of soil, inhalation of particulates, inhalation of volatiles, and dermal exposure—that were evaluated in the Region 9 document are sufficiently conservative, resulting in a conservative PRG for screening purposes (EPA 1998, 58571).

Concerning use of "Region 9 PRGs" (EPA 1998, 58751), it should be noted that not all toxicity values used in Region 9's database are approved for use by the EPA headquarters workgroup for toxicity criteria. Some are flagged as derived from alternative sources of information (e.g., HEAST, EPA's NCEA, and other sources). These sources are considered valid secondary sources and these values are used as listed in the Region 9 document.

PRGs were not available for the 4-amino-2,6-dinitrotoluene and 2-amino-4,6-dinitrotoluene. TNT was identified as an appropriate surrogate for the amino-substituted dinitrotoluenes (ADNTs). This is appropriate due to structural similarity and to the fact that TNT is metabolized to the ADNTs (HSDB 1999, 63385).

Using TNT as a surrogate for the ADNTs is inherently uncertain because very little is known about the toxicity of the ADNTs, and because the mechanism for the toxicity of TNT is not clear. However, the PRG for TNT is 100, and the highest detection for an ADNT at this PRS is 0.43 mg/kg. This concentration is three orders of magnitude lower than the surrogate PRG, so it is unlikely that the ADNTs present any threat to human health at the site.

**(d) Interpretation**

No COCs are identified at PRS 16-005(d). Based on this screening evaluation for human health, PRS 16-005(d) is recommended for NFA.

#### 4.4.2.2 Ecological

The ecological screening assessment for PRS 16-005(d) is provided in this section.

**(a) Scoping**

The scoping phase of the ecological screening assessment included a site visit and completion of an Ecological Scoping Checklist and an Ecological Pathways CEM. The site visit, checklist, and CEM were used to determine the presence of ecological receptors and completeness of exposure pathways for ecological receptors. The scoping checklist and CEM are included in Appendix F-2.0.

PRS 16-005(d) lies in an area that is mixed grassland and ponderosa pine habitat. As a result of excavation, removal of the drainlines, and subsequent backfill of the excavated soil, the areas above the drainline location are partially barren of vegetation. The site borders areas of natural habitat with few developments, although PRS 16-005(d) was once connected to the Building 27 complex, which was demolished. Ecological receptors are present at PRS 16-005(d): as birds were observed foraging at the site and sign of elk, deer, and fossorial mammals were noted during the site visit. No nesting habitat for threatened or endangered (T&E) species is on or near V-Site, although the area may be considered as within the medium frequency foraging range of the peregrine falcon (LANL 1999, 63130). This is not likely to present any risk to the falcon as the potential contamination is subsurface and complete exposure pathways are unlikely.

The potentially complete exposure pathways include incidental ingestion of soil by burrowing animals and uptake by plants. The incidental ingestion pathway is characterized as "unlikely", and the uptake by plants pathway is characterized as "minor" on the Ecological Scoping Checklist (see Appendix F-2.0)

**(b) Screening Evaluation**

The contaminants retained from Section 4.3.4.5, "Data Review", were further investigated using the following methodology.

- Those inorganic, organic, and radionuclide constituents whose maximum concentrations exceeded BVs were compared to ESLs. (ESLs are used in a similar way to human health PRGs, but they differ in that ESLs are species- and food-chain-specific). Nine individual ESLs have been established for use at the Laboratory. Because uncertainty factors are used to develop ESLs, some ESLs are below BVs. In those cases where the ESL is below the BV, the ESL will be evaluated on a case by case basis. The use of ESLs is further discussed in Section 2.4.2.2(c), "Uncertainty Analysis".

- The data are screened to ecologically relevant depths in order to eliminate samples that are not in potential ecological exposure pathways. Ecologically relevant depths are defined as 0–5 ft below the surface. All PRS 16-005(d) data were screened to retain samples within 5 ft of the surface.

The 2,4,6-TNT and barium concentrations identified at PRS 16-005(d) were found at depths of 3–4.2 ft, and, as such, they are unlikely to be in any animal receptor exposure pathways. The deepest fossorial mammal that is common at the Laboratory is the pocket gopher (*Thomomys* spp.), with a typical burrowing depth range of 0.33–1.5 ft (Armstrong 1987) and a maximum reported burrowing depth of approximately 4.9 ft (Felthauser and McInroy 1983, 50280). It is possible that a deer mouse might use a pocket gopher burrow, but for an exposure pathway to exist, the burrow would have to be greater than twice the typical maximum burrowing depth at the one specific location where 2,4,6-TNT is found at a concentration greater than the ESL. Inspection during the site visit indicated that pocket gopher activity at PRS 16-005(d) was minimal, most likely because of the disturbance at the site and the relative lack vegetation. In addition, it is un likely that earthworms, or any of the invertebrates that earthworms are used to represent, (no barium or 2,4,6-TNT ESLs are available for earthworms) will inhabit the soil below the A and B soil horizons. This is because of the lack of organic matter below the B horizon. In the Nyhan soil unit typical at TA 16, the A and B soil horizons are approximately 2 ft thick in total (Nyhan et al. 1978, 5702.2).

In addition to the unlikely presence of any animal receptors, the 2,4,6-TNT concentration of 5.18 mg/kg does not exceed the plant ESL of 30 mg/kg; thus, plant uptake is not a concern. The single point 2,4,6-TNT maximum concentration of 5.18 mg/kg exceeds the deer mouse 2,4,6-TNT ESL of 2.62 mg/kg. The calculated ESL assumes that a receptor receives all its exposure from the point with the maximum concentration. When considering the actual foraging area of the deer mouse, the effective exposure will be many times less than the maximum concentration, resulting in an exposure to 2,4,6-TNT that will not pose an ecological risk to the deer mouse population. Based on the low significance of the animal pathway and the little concern regarding plant uptake, 2,4,6-TNT is not retained as a COEC.

Plant uptake is the only potentially complete exposure pathway for barium. The barium ESL for plants is 1000 mg/kg. Although there is potential for barium to inhibit plant growth at the location where the 2000 mg/kg concentration was detected, sample locations up- and downgradient along the drainline showed barium concentrations below background. The inhibition of plant growth would be contingent on plants (most likely a grass, which is the dominant plant at the site) revegetating this specific location (the site is relatively barren as a result of the drainline removal) and then propagating roots to the 3–4 ft depth interval. The overall effect of this potential growth inhibition of only a few grass plants on the plant population at PRS 16-005(d) can be viewed as negligible. As a result, barium will not be retained as a COEC.

No COPCs at PRS 16-005(d) were retained as COECs following the ecological data screening. Table 4.4-2 shows the COPCs and the results of the ecological data screening.

**Table 4.4-2**
**Ecological COPC Analysis at PRS 16-005(d)**

| Analyte | Location ID | Sample ID | Depth (ft) | Maximum Concentration (mg/kg)[a] | Lowest ESL (Species:Value [mg/kg]) | Rationale for Elimination / Retention |
|---|---|---|---|---|---|---|
| Barium | 16-3343 | 0316-98-0097 | 3–4 | 2000 | kestrel : 403.0 | Eliminated; see text |
| Thallium | 16-3341 | 0316-98-0096 | 3–4 | 1.6 | red fox : 2.36 | Eliminated; <ESL |
| Methylene chloride | 16-5793 | RE16-98-0005 | 9–9.5 | 0.0048(J) | mouse : 6.68 | Eliminated; depth, <ESL |
| Amino-2,6-dinitrotoluene[4-] | 16-3343 | RE16-98-0004 | 3–4 | 0.433 | mouse : 4.28 | Eliminated; <ESL |
| Amino-4,6-dinitrotoluene[2-] | 16-3345 | 0316-98-0098 | 2.5–3.5 | 0.302 | mouse : 6.22 | Eliminated; <ESL |
| HMX | 16-3345 | 0316-98-0098 | 2.5–3.5 | 0.584 | mouse : 1.50 | Eliminated; <ESL |

**Table 4.4-2**
**Ecological COPC Analysis at PRS 16-005(d) (continued)**

| Analyte | Location ID | Sample ID | Depth (ft) | Maximum Concentration (mg/kg)[a] | Lowest ESL (Species:Value [mg/kg]) | Rationale for Elimination / Retention |
|---|---|---|---|---|---|---|
| RDX | 16-3343 | RE16-98-0004 | 3–4 | 0.373 | mouse : 5.19 | Eliminated; <ESL |
| TNT[2,4,6-] | 16-3343 | RE16-98-0004 | 3–4 | 5.18 | mouse : 2.62 | Eliminated; see text |

[a] Data qualifier flags are defined in the Glossary, Appendix A-2.

### (c) Uncertainty Analysis

There are uncertainties inherent in all phases of ecological risk screening and assessment. Generally, these uncertainties are related to field sampling, laboratory analysis, the use of ESLs for data screening, and the subjective analyses of potentially complete exposure pathways.

Both the sampling plan and the execution of field sampling were intended to characterize the nature and extent of potential contamination at the site. Sampling only in areas with less-than-maximum concentrations would result in an underestimate of potential risk; conversely, sampling only in areas exhibiting maximum concentrations would result in an overestimate of true ecological risk. Biasing the selection of sampling locations with field-screening helped ensure that samples were taken at locations with maximum contaminant concentrations. These sampling-related uncertainties have had no significant effect on the confidence of this ecological screening assessment.

Any uncertainty associated with the laboratory analyses would include detection limits for some metals above background concentrations (see Section 4.3.4.5, "Data Review", for a discussion of this issue). The uncertainty associated with the laboratory analyses is not likely to significantly affect the confidence of this ecological screening assessment.

The use of consistently derived ESLs is an important tool in ecological risk assessment. The Laboratory's ER Project Ecological Risk Team developed the ESLs used in this ecological screening assessment, and so the ESLs are the best available ecological screening tool for use at this site, although the ESLs are currently under review and are likely to be revised in mid-1999. The ESLs were derived with the following assumptions:

- the maximum chemical availability,
- the receptor receives all its exposure from the contaminated site,
- the minimum receptor weight, and
- the maximum receptor dietary-intake rates.

Each of these assumptions leads to an overestimate of potential risk. The assumption that an animal receptor receives all of its exposure at the point of the maximum detected concentration contrasts starkly with the reality of a receptor's exposure to the environment over its entire home range. This results in an estimate of a receptor's true exposure that may be significantly overestimated. On the other hand, ESLs do not account for additive or synergistic effects of contaminants, which may result in an underestimate of potential risk. Due to the extremely conservative nature of this model, these uncertainties are not expected to result in any underestimate of ecological risk that would significantly affect any ecological receptors or the environment.

The primary exposure pathways for ecological receptors are dietary intake, incidental ingestion of soil, plant uptake, and food web transport. Additional potential pathways include dermal contact with contami-

nated soil, inhalation of volatile constituents, inhalation of fugitive dust, and external irradiation. Of all these potential pathways, only incidental ingestion of soil by burrowing animals and plant uptake pathways were considered to be complete; these were characterized as "unlikely" and "minor", respectively, because of the depth at which the contaminants were detected (3 ft or greater) and because the contamination exceeded screening levels at only one location. The subjective characterization of the exposure pathways introduces uncertainty into the screening assessment, but this uncertainty is not likely to significantly affect the interpretations made in the assessment.

**(d) Interpretation**

No COECs were identified at PRS 16-005(d). This is based on the comparison of sampling data to BVs (Section 4.3.4.5, "Data Review"), the comparison of data to ESLs, the unlikely receptor exposure pathways, and the elimination of 2,4,6-TNT and barium as COECs based on the insignificant potential effects these constituents would have on the environment. From an ecological risk perspective, and based on this ecological screening assessment, PRS 16-005(d) is recommended for NFA.

### 4.4.3 Risk Assessments

No risk assessments are necessary or required because no COPCs exceeded human health and/or ecological screening criteria at PRS 16-005(d).

### 4.4.4 Other Applicable Assessments

#### 4.4.4.1 Surface Water

PRS 16-005(d) was an underground septic tank that served former Building TA-16-27. The PRS received an erosion matrix score of 10.5 during the site assessment conducted in accordance with LANL-ER-SOP 2.01, Surface Water Site Assessment. There was no evidence of erosion at the site. The PRS is situated in a level field, and there is very little surface water run-on or run-off occurring at the PRS location. The area has a slight gradient that trends toward the east, and any surface water run-off from the site would enter a small ditch that leads to the south east.

#### 4.4.4.2 Groundwater

Groundwater was not directly assessed as part of the VCM conducted at PRS 16-005(d); however, it is unlikely that releases from this PRS affected the uppermost perched horizon or any deeper groundwater zones. Contamination is confined to locations immediately beneath the PRSs and all locations show a decreasing trend in contamination with depth. Finally, a persistent hydrologic driver to the spread of contamination was never present at this PRS.

#### 4.4.4.3 Underground Storage Tanks

There have been no underground storage tanks at this PRS.

## 4.5 Conclusions and Recommendations

The objective of the VCM at PRS 16-005(d) was to implement an accelerated cleanup in conjunction with D&D of the septic tank and drainline. The cleanup strategy for the site included (1) sampling appropriate locations to detect the presence of any contamination, (2) removal of contamination if it was present at levels greater than PRGs, (3) bounding the spatial extent of contamination, and (4) determining decreasing trends in remaining contaminant concentrations. The VCM plan required taking confirmation samples, which were analyzed in fixed laboratories, to ensure that PRGs had been achieved.

Initial site characterization was conducted as D&D personnel removed the drainline. Site investigation included initial screening/characterization sampling to define the nature of contamination and, upon evalu-

ation of initial analytical results, sampling to bound the extent of contamination. Screening sample locations were distributed approximately uniformly along the drainline and were sufficient to detect any significant release from the drainline.

The data is considered adequate to define the nature and extent of contamination and to determine the need for any further action at the site. Analyses for inorganic, organic, HE and radioactive contamination showed that inorganics, (barium, calcium, and thallium) were detected above the Laboratory's BVs at three locations in the drainline trench. Additional samples, which were collected either below or beside these, did not contain inorganics above BVs; thus, all detected inorganic contaminants were bounded. Uranium analyses at 16-005(d) are at variance with the Laboratory's site-wide uranium BV; however, uranium analyses at this site yielded concentrations that were within the TA-16 background data set. HE (HMX, RDX, and TNT) and HE-degradation products were detected in the drainline trench samples collected near the former septic tank. Examination of adjacent samples revealed diminishing concentrations both laterally and vertically.

The human health screening assessment showed that neither the inorganics (including uranium) nor the organics (including HEs) exceeded their respective PRGs: and therefore, a human health risk assessment was not performed.

The ecological screening assessment compared COPCs to ESLs, with consideration of exposure pathways. At this PRS, exposure pathways are not likely to be complete and receptor exposure is unlikely. The assessment identified no COPECs.

In conclusion, the fundamental requirement of the VCM plan was met: to assess and, if necessary, clean up PRS 16-005(d) in relation to NMED-approved PRGs. The low levels of organic and inorganic contaminants remaining in the soil have been bounded (i.e., sampling data indicate that maximum concentrations at the contamination source were characterized and that remaining contaminant concentrations diminish with distance from the removed source). PRS 16-005(d) is recommended for NFA.

## 5.0 PRS 16-034(p)

### 5.1 Summary

PRS 16-034(p) is the foundation of a former office and laboratory building, TA-16-41. In 1962, the building was removed and the basement was used as an incinerator. Based on the history of operations and on limited sampling done in July 1995, ER Project personnel suspected the COPCs at this site to be HE, metals, and SVOCs.

The objectives of the VCM were to characterize this PRS and to implement an accelerated cleanup in conjunction with D&D of the concrete floor and foundation. The cleanup strategy for the site included (1) sampling in appropriate locations to detect the presence of any contamination, (2) removing contamination if it were present at levels greater than PRGs, (3) bounding the spatial extent of contamination, and (e) determining decreasing trends in remaining contaminant concentrations. Additional details about characterization and cleanup objectives are contained in Section 5.3.3, "Preliminary Conceptual Model."

At 16-034(p) D&D activities were limited to removal of the basement floor. After D&D removed the basement floor, the project field team collected 23 samples from 22 locations, with some samples biased to cracks and a hole in the basement floor. These samples were screened for HE, radioactivity, metals, PAHs, and VOCs. Based on screening results that indicated the potential presence of contaminants, 16 samples were submitted for laboratory analyses. After receiving the analytical results for these 16 samples, the field team collected 3 additional samples to define lateral and vertical boundaries of contamination. The bounding samples were the deepest samples (10.5–12 ft) taken from the excavation of the basement. They were collected from locations 16-5963, 16-5964, and 16-5986 on the southwest side of the basement. Details of the sampling campaign are included in Section 5.3.4, "Field Investigation and Remediation."

Early sampling revealed low concentrations of inorganics across the bottom of the excavation, either in or immediately above the fill/tuff interface. Specifically, arsenic, barium, cadmium, calcium, cobalt, copper, lead, manganese, selenium, silver, and zinc were detected above BVs. Bounding samples collected at locations 16-5963 (beneath the footprint of the basement floor) and 16-5986 (outside the footprint of the basement floor) from tuff, at 10.5–11 ft contained no inorganics above BVs. Pyrene was detected at Location 16-5964. Subsequent sampling at a greater depth did not detect pyrene. The isolated pockets of subsurface contaminants near BVs, the limited amounts of soil water for dissolving and dispersing contaminants, and the absence of a persistent hydrologic driver to spread contamination– all indicate minimal potential for contaminant migration. Details are included in Section 5.3.5, "Revised Site Conceptual Model."

During the human health screening assessment, contaminants above BVs or EQLs were compared to EPA's Region 9 PRGs for industrial workers. After comparing COPCs to PRGs, all were found to be below the PRGs except arsenic, which was detected at 10.3–10.8 ft at a concentration greater than the PRG. The original excavation for the basement floor has been filled with select backfill up to the level of ground surface. The surface has been revegetated. Exposure to a human receptor at this depth is improbable; a human health risk assessment was not performed.

None of the COPCs identified at 16-034(p) were retained as COPECs because there are no complete exposure pathways for ecological receptors at the PRS. Details of the human health screening assessment are reported in Section 5.4.2.1; details of the ecological screening assessment are reported in Section 5.4.2.2.

Based on the human health and ecological screening assessment PRS 16-034(p) is recommended for NFA.

## 5.2 Description and Operational History

PRS 16-034(p) is a SWMU listed in Module VIII of the Laboratory's Hazardous Waste Facility Permit (EPA 1990, 01585).

### 5.2.1 Site Description

PRS 16-034(p) was the foundation of former laboratory building TA-16-41. The building measured 17 x 30 x 14 ft. Later, this location was the site of an incinerator. PRS 16-034(p) includes the former basement foundation as well as associated soil. It is located southwest of the TA-16-27 complex.

### 5.2.2 Operational History

TA-16-41 is the building whose foundation and associated soil make up this PRS. The building originally provided lavatories and office space on the ground floor, with utilities in the basement to serve other buildings in the area. It also served as a laboratory and may have been used to store compressors.

In 1962, the building was removed and a trash incinerator (PRS 16-011) was built in the building's basement. The incinerator was used to burn paper and cloth items that might have been contaminated with low levels of HE. The incinerator portion of the structure was removed during a VCA in 1995. The basement foundation was removed in 1998.

## 5.3 Investigatory and Remediation Activities

### 5.3.1 Summary

Section 5.3 describes the investigatory activities for PRS 16-034(p), the basement foundation. This section includes previous investigations (Section 5.3.2), the preliminary conceptual model that guided the VCM fieldwork (Section 5.3.3), and the VCM field activities (Section 5.3.4). Section 5.3.4 contains information about D&D activities, VCM plan requirements, remediation stages, and a review of the data. The site conceptual model will be revised in Section 5.3.5, using the information gained during the VCM.

### 5.3.2 Previous Investigation

No previous investigations have been performed at PRS 16-034(p).

### 5.3.3 Preliminary Conceptual Model

This section presents the preliminary conceptual model of contaminant occurrence and distribution at PRS 16-034(p). The conceptual model provides our best understanding of what contamination was released, if any; the distribution and location of releases; the potential transformation of the contaminants; and the potential translocation of the contaminants based on transport mechanisms, pathways, and chemical properties. The objectives of the model are (1) to ensure that samples are collected in appropriate locations, (2) that samples are analyzed for the correct potential contaminants, and (3) to ensure that all characterization and remediation objectives of the VCM are appropriate.

The conceptual model contains the assumptions used to guide the VCM sampling and cleanup design. The objectives of the sampling design are (1) to sample in appropriate locations, detecting contamination if it is present; (2) to bound the contamination; and (3) to determine decreasing trends in contaminant concentrations.

PRS 16-034(p) was the foundation of former laboratory building TA-16-41. It is assumed that tuff was excavated and fill material was placed in the excavation prior to pouring the concrete foundation for the laboratory building. The foundation floor is approximately 10 ft below surface grade. Based on the history of operations at this building, and on the source of contamination, the suspected COCs at this PRS include

SVOCs, inorganic chemicals (specifically barium and silver), and HE (RDX and TNT). Note that the suite of suspected COCs at this PRS differs from that of other PRSs in this report due to differences in past building usage. Constituents of the potentially released SVOCs and HE may have partially degraded into other constituents that could be potential contaminants.

We hypothesize that the primary mechanism for contaminant transport would be leakage from cracks or from holes in the concrete floor. Snowmelt and rainfall may percolate to the subsurface and help move the contaminants. Contaminants are hypothesized to be in either the solid phase (particulates and ash) or aqueous phase (dissolved species). The secondary transport mechanism would be liquid and gaseous diffusion through the porous fill matrix.

The major (preferential) pathway for contaminant migration is vertical movement down from the concrete structure to the soil/tuff interface. Contamination, if present, should be found directly beneath the concrete foundation (in the fill material). Downward migration of contaminants may naturally slow at the tuff interface. The interface itself should serve as a preferential channel for the contaminants because of the low permeability of tuff and the much greater permeability of the soil or fill. Contaminants could be trapped along the soil/tuff interface, and horizontal transport could be hampered at the tuff/wall faces. Vertical infiltration of liquids through the tuff is more likely if the tuff is highly fractured.

The extent of potential translocation of contaminants is based mainly on solubility, adsorptivity, and transport mechanism flow rate. It is assumed that the solid phase particulates would be just beneath the foundation. Most of the contaminants released from at PRS should have been solubilized. The contaminants may have precipitated from solution or have been adsorbed onto silts, clays, and organic matter in the fill material. The limiting factors for contaminant translocation are the mechanism flow rate and the diffusion rate. Due to the typically unsaturated flow conditions at this site, we expect infiltration to be low. Flow rates (permeability) and diffusion rates at the soil/tuff wall will be very slow. Given these conditions, we believe contaminants are not likely to move quickly or to travel far.

### 5.3.4 Field Investigation and Remediation

The goals of the VCM at PRS 16-034(p) were to conduct an investigation and to implement an accelerated cleanup in conjunction with D&D activities. D&D activities were conducted by the ER Project field team and consisted of removing the concrete foundation of the former structure. ER Project personnel also conducted all characterization and verification sampling.

Following the conceptual model, the field team collected samples from beneath the foundation of the former building and incinerator and along the entire extent of the footprint (within a grid system). These samples were characterized by analysis for suspected COCs. The potential translocation of contamination was evaluated by sampling the fill material beneath the foundation, in the tuff beneath the fill material, and along the fill/tuff walls.

The field team used the following sampling equipment and SOPs.

- Excavations were conducted using an excavator.
- Soil/fill and tuff samples were collected at PRS 16-034(p) from depths of approximately 0–0.5 ft below the excavated structures; they were collected from the excavation or backhoe bucket using LANL-ER-SOP-6.09, R0, "Spade and Scoop Method for Collection of Soil Samples".
- Samples were screened in the field for HE and beta/gamma radioactivity using the HE spot test kit with modified Griess reagents (LANL-ER-SOP-10.06,R1, "High Explosives Spot Test") and a Ludlum 12 survey meter with pancake and air proportional detector (LANL-ER-SOP-10.07, R1, "Field Monitoring for Surface and Volume Radioactivity Levels").

- In the field chemistry trailer, the samples were further analyzed for RDX and TNT using a D-Tech immunoassay HE field-screening kit (EPA SW-846 Methods 4051 and 4050), for PAHs using the Millipore/Envirogard test kit (EPA SW-846 Method 4030), and for 24 metals (listed in Appendix C) using a Tracor Northern Spectrace 9000 XRF (LANL-ER-SOP-10.08, R0, "Operation of the Spectrace 9000 Field-Portable X-Ray Fluorescence Instrument").

- The soil and tuff were described and logged in on the sample collection log forms (LANL-ER-SOP-01.04,R3, "Sample Control and Field Documentation").

- Drilling activities were conducted in accordance with LANL-ER-SOP-04.01, R1, "Drilling Methods and Drill Site Management." Samples were collected from boreholes using a stainless steel split-spoon sampler, according to LANL-ER-SOP-06.24, R0, "Sample Collection from Split Spoon and Shelby Tube Samplers".

- Drilling was conducted using the Acker II drill rig.

#### 5.3.4.1 D&D Activity

The field team removed the concrete foundation and adjacent asphalt during the period from September 21, 1998, to September 24, 1998 (Figure 5.3-1). The concrete associated with the basement (approximately 70 $yd^3$) was broken up and transported to the concrete stockpile located east of former building TA-16-27. Due to the anticipated difficulty of removing the foundation footings, which appeared to have been poured into trenches within the tuff, the field team determined that the footings would remain in place.

Reinforcing metal and other metal items encountered during the removal were placed in a roll-off container for recycling. Approximately 20 $yd^3$ of asphalt paving was removed during excavation activities. The asphalt was screened for HE and radioactivity. Three asphalt samples were submitted for analysis for waste-characterization purposes (RE16-98-4005, RE16-98-4006, and RE16-98-4007). (Refer to Section 6 for more details.) Due to the large amount of loose concrete footings and piping within the fill material along the eastern foundation wall, the team excavated an exploratory trench perpendicular to the foundation to investigate the extent of the fill material. The trench continued for approximately 15 ft east until a tuff face was encountered. A small volume of debris and engineer fill was encountered beyond the immediate vicinity of the foundation wall. The team determined that the fill material had been used as part of the construction of the basement structure. After the removal of the basement structure, the average depth from the surrounding grade to the bottom of the excavation was 10 ft.

**Figure 5.3-1. Photograph of ER Project field personnel removing concrete basement**

### 5.3.4.2 VCM Plan Requirements

The VCM plan specified the collection of nine screening samples in a 3 × 3 ft grid pattern at a depth of 0–0.5 ft beneath the excavated foundation. These samples were to be screened using in situ field-screening, which consisted of screening at the sample location for HE (with an HE spot test kit), radioactivity (with a direct reading beta/gamma analyser), and VOCs (with a PID 10.2 evbulb). These samples were also to be screened in the on-site field chemistry trailer for metals (using an XRF), and for PAHs (with a Millipore/Envirogard test kit). Six of these samples were to be further screened, in the field trailer, for HE using a D-Tech kit.

Four laboratory samples were to be selected from the screening samples for off-site analyses. Two laboratory samples were to be selected based on HE field-screening results and two samples were to be selected based on metals field-screening results. This would ensure that the broadest range of contaminants were studied. According to the general strategy, if there were no positive HE results and no elevated metals, then the laboratory samples were to be selected from locations with elevated radioactivity or VOCs. The plan did not require that sample locations be biased to locations where positive PAH results had been obtained.

If field-screening results indicated that contaminants were present above 50% of the cleanup levels for HE and metals (as shown in Table 5.3-1), above two times background concentrations for radioactivity, or greater than 0 ppm VOCs, that soil was to be excavated until results were no longer above 50% of these criteria. Table 5.3-1 presents the soil cleanup levels according to the approved VCM plan (LANL 1997, 55653.2). The EPA Region 9 PRGs for industrial soil were used as cleanup levels for the VCM activities. Note that some of these PRGs have changed since they were included in the approved VCM plan.

**Table 5.3-1**
**Approved Soil Cleanup Levels for V-Site VCM**

| Chemical | Cleanup Level (mg/kg) | Rationale |
|---|---|---|
| Barium | 11000 | HI[a] = 0.1 |
| Beryllium | 11 | Risk = $10^{-5}$[b] |
| Cadmium | 85 | HI = 0.1 |
| Chromium (total) | 450 | Risk = $10^{-6}$ |
| Copper | 6300 | HI = 0.1 |
| Cyanide | 1400 | HI = 0.1 |
| DNB mixture | 6.8 | HI = 0.1 |
| DNT mixture | 2.8 | Risk = $10^{-6}$ |
| HMX | 3400 | HI = 0.1 |
| Lead | 1000 | EPA Region 6 guidance |
| Nickel | 3400 | HI = 0.1 |
| RDX | 17 | Risk = $10^{-6}$ |
| Silver[c] | 940 | HI = 0.1 |
| TNB | 3.4 | HI = 0.1 |
| TNT | 64 | Risk = $10^{-6}$ |

[a] HI = Hazard index for noncarcinogens.

[b] The VCM Plan states that, for beryllium, the 10-5 risk level is used "...to establish a threshold above the background concentration for this metal." (LANL 1997, 55653.2)

[c] Cleanup level was not listed in the V-site VCM plan. Information is included here for completeness.

### 5.3.4.3 Remediation Stage I

This section presents a discussion of the remedial activities including field-screening, characterization, and sampling for nature and extent. Table 5.3-2 lists all analytical samples and the analytical suites associated with each sample. The individual analytes that make up each suite can be found in Appendix D.

**Table 5.3-2**
**Summary of PRS 16-034(p) Samples Collected for Fixed-Laboratory Analysis[a]**

| Location ID | Sample ID | Sample Type | Depth (ft) | Media | HE | Inorganic Chemicals | SVOCs | Cyanide | Radionuclides |
|---|---|---|---|---|---|---|---|---|---|
| 16-5940 | RE16-98-0065 | Grab | 8.65–9.15 | Soil | 4722R | NA[b] | 4720R | NA | NA |
| 16-5940 | RE16-98-0077 | Grab | 9.65–10.15 | Qbt 4 | NA | 5088R | NA | 5088R | NA |
| 16-5941 | RE16-98-0066 | Grab | 8.75–9.25 | Soil | 4722R | NA | 4720R | NA | NA |
| 16-5941 | RE16-98-0072 | Grab | 9.25–9.75 | Qbt 4 | 5046R | 5045R | 5044R | 5045R | NA |
| 16-5941 | RE16-98-0084 | Grab | 10.95–11.45 | Qbt 4 | NA | 5088R | NA | 5088R | NA |
| 16-5942 | RE16-98-0067 | Grab | 8.75–9.25 | Soil | 4722R | NA | 4720R | NA | NA |
| 16-5942 | RE16-98-0083 | Grab | 9.25–9.75 | Qbt 4 | NA | 5088R | NA | 5088R | NA |
| 16-5942 | RE16-98-0085 | Grab | 11.05–11.55 | Qbt 4 | NA | 5088R | NA | 5088R | NA |
| 16-5947 | RE16-98-0068 | Grab | 11.25–11.75 | Soil | 4722R | NA | 4720R | NA | NA |
| 16-5962 | RE16-98-0071 | Grab | 12.45–12.95 | Soil | 5046R | 5045R | 5044R | 5045R | NA |

**Table 5.3-2**
**Summary of PRS 16-034(p) Samples Collected for Fixed-Laboratory Analysis[a] (continued)**

| Location ID | Sample ID | Sample Type | Depth (ft) | Media | HE | Inorganic Chemicals | SVOCs | Cyanide | Radionuclides |
|---|---|---|---|---|---|---|---|---|---|
| 16-5963 | RE16-98-0073 | Grab | 8.6–9.1 | Soil | 5046R | 5045R | 5044R | 5045R | NA |
| 16-5964 | RE16-98-0074 | Grab | 11.35–11.85 | Soil | 5046R | 5045R | 5044R | 5045R | NA |
| 16-5965 | RE16-98-0075 | Grab | 10.35–10.85 | Soil | 5046R | 5045R | 5044R | 5045R | NA |
| 16-5966 | RE16-98-0076 | Grab | 8.65–9.15 | Soil | 5046R | 5045R | 5044R | 5045R | NA |
| 16-5963 | RE16-99-0018 | Grab | 10.5–11 | Qbt 4 | NA | 5229R | NA | NA | NA |
| 16-5964 | RE16-99-0019 | Grab | 11.5–12 | Qbt 4 | NA | NA | 5228R | NA | NA |
| 16-5986 | RE16-99-0020 | Grab | 10.5–11 | Qbt 4 | NA | 5229R | NA | NA | NA |
| NA | RE16-98-0069 | Grab | NA | Soil | 4924R | 4923R | 4922R | 4923R | 4925R |
| 16-5941 | RE16-98-0072 | Grab | 9.25–9.75 | Qbt 4 | 5046R | 5045R | 5044R | 5045R | NA |
| 16-5940 | RE16-98-0077 | Grab | 9.65–10.15 | Qbt 4 | NA | 5088R | NA | 5088R | NA |
| 16-5942 | RE16-98-0083 | Grab | 9.25–9.75 | Qbt 4 | NA | 5088R | NA | 5088R | NA |
| 16-5941 | RE16-98-0084 | Grab | 10.95–11.45 | Qbt 4 | NA | 5088R | NA | 5088R | NA |
| 16-5942 | RE16-98-0085 | Grab | 11.05–11.55 | Qbt 4 | NA | 5088R | NA | 5088R | NA |
| 16-5940 | RE16-98-0065 | Grab | 8.65–9.15 | Soil | 4722R | 4721R | 4720R | 4721R | NA |
| 16-5941 | RE16-98-0066 | Grab | 8.75–9.25 | Soil | 4722R | 4721R | 4720R | 4721R | NA |
| 16-5942 | RE16-98-0067 | Grab | 8.75–9.25 | Soil | 4722R | 4721R | 4720R | 4721R | NA |
| 16-5947 | RE16-98-0068 | Grab | 11.25–11.75 | Soil | 4722R | 4721R | 4720R | 4721R | NA |

[a] Numbers in the cell for each analytical suite are request numbers.

[b] NA = Not applicable.

Sampling and removal activities were conducted at PRS 16-034(p) from September 15, 1998, to February 9, 1999. Fill and tuff samples were collected from locations beneath the former concrete foundation using a 3 × 3 ft grid system. A total of 22 samples were collected from 15 locations for in situ and XRF screening. Thirteen of these samples were further screened for HE using a D-Tech kit; ten samples were further screened for PAHs using a Millipore/Envirogard test kit. A total of 17 laboratory samples (excluding waste characterization samples) were collected and submitted for off-site laboratory analysis. Fourteen of the laboratory samples were selected from the screening samples based on screening results. Three of the laboratory samples were collected as vertical and lateral bounding samples based on off-site analytical results from the initial 13 laboratory samples. Figure 5.3-2 presents the sample locations.

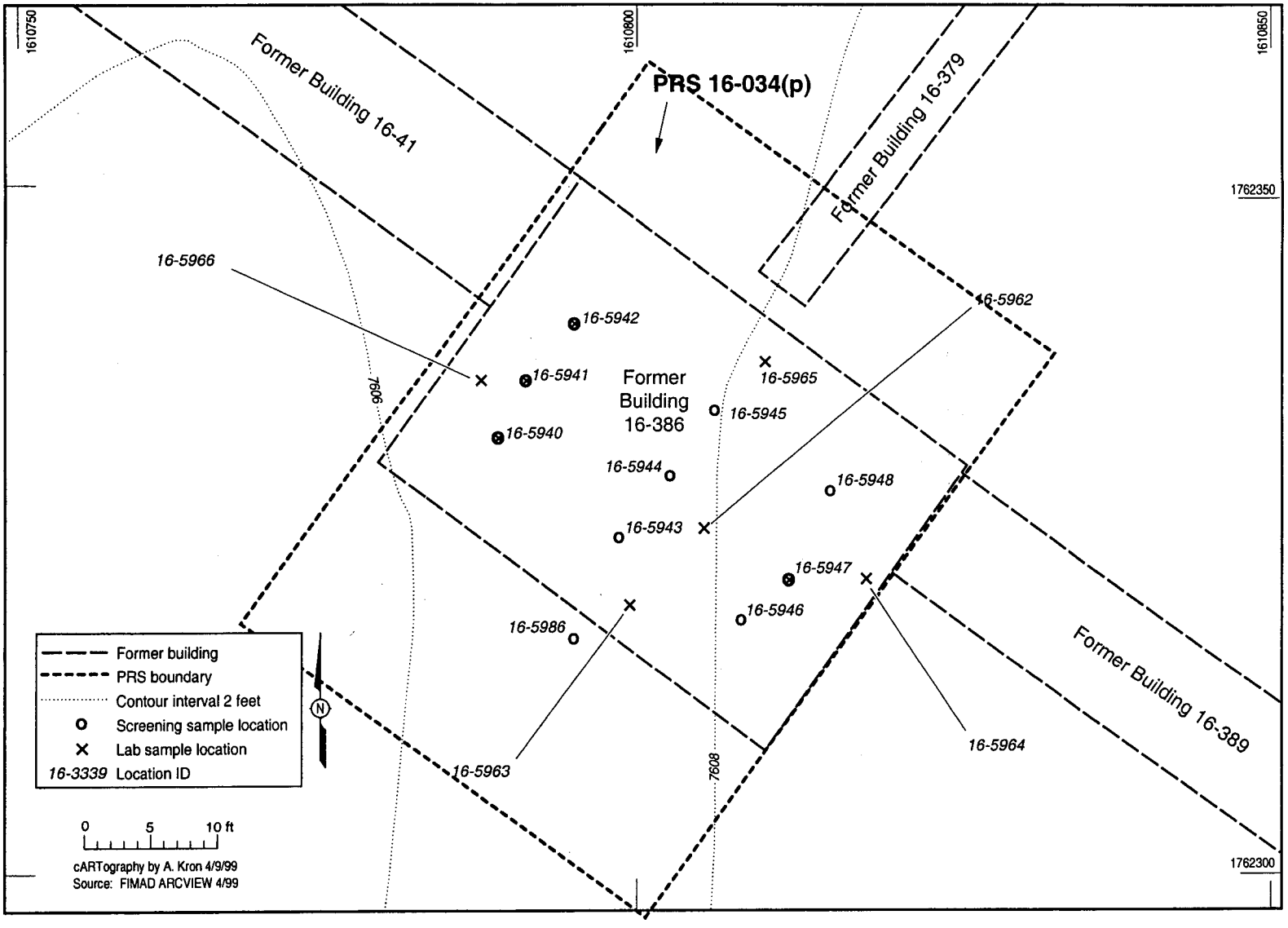


**Figure 5.3-2. Sampling locations at PRS 16-034(p)**

Just after the removal of the basement structure and per the VCM plan, the field team collected nine screening samples from the foundation footprint in a 3 × 3 ft grid pattern. These nine samples (RE16-98-1200, RE16-98-1201, RE16-98-1202, RE16-98-1203, RE16-98-1204, RE16-98-1205, RE16-98-1206, RE16-98-1207, and RE16-98-1208) were screened for in situ and XRF, for HE using a D-Tech kit, and for PAHs using a Millipore/Envirogard test kit. The four laboratory samples (RE16-98-0065, RE16-98-0066, RE16-98-0067, and RE16-98-0068) were biased towards XRF and PAH screening results. The four were submitted for HE, SVOCs, and inorganics analyses. After reviewing the data validation package associated with these four samples, ER Project personnel determined that the results of the inorganic analyses done on these samples were invalid. These data were rejected during data validation. The metals listed in Table 5.3-4 are the COCs that were identified and presented in the VCM plan. Note that beryllium is a COC, however, this metal is not detected by the XRF.

Six samples were collected from the foundation footprint to take the place of the four samples that had produced rejected data. These samples (RE16-98-0071, RE16-98-0072, RE16-98-0077, RE16-98-0083, RE16-98-0084, and RE16-98-0085) were collected at the fill/tuff interface (from the fill material overlying the tuff bedrock). Sample locations were 16-5962, 16-5941, 16-5940, 16-5942, 16-5947, and 16-5948, respectively. Four additional samples were collected from the area's perimeter, just outside the footprint. These samples (RE-16-0073, RE16-98-0074, RE16-98-0075, and RE16-98-0076) were collected from the fill material overlying the tuff bedrock. Sample locations are 16-5963, 16-5964, 16-5965, and 16-5966, respectively. The ten laboratory samples were submitted to the off-site laboratory and analyzed for inorganics analysis.

After evaluating the above-mentioned laboratory results, ER Project personnel collected additional bounding samples at locations 16-5963 and 16-5964 to determine trends in metals and pyrene contamination. The excavated area had already been backfilled with clean fill material. (To confirm that the fill material, which was purchased from the Los Alamos County Landfill, was clean, a sample of the fill was submitted to the laboratory for analysis of HE, inorganics, SVOCs, VOCs, and gamma spectroscopy. The fill was determined to be clean.) Because the area had been filled to surface grade, a drill rig was used to collect the bounding samples. Two vertical bounding samples (RE16-99-0018 and RE16-98-0019) were collected at locations 16-5963 and 16-5964, respectively. In addition, one lateral bounding sample was collected 5 ft south and 2 ft down from location 16-5963. These three bounding samples were not screened for metals using an XRF or for HE using a D-Tech kit. They were submitted directly to an off-site laboratory and analyzed for metals and pyrene. Tables 5.3-3 and 5.3-4 present sampling information and screening results. Figure 5.3-3 is a photograph of the PRS following the VCM activities.

**Figure 5.3-3. Photograph of PRS 16-034(p) following VCM activities (view to the west)**

**Table 5.3-3**
**Sampling Information for PRS 16-034(p)**

| Screening Sample ID | Location ID | Depth (ft)[a] | Media | Sample Location | Date Collected | Lab Sample ID |
|---|---|---|---|---|---|---|
| RE16-98-1200 | 16-5940 | 9.75–10 | Soil/fill | Southwest corner of footprint—verification | 9/23/98 | RE16-98-0065 |
| RE16-98-1201 | 16-5941 | 9.75–10 | Soil/fill | West center of footprint—verification | 9/23/98 | RE16-98-0066 |
| RE16-98-1202 | 16-5942 | 9.75–10 | Soil/fill | Northwest corner of footprint-verification | 9/23/98 | RE16-98-0067 |
| RE16-98-1203 | 16-5943 | 9.75–10 | Soil/fill | South center of footprint | 9/23/98 | NA[b] |
| RE16-98-1204 | 16-5944 | 9.75–10 | Soil/fill | Center of footprint | 9/23/98 | NA |
| RE16-98-1205 | 16-5945 | 9.75–10 | Soil/fill | North center of footprint | 9/23/98 | NA |
| RE16-98-1206 | 16-5946 | 9.75–10 | Soil/fill | Southeast corner of footprint | 9/23/98 | NA |
| RE16-98-1207 | 16-5947 | 9.75–10 | Soil/fill | East center of footprint—verification | 9/23/98 | RE16-98-0068 |
| RE16-98-1208 | 16-5948 | 9.75–10 | Soil/fill | Northeast corner of footprint | 9/23/98 | NA |
| RE16-98-1209 | 16-5949 | 5.0–5.5 | Soil/fill | South end of east excavation wall | 9/24/98 | NA |
| RE16-98-1210 | 16-5950 | 5.0–5.5 | Soil/fill | Center of east excavation wall | 9/24/98 | NA |
| RE16-98-1211 | 16-5951 | 5.0–5.5 | Soil/fill | North end of excavation wall | 9/24/98 | NA |

**Table 5.3-3**
**Sampling Information for PRS 16-034(p) (continued)**

| Screening Sample ID | Location ID | Depth (ft)[a] | Media | Sample Location | Date Collected | Lab Sample ID |
|---|---|---|---|---|---|---|
| NA | NA | 9.75–10 | Soil/fill | Fill material form LA County Landfill—fill certification | 10/27/98 | RE16-98-0069 |
| NA | 16-5962 | 9.75–10 | Soil/fill | Clay filled Qbt crack near the SE corner of footprint—verification | 12/10/98 | RE16-98-0071 |
| NA | 16-5941 | 9.75–10 | Qbt | West center of footprint—verification | 12/10/98 | RE16-98-0072 |
| NA | 16-5963 | 9–9.5 | Soil/fill | Mid point, outside of southern footing—verification | 12/10/98 | RE16-98-0073 |
| RE16-99-0018 | 16-5963 | 10.5–11 | Qbt | Vertical bounding sample | 2/17/99 | RE16-99-0018 |
| RE16-99-0020 | 16-5986 | 10.5–11 | Qbt | Lateral bounding sample for 16-5963 | 2/17/99 | RE16-99-0020 |
| NA | 16-5964 | 9.75–10 | Soil/fill | Mid point, outside of eastern footing—verification | 12/10/98 | RE16-98-0074 |
| RE16-99-0019 | 16-5963 | 11.5–12 | Qbt | Vertical bounding sample | 2/17/99 | RE16-99-0019 |
| NA | 16-5965 | 9.75–10 | Soil/fill | Mid point, outside of northern footing—verification | 12/10/98 | RE16-98-0075 |
| NA | 16-5966 | 9.75–10 | Soil/fill | Mid point, outside of western footing—verification | 12/10/98 | RE16-98-0076 |
| NA | 16-5940 | 9.75–10 | Qbt | Southwest corner of footprint—verification | 12/18/98 | RE16-98-0077 |
| NA | 16-5942 | 9.75–10 | Qbt | Northwest corner of footprint—verification | 12/18/98 | RE16-98-0083 |
| NA | 16-5941 | 9.75–10 | Qbt | West center of footprint—bounding | 12/21/98 | RE16-98-0084 |
| NA | 16-5942 | 9.75–10 | Qbt | Northwest corner of footprint—bounding | 12/21/98 | RE16-98-0085 |
| NA | 16-5941 | 9.75–10 | Qbt | West center of footprint—bounding | 12/21/98 | RE16-98-0084 |
| NA | 16-5942 | 9.75–10 | Qbt | Northwest corner of footprint—bounding | 12/21/98 | RE16-98-0085 |

[a] Depths are from surface grade.

[b] NA = Not applicable.

**Table 5.3-4**
**Field-Screening Results for PRS 16-034(p)**

| Sample ID | HE Spot Test | D-Tech RDX/TNT mg/kg | PAH (mg/kg) | Silver (mg/kg) | Barium (mg/kg) | Lead (mg/kg) | Chromium (mg/kg) | Copper (mg/kg) | Nickel (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|
| RE16-98-1200 | Negative | <0.5/<0.5 | 1.0<x<10.0 | 69 | 354.1 | 81 | ND[a] | ND | ND |
| RE16-98-1201 | Negative | <0.5/<0.5 | 1.0<x<10.0 | 47 | 377.0 | 193 | ND | 112 | ND |
| RE16-98-1202 | Negative | <0.5/<0.5 | 1.0<x<10.0 | 66 | 395.4 | 84 | ND | 256 | ND |

**Table 5.3-4**
**Field-Screening Results for PRS 16-034(p) (continued)**

| Sample ID | HE Spot Test | D-Tech RDX/TNT mg/kg | PAH (mg/kg) | Silver (mg/kg) | Barium (mg/kg) | Lead (mg/kg) | Chromium (mg/kg) | Copper (mg/kg) | Nickel (mg/kg) |
|---|---|---|---|---|---|---|---|---|---|
| RE16-98-1203 | Negative | <0.5/<0.5 | x<1.0 | 100 | 393.5 | 79 | ND | 96 | ND |
| RE16-98-1204 | Negative | <0.5/<0.5 | x<1.0 | 53 | 326.1 | 73 | ND | ND | ND |
| RE16-98-1205 | Negative | <0.5/<0.5 | 1.0<x<10.0 | ND | 304.3 | 36 | ND | ND | ND |
| RE16-98-1206 | Negative | <0.5/<0.5 | x<1.0 | ND | 286.3 | ND | ND | ND | ND |
| RE16-98-1207 | Negative | <0.5/<0.5 | x<1.0 | 84 | 336.7 | ND | ND | ND | ND |
| RE16-98-1208 | Negative | <0.5/<0.5 | x<1.0 | 55 | 304.5 | ND | ND | ND | ND |
| RE16-98-1209 | Negative | <0.5/<0.5 | NA[b] | NA | NA | NA | NA | NA | NA |
| RE16-98-1210 | Negative | <0.5/<0.5 | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-1211 | Negative | <0.5/<0.5 | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-0069 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-0071 | Negative | NA | NA | 63 | 488.5 | ND | ND | ND | ND |
| RE16-98-0072 | Negative | NA | NA | 48 | 251.7 | ND | ND | ND | ND |
| RE16-98-0073 | Negative | NA | NA | 85 | 287.2 | 56 | ND | 93 | ND |
| RE16-99-0018 | Negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-99-0020 | Negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-0074 | Negative | NA | NA | 53 | 387.0 | ND | ND | 96 | ND |
| RE16-99-0019 | Negative | NA | NA | NA | NA | NA | NA | NA | NA |
| RE16-98-0075 | Negative | NA | NA | 84 | 390.6 | ND | ND | 59 | ND |
| RE16-98-0076 | Negative | NA | NA | 66 | 417.1 | 33 | ND | ND | ND |
| RE16-98-0077 | Negative | NA | NA | 54 | 261.0 | ND | ND | ND | ND |
| RE16-98-0083 | Negative | NA | NA | 89 | 248.9 | ND | ND | ND | ND |
| RE16-98-0084 | Negative | NA | NA | 53 | 238.9 | ND | ND | ND | ND |
| RE16-98-0085 | Negative | NA | NA | 50 | 255.4 | ND | ND | ND | ND |

[a] ND = Non-detect.

[b] NA = Not applicable.

The concentrations of silver based on XRF screening are reported in Table 5.3-4. These silver results are greater than three times the standard deviations, however, these values are considered to be artifacts due to fluorescence of the mercury iodide detector. The peak associated with the iodine (from the detector) is very close to that of silver, resulting in an overlap of the two peaks. This results in a decrease in resolution and a higher detection limit for silver. Because these values are close to the reported detection limit for silver (50 mg/kg), the values may not be reliable.

All field-screening results for radionuclides were less than two times background and VOCs were not detected. The field screening results indicate that there are no radioactivity and no vapor phase VOC plume at the site. In addition, there are no indications of staining or organic odors that might suggest leaks or spills of solvents. The PAH field-screening results were used to check for a correlation between those results and laboratory analysis results.

Five deviations were made from the approved VCM work plan.

1. The field team collected 22 samples from 15 locations, rather than the required 9 samples from 5 locations. The samples were used for in situ and XRF screening. Extra samples were collected to better characterize the PRS.

2. The field team further screened 16 samples rather than the required 6 for HE using a D-Tech kit. The extra samples were collected to better characterize the PRS.

3. The field team collected 16 laboratory samples (including the unvalidated samples) rather than the required 4. The extra samples were collected to better characterize the PRS and to obtain more information about decreasing trends of contamination.

4. The field team collected samples from outside the perimeter footings in addition to the samples required from within the foundation. These perimeter samples were collected to better understand the lateral translocation of contaminants at the soil/tuff wall.

5. The field team collected bounding samples to learn more about trends in contamination.

#### 5.3.4.4 Remediation Stage II

No contaminated soil was removed, so verification samples were not collected from this PRS.

#### 5.3.4.5 Data Review

All data discussed in the body of this report are also discussed in Appendixes C and D of this report. Appendix C provides an assessment of the data quality. Appendix D provides a list of analytical results and the analytes that make up the analytical suites. The complete data set has been submitted to the AA in electronic format. Tables in this section include all detected values and some undetected values. All analytical results were validated by the Laboratory's ER Project routine validation protocol. All non-rejected data are usable for decision-making purposes and adequate for evaluating a potential release. Qualifiers on the data indicate if error or bias on the data must be considered while using the data. Qualified data are acceptable to use, as long as the qualifications on the data are considered.

**(a) Inorganic Chemical Comparison with Background**

All inorganic results are compared to the LANL background data set (Ryti et al. 1998, 58093). BVs are applied to the data based upon the soil horizon the sample was collected from. Table 5.3-5 lists the frequency of detected analytes at PRS 16-034(p), the range of detected levels, and what soil horizons the samples originated in. Table 5.3-6 compares detected inorganic chemicals with the associated BV.

**Table 5.3-5**
**Frequency of Detected Inorganic Chemicals in PRS 16-034(p) Samples**

| Analyte | Media | Number of Samples Analyzed | Number of Detects | Concentration Range (mg/kg)[a] | BV (mg/kg) | Frequency of Detects Above BV[b] |
|---|---|---|---|---|---|---|
| Aluminum | Qbt 4 | 7 | 7 | 588–1270 | 7300 | 0/7 |
| | Soil | 10 | 6 | 4200–15,700 | 29,200 | 0/6 |
| Antimony | Qbt 4 | 7 | 1 | 0.09–[0.86] | 0.5 | DL>BV[c] (5/6) |
| | Soil | 10 | 0 | [12] | 0.83 | DL>BV[c] (1/1) |
| Arsenic | Qbt 4 | 7 | 7 | 1.2–2.8 | 2.79 | 1/7 |
| | Soil | 10 | 6 | 1.8–13.2 | 8.17 | 1/6 |

**Table 5.3-5**
**Frequency of Detected Inorganic Chemicals in PRS 16-034(p) Samples (continued)**

| Analyte | Media | Number of Samples Analyzed | Number of Detects | Concentration Range (mg/kg)[a] | BV (mg/kg) | Frequency of Detects Above BV[b] |
|---|---|---|---|---|---|---|
| Barium | Qbt 4 | 7 | 7 | 7.7–28.5 | 46 | 0/7 |
| | Soil | 10 | 6 | 27–312 | 295 | 1/6 |
| Beryllium | Qbt 4 | 7 | 2 | [0.250.55] | 1.21 | 0/7 |
| | Soil | 10 | 5 | 0.58–0.9 | 1.83 | 0/6 |
| Cadmium | Qbt 4 | 7 | 1 | [0.04]–0.13 | 1.63 | 0/7 |
| | Soil | 10 | 5 | 0.15–1.3 | 0.4 | 2/6 DL>BV (1/6) |
| Calcium | Qbt 4 | 7 | 7 | 520–1350 | 2200 | 0/7 |
| | Soil | 10 | 6 | 680–7900 | 6120 | 1/6 |
| Chromium (total) | Qbt 4 | 7 | 6 | 0.046–1.5 | 7.14 | 0/7 |
| | Soil | 10 | 6 | 2.5–12.2 | 19.3 | 0/6 |
| Cobalt | Qbt 4 | 7 | 7 | 0.44–1 | 3.14 | 0/7 |
| | Soil | 10 | 6 | 1.5–14.9 | 8.64 | 1/6 |
| Copper | Qbt 4 | 7 | 7 | 0.52–12.7 | 4.66 | 1/7 |
| | Soil | 10 | 6 | 1.9–157 | 14.7 | 2/6 |
| Cyanide (total) | Qbt 4 | 5 | 1 | 0.07–[0.57] | 0.5[d] | DL>BV (4/5) |
| | Soil | 9 | 0 | [0.05–0.6] | 0.5 | DL>BV (1/5) |
| Iron | Qbt 4 | 7 | 7 | 2170–4290 | 14,500 | 0/7 |
| | Soil | 10 | 6 | 7500–17,800 | 21,500 | 0/6 |
| Lead | Qbt 4 | 7 | 7 | 1.4–25 | 11.2 | 2/7 |
| | Soil | 10 | 6 | 5.7–219 | 22.3 | 3/6 |
| Magnesium | Qbt 4 | 7 | 7 | 103–251 | 1690 | 0/7 |
| | Soil | 10 | 6 | 610–2310 | 4610 | 0/6 |
| Manganese | Qbt 4 | 7 | 7 | 81.1–260 | 482 | 0/7 |
| | Soil | 10 | 6 | 209–1450 | 671 | 1/6 |
| Mercury | Qbt 4 | 7 | 3 | 0.01–[0.11] | 0.1 | DL>BV (1/7) |
| | Soil | 10 | 5 | 0.03–[0.12] | 0.1 | DL>BV (1/6) |
| Nickel | Qbt 4 | 7 | 7 | 0.41–2 | 6.58 | 0/7 |
| | Soil | 10 | 5 | [2.4]–15.3 | 15.4 | 0/6 |
| Potassium | Qbt 4 | 7 | 5 | 150–422 | 3500 | 0/7 |
| | Soil | 10 | 6 | 560–2250 | 3460 | 0/6 |
| Selenium | Qbt 4 | 7 | 1 | [0.55–1.1] | 0.3 | 1/7 DL>BV (6/7) |
| | Soil | 10 | 1 | [0.13–2.4] | 1 | 1/6 DL>BV (1/6) |
| Silver | Qbt 4 | 7 | 0 | [0.13–0.55] | 1 | 0/3 |
| | Soil | 10 | 1 | [0.13–2.4 | 1 | 1/6 |
| Sodium | Qbt 4 | 7 | 7 | 41.7–167 | 2770 | 0/7 |
| | Soil | 10 | 6 | 87.5–227 | 915 | 0/6 |

**Table 5.3-5**
**Frequency of Detected Inorganic Chemicals in PRS 16-034(p) Samples (continued)**

| Analyte | Media | Number of Samples Analyzed | Number of Detects | Concentration Range (mg/kg)[a] | BV (mg/kg) | Frequency of Detects Above BV[b] |
|---|---|---|---|---|---|---|
| Thallium | Qbt 4 | 7 | 3 | 0.05–[0.7] | 1.1 | 0/7 |
| | Soil | 10 | 5 | 0.06–[2.4] | 0.73 | DL>BV (1/6) |
| Vanadium | Qbt 4 | 7 | 7 | 1.2–2.4 | 17 | 0/7 |
| | Soil | 10 | 6 | 4.5–25.7 | 39.6 | 0/6 |
| Zinc | Qbt 4 | 7 | 7 | 8.7–26.9 | 63.5 | 0/7 |
| | Soil | 10 | 6 | 36.4–257 | 48.8 | 3/6 |

[a] Brackets indicate the value is below detection limits; data qualifier flags are defined in the Glossary, Appendix A-2.

[b] Value is the ratio of values exceeding the BV to the number of non-rejected analyses.

[c] The detection limit for this analyte exceeded the BV.

[d] There is no background value for cyanide in soil or tuff. The listed value is a nominal BV obtained from the detection limit for cyanide analysis in the background study (Ryti et al. 1998, 59730).

**Table 5.3-6**
**Inorganic Chemicals with Concentrations at or Exceeding Soil BVs in PRS 16-034(p) Verification Samples**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | BV (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|---|
| Antimony | 16-5940 | RE16-98-0077 | 0.57(UJ) | 0.5 | Qbt 4 | 9.65–10.15 |
| | 16-5941 | RE16-98-0084 | 0.61(UJ) | 0.5 | Qbt 4 | 10.95–11.45 |
| | 16-5942 | RE16-98-0083 | 0.6(UJ) | 0.5 | Qbt 4 | 9.25–9.75 |
| | 16-5942 | RE16-98-0085 | 0.75(UJ) | 0.5 | Qbt 4 | 11.05–11.55 |
| | 16-5986 | RE16-99-0020 | 0.86(U) | 0.5 | Qbt 4 | 10.5–11 |
| | NA[b] | RE16-98-0069 | 12(U) | 0.5 | Soil | NA |
| Arsenic | 16-5941 | RE16-98-0072 | 2.8 | 2.79 | Qbt 4 | 9.25–9.75 |
| | 16-5963 | RE16-98-0073 | 13.2 | 8.17 | Soil | 8.6–9.1 |
| Barium | 16-5966 | RE16-98-0076 | 312 | 295 | Soil | 8.65–9.15 |
| Cadmium | 16-5962 | RE16-98-0071 | 1.3 | 0.4 | Soil | 12.45–12.95 |
| | 16-5966 | RE16-98-0076 | 0.48 | 0.4 | Soil | 8.65–9.15 |
| | NA | RE16-98-0069 | 0.6(U) | 0.4 | Soil | NA |
| Calcium | 16-5966 | RE16-98-0076 | 7900 | 6120 | Soil | 8.65–9.15 |
| Cobalt | 16-5962 | RE16-98-0071 | 14.9 | 8.64 | Soil | 12.45–12.95 |
| Copper | 16-5940 | RE16-98-0077 | 12.7(J) | 4.66 | Qbt 4 | 9.65–10.15 |
| | 16-5963 | RE16-98-0073 | 157 | 14.7 | Soil | 8.6–9.1 |
| | 16-5966 | RE16-98-0076 | 33.6 | 14.7 | Soil | 8.65–9.15 |

**Table 5.3-6**
**Inorganic Chemicals with Concentrations at or Exceeding Soil BVs in PRS 16-034(p) Verification Samples (continued)**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg)[a] | BV (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|---|
| Cyanide (total) | 16-5940 | RE16-98-0077 | 0.53(U) | 0.5 | Qbt 4 | 9.65–10.15 |
| | 16-5941 | RE16-98-0084 | 0.56(U) | 0.5 | Qbt 4 | 10.95–11.45 |
| | 16-5942 | RE16-98-0083 | 0.55(U) | 0.5 | Qbt 4 | 9.25–9.75 |
| | 16-5942 | RE16-98-0085 | 0.57(U) | 0.5 | Qbt 4 | 11.05–11.55 |
| | 16-5963 | RE16-98-0073 | 0.06(U) | 0.5 | Soil | 8.6–9.1 |
| | 16-5964 | RE16-98-0074 | 0.06(U) | 0.5 | Soil | 11.35–11.85 |
| | 16-5965 | RE16-98-0075 | 0.05(U) | 0.5 | Soil | 10.35–10.85 |
| | 16-5966 | RE16-98-0076 | 0.06(U) | 0.5 | Soil | 8.65–9.15 |
| | NA | RE16-98-0069 | 0.6(U) | 0.5 | Soil | NA |
| Lead | 16-5940 | RE16-98-0077 | 15.6 | 11.2 | Qbt 4 | 9.65–10.15 |
| | 16-5963 | RE16-98-0073 | 219 | 22.3 | Soil | 8.6–9.1 |
| | 16-5964 | RE16-98-0074 | 23 | 22.3 | Soil | 11.35–11.85 |
| | 16-5966 | RE16-98-0076 | 36.7 | 22.3 | Soil | 8.65–9.15 |
| | 16-5986 | RE16-99-0020 | 25 | 11.2 | Qbt 4 | 10.5–11 |
| Manganese | 16-5962 | RE16-98-0071 | 1450 | 671 | Soil | 12.45–12.95 |
| Mercury | 16-5963 | RE16-99-0018 | 0.11(U) | 0.1 | Qbt 4 | 10.5–11 |
| | NA | RE16-98-0069 | 0.12(U) | 0.1 | Soil | NA |
| Selenium | 16-5940 | RE16-98-0077 | 0.55(U) | 0.3 | Qbt 4 | 9.65–10.15 |
| | 16-5941 | RE16-98-0072 | 0.64(U) | 0.3 | Qbt 4 | 9.25–9.75 |
| | 16-5941 | RE16-98-0084 | 0.59(U) | 0.3 | Qbt 4 | 10.95–11.45 |
| | 16-5942 | RE16-98-0083 | 0.58(U) | 0.3 | Qbt 4 | 9.25–9.75 |
| | 16-5942 | RE16-98-0085 | 0.66 | 0.3 | Qbt 4 | 11.05–11.55 |
| | 16-5963 | RE16-99-0018 | 1.1(U) | 0.3 | Qbt 4 | 10.5–11 |
| | 16-5986 | RE16-99-0020 | 1.1(U) | 0.3 | Qbt 4 | 10.5–11 |
| Silver | 16-5963 | RE16-98-0073 | 1.6 | 1 | Soil | 8.6–9.1 |
| | NA | RE16-98-0069 | 2.4(U) | 1 | Soil | NA |
| Thallium | NA | RE16-98-0069 | 2.4(U) | 0.73 | Soil | NA |
| Zinc | 16-5963 | RE16-98-0073 | 197 | 48.8 | Soil | 8.6–9.1 |
| | 16-5964 | RE16-98-0074 | 58.7 | 48.8 | Soil | 11.35–11.85 |
| | 16-5966 | RE16-98-0076 | 257 | 48.8 | Soil | 8.65–9.15 |

[a] Data qualifier flags are defined in the glossary, Appendix A-2.0.

[b] NA = Not applicable.

Samples RE16-98-0065 through –0068 were rejected due to very poor QA/QC results associated with almost every inorganic analyte.

Antimony results were qualified in all remaining request numbers. Five samples were rejected in one request because of extremely poor spike recovery results. Where antimony was not rejected, it was qualified as UJ because of low but acceptable spike recoveries. Antimony was undetected in four samples, with detection limits above the antimony BV (0.5 in tuff) in three of the four samples. The detection limits ranged from 0.6 to 0.75 mg/kg. Two samples were collected in 1999 and analyzed for antimony. One sample contained antimony detected at 0.09 mg/kg. The other sample was undetected at 0.86 mg/kg. Although only

two samples had antimony results below the BV, the remaining results were undetected at levels near the BV. These results indicate that no release of antimony occurred at this site.

Silver results associated with four samples in one request number were rejected for extremely low matrix spike recoveries. The remaining silver results had no QA/QC issues associated with them. All but one sample had detection limits below the BV. Silver will be carried into screening assessment because it was detected in one sample at levels above the BV.

Mercury results associated with four samples were qualified as UJ due to poor spike recovery. This is not uncommon for mercury analysis because of mercury's volatility. This did not significantly affect the data and its usability because no mercury was detected and all detection limits were either below or near the BV.

During focused validation, cyanide results were rejected in one sample (RE16-98-0071) because cyanide was detected in that sample at an elevated level due to contamination on the analytical equipment from a cyanide-containing sample (not associated with this PRS) that was analyzed immediately prior. Cyanide was not detected in any non-rejected result. Five samples had detection limits above the BV of 0.5 mg/kg, ranging from 0.53 to 0.6 mg/kg. Five samples had detection limits ranging from 0.06 to 0.07 mg/kg. Because half the data had adequately low detection limits and the rest of the data had detection limits near the BV and because no cyanide was detected, the data show that no release of cyanide has occurred at this PRS. Cyanide will not be carried forward as a COPC.

Selenium was detected in only one sample. In the samples collected from tuff, the detection limits were above the BV of 0.3 mg/kg (detection limits ranged from 0.58 to 1.1 mg/kg). Although samples 0316-99-0018 and 0316-99-0020 were reported as undetected at 1.1 mg/kg, examination of the raw data showed that selenium was actually undetected at 0.61 mg/kg and 0.58 mg/kg, respectively. The one detected selenium value will be carried into screening assessment. Screening assessment will determine if selenium at levels of less than 1 mg/kg poses a risk to human health and the environment.

Prior to the final sampling campaign in 1999, the excavation at PRS 16-034(p) was filled in. The clean fill originated at the Los Alamos County Landfill. To ensure that the clean fill was truly clean, a fill sample was analyzed for several relevant analytes (see Appendix C for the analytical suites). Sample RE16-98-0069 was the fill sample collected. The results for the inorganic chemicals were below the soil BVs. Selenium results were qualified as J due to duplicate problems; antimony results were qualified as UJ due to spike recovery problems. Neither of these issues interfered with the assessment that the fill was clean enough for use at this PRS.

All non-rejected inorganic results are usable for determining if contamination releases occurred at this PRS. Table 5.3-7 lists the inorganic chemicals that will be carried forward into screening assessment. Figure 5.3-4 indicates the locations of the samples containing these chemicals.

**Table 5.3-7**
**Results of Inorganic Data Review of PR Ss 16-034(p) Samples**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Antimony | Soil & Qbt 4 | Eliminated | Two of six samples were below the BV, detection limits were near the BV. |
| Arsenic | Qbt 4 | Retained | Detected in at least one sample at 13.2 mg/kg, along with several other inorganic chemicals |
| Barium | Soil & Qbt 4 | Retained | Detected in two perimeter samples at levels above the BVs. |
| Cadmium | Soil | Retained | Detected in two samples at levels above the BV. |

**Table 5.3-7**
**Results of Inorganic Data Review of PR Ss 16-034(p) Samples (continued)**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Calcium | Soil & Qbt 4 | Retained | Detected in two perimeter samples at levels above the BVs. |
| Cobalt | Soil | Retained | Detected in one sample. |
| Copper | Soil & Qbt 4 | Retained | Detected in two samples along with other inorganic chemicals. |
| Cyanide | Soil & Qbt 4 | Eliminated | Cyanide was not detected in any non-rejected sample at levels above the BV. |
| Lead | Soil & Qbt 4 | Retained | Detected in three samples at levels up to 219 mg/kg, along with other inorganic chemicals. |
| Manganese | Soil | Retained | Detected in one sample. |
| Mercury | Soil & Qbt 4 | Retained | Undetected in two samples at levels above the BV. |
| Selenium | Qbt 4 | Retained | Detected in one sample at 0.66 mg/kg. |
| Silver | Qbt 4 | Retained | Detected in one sample at 1.6 mg/kg, along with several other inorganic chemicals. |
| Zinc | Soil & Qbt 4 | Retained | Detected in three perimeter samples. |

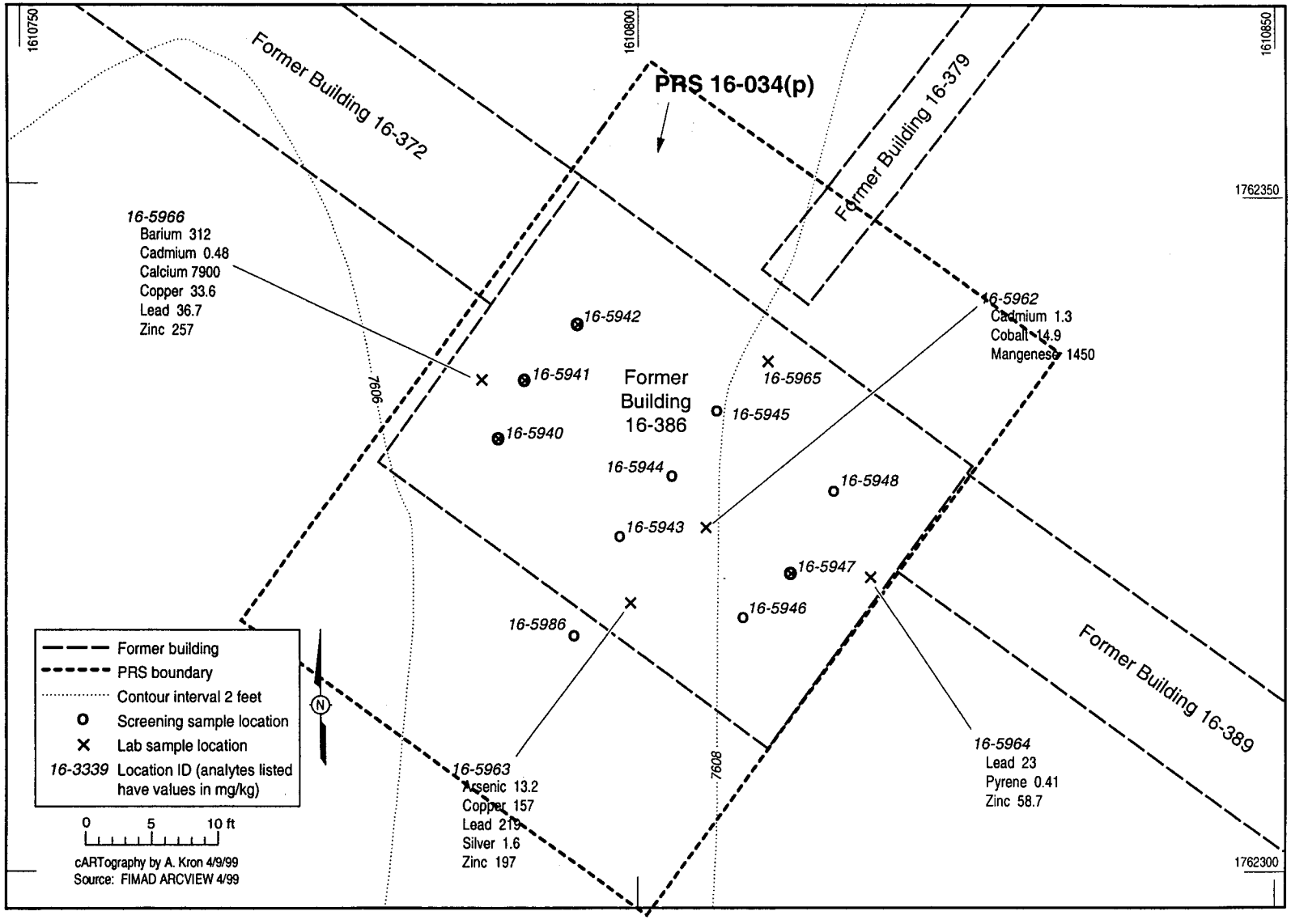


**Figure 5.3-4. Sampling locations at PRS 16-034(p)**

### (b) Radionuclide Comparison with Background

The clean fill sample, RE16-98-0069, was the only sample analyzed for radionuclides by gamma spectroscopy. The only QA/QC issue associated with this analysis was a slight change in the duplicate analysis. Insufficient sample prohibited a separate aliquot from being analyzed as the duplicate. Therefore, the same sample was analyzed twice as the duplicate. Although this result does not give an indication of the heterogeneity of the sample, it does indicate that the laboratory protocols yield consistent results. Soil heterogeneity is not expected to be a problem because this sample originated from clean fill which has presumably been moved, mixed, and handled several times before final deposition.

No radionuclides were detected at levels sufficient to require screening assessment.

### (c) Evaluation of Organic Chemicals

SVOCs, VOCs, and HE were the organic chemicals analyzed for at this site. Tables 5.3-8 and 5.3-9 list the detected organic compounds. There were no QA/QC issues associated with these analyses.

**Table 5.3-8**
**Frequency of Detected Organic Chemicals in PRS 16-034(p) Verification Samples**

| Analyte | Media | Number of Samples Analyzed | Contract-Required EQL (mg/kg) | Concentration Range (mg/kg)[a] | Frequency of Detects[b] |
|---|---|---|---|---|---|
| Pyrene | Soil | 10 | 0.33 | [0.35]–0.41 | 1/10 |

[a] Brackets indicate the value is below detection limits.

[b] Value is the ratio of values above the detection limit to the number of analyses.

**Table 5.3-9**
**Detected Organic Chemicals in PRS 16-034(p) Verification Samples**

| Analyte | Location ID | Sample ID | Sample Concentration (mg/kg) | Media | Depth (ft) |
|---|---|---|---|---|---|
| Pyrene | 16-5964 | RE16-98-0074 | 0.41 | Soil | 11.35-11.85 |

The organic constituent data were reviewed in comparison with the contract-specified EQLs. The procedures used by each analytical laboratory result in organic constituent EQLs that are somewhat different from the contract-specified EQLs. However, a comparison of the data with the contract-specified EQLs found no data to be qualified as undetected with concentrations greater than twice the contract-specified EQLs.

Table 5.3-10 shows that only one organic compound will be carried forward into screening assessment and Figure 5.3-4 indicates the location of the sample containing this compound.

**Table 5.3-10**
**Results of Organic Data Review of PRSs 16-034(p) Samples**

| Analyte | Media | Result | Rationale |
|---|---|---|---|
| Pyrene | Soil | Retained | Detected in one sample at a depth of approximately 10 ft. |

### 5.3.5 Revised Site Conceptual Model

Evaluation of sampling results in the context of the preliminary conceptual model (Section 5.3.3) did not disclose required changes to that model.

#### 5.3.5.1 Nature and Extent of Contamination in PRS 16-034(p)

PRS 16-034(p) is the foundation of a former office and laboratory building, TA-16-41. In 1962 the building was removed and the basement was used as an incinerator. The basement foundation was removed in September 1998.

PRS 16-034(p) was sampled immediately following the removal of the basement floor. Eighteen laboratory samples were collected from within the footprint of the basement floor. They were taken from the fill material below the floor and from the tuff beneath. To bound the extent of contamination one laboratory sample was collected from the tuff outside the footprint of the basement floor. The distribution of samples across the PRS enabled a comprehensive assessment of the site as well as providing an indication of potential migration within the site. Twenty-three screening samples from 22 locations and 19 laboratory samples from 11 locations were collected and evaluated. Although inorganic analyses in four laboratory samples were judged to be invalid, the data quality of the remaining analytical samples is adequate for site evaluation.

The contaminants detected at PRS 16-034(p) are consistent with the wastes we expected to find at the incinerator. Neither radionuclides nor HE were detected at the site.

We postulated in the conceptual model that the contaminant transport, primarily snowmelt and rainfall through holes or cracks in the incinerator floor, deposited the contaminants in the porous fill material below the slab. However, we hypothesized that the downward flow from the fill material would be hampered at the tuff interface, and that any horizontal flow would be contained by the excavation walls.

Generally, sampling and analysis confirm this hypothesis; samples collected in fill material immediately below the incinerator floor contained metals slightly above BVs. Pyrene, the only PAH detected at the site, was in the fill material below the floor at 0.41 mg/kg. Eleven metals were detected above BVs in the fill below the former basement floor. Of these 11, calcium is not a RCRA-related hazardous constituent. Barium, cadmium, and manganese concentrations were all within the ranges of concentration in the sample set used to calculate the Laboratory's soil BVs. The six inorganics outside the range of BVs are (1) arsenic at 13.2 mg/kg (location 16-5963), (2) cobalt at 14.9 mg/kg (location 16-5962), (3) copper at 157 mg/kg and 33.6 mg/kg (locations 16-5963 and 16-5966, respectively), (4) lead at 219, 23, and 36.7 mg/kg (locations 16-5963, 5964, and 5966 respectively), (5) silver at 1.6 mg/kg (location 16-5963), and (6) zinc at 197, 58.7, and 257 mg/kg (locations 16-5963, 5964, and 5966, respectively).

After recognizing that the fill material beneath the floor contained inorganics and pyrene above BVs, the field team collected vertical bounding samples below the fill, locations 16-5963 and 16-5964, at depths of 10.5–12 ft. A lateral bounding sample was collected at 16-5986, outside the footprint of the floor, at a depth of 10.5–11 ft. These bounding samples yielded metals and pyrene concentrations below BVs, thereby effectively bounding contamination beneath the former floor both laterally and vertically.

As shown in Tables 5.3-7 and 5.3-10, metals and pyrene will be retained for further evaluation.

### 5.3.5.2 Environmental Fate

This section evaluates the environmental fate of one organic chemical and 12 metals retained for further evaluation from Section 5.3.4.5. The evaluation of environmental fate addresses the chemical processes that affect the persistence of a constituent along its migration pathway. The evaluation of transport addresses the physical processes that affect mobility along a migration pathway. Physicochemical properties such as vapor pressure, solubility in water, and the tendency to adsorb on soils are important for evaluating constituent mobility. The transport and mobility of the retained contaminants are discussed below, and their physicochemical properties are listed in Table 5.3-11.

**Table 5.3-11**
**Physicochemical Properties for COPCs at PRS 16-034(p)**

| COPC Name | Vapor Pressure mm Hg@20C | Solubility mg/l@25C | Kd | Koc |
|---|---|---|---|---|
| Arsenic | 0[a] | 0[a] | 29[a] | NA[b] |
| Barium | 0[a] | 0[a] | 41[a] | NA |
| Cadmium | 0[a] | 0[a] | 75[a] | NA |
| Calcium | NA | NA | 2209.7[c] | NA |
| Cobalt | NA | NA | 47 [d] | NA |
| Copper | NA | NA | 62.7[d] | NA |
| Lead | 0[a] | 0[a] | 900[a] | NA |
| Manganese | NA | NA | 18.4[d] | NA |
| Mercury | 2.63E-06[a] | 5.6E-02[a] | 1000[a] | NA |
| Pyrene | 0.00892[b] | 0.135[b] | 410[e] | 68000[e] |
| Selenium | 0[a] | 0[a] | 5.0[a] | NA |
| Silver | 0[a] | 0[a] | 8.3[a] | NA |
| Zinc | 0[a] | 0[a] | 62[a] | NA |

[a] EPA 1999, 63062; arsenic from Table A-3-14, pp. 42–44; barium from Table A-3-16, pp. 48–50; cadmium from Table A-3-35, pp. 107–109; lead from Table A-3-128, pp. 94–96; mercury from Table A-3-131, pp. 104–106; pyrene from Table A-3-168, pp. 63–65; selenium from Table A-3-172, pp. 75–77; silver from Table A-3-173, pp. 79–81; zinc from Table A-3-204, pp. 175–177.

[b] NA = Not available

[c] HSDB 1998, 63385

[d] MEPAS 1999, 63179

[e] EPA 1998

Water solubility is perhaps the most important chemical characteristic used to assess chemical mobility. In addition, soil sorption, chemical sorption, or chemical binding in soil may limit the transport of a chemical. These properties may be expressed as ratios of the amount of an organic chemical partitioned between solid and liquid phases. The partitioning ratio between organic material and water is known as the carbon-water sorption coefficient (Koc). The partitioning ratio between soils and water is known as the distribution coefficient (Kd). Volatilization of an organic chemical will enhance its diffusion through the soil and its potential release to the atmosphere.

The following information, summarized from Ney (1995, 58210), is presented to give an indication of the fate and transport tendencies of organic chemicals. The higher the water solubility of a chemical, the more

likely it is to be mobile and the less likely it is to accumulate, bioaccumulate, volatilize, and persist in the environment. However, a highly soluble chemical (greater than 1000 mg/l) is also more prone to biodegradation and metabolism. The lower the water solubility of a chemical (less than 10 mg/l) the more likely it is that it will be immobilized by way of adsorption. Chemicals with a Koc of greater than 10,000 will tend to remain immobilized on soil particles. Chemicals with a Koc of 1000 or less will tend to be more mobile in soil water. A chemical with a low vapor pressure (less than 0.000001 mm Hg) is less likely to volatilize. A chemical with high vapor pressure (greater than 0.01 mm Hg) is more likely to volatilize.

**Organic Chemicals**

Pyrene has low water solubility indicating that the chemical will not be highly mobile within water percolating from rainfall infiltration. The vapor pressure of pyrene is also very low, indicating that this chemical will not be highly mobile through diffusion of soil pore gas. Pyrene has a Koc of 68,000, indicating that it tends to remain immobilized on soil particles (EPA 1999, 63062, Table A-3-168). Because contamination at this site is only present in the subsurface, any water-driven transport of pyrene adsorbed on soil particles will be very limited. Based on this information, the small source term, and the site conditions at this PRS, it seems unlikely that pyrene will be transported off-site.

**Inorganic Chemicals**

Metals can be transported as colloidal and dissolved phases. Because of sorption and precipitation, inorganic chemicals can have long residence times. The mobility of inorganic chemicals is governed largely by the Eh and pH conditions of the water, soil, sediment, and tuff. The Eh and pH conditions exert a strong influence on the speciation of inorganic chemicals, which affects the solubility and sorption of inorganic phases. Soil sorption, chemical sorption, or chemical binding in soil is expressed as the adsorption coefficient (Kd). In general, metallic cations are strongly adsorbed to soil particles, especially if the soil is not highly acidic. Adsorption to particulate matter is a major mechanism by which chemicals are removed from solution and it is dependent, in part, upon the type of soil (Brady 1974, 58203, pp. 563–566).

The reaction of arsenic, cadmium, copper, manganese, and zinc in soils is affected by the pH, the organic matter content, and the oxidation-reduction status of the soil. Ordinarily at pH values of 6.5 and above, they tend to be so highly adsorbed that their availability for uptake by plants is limited, especially if the chemicals are present in their high-valence or oxidized forms. Consequently, most soil will bind relatively large quantities of these elements, if the pH is high and the drainage is good. Cadmium, copper, and zinc are relatively insoluble in water. As with other metallic cations, lead is quite insoluble in soil. Most lead is found in surface soil which indicates little, if any, downward movement.

The other inorganic chemicals present at this site have Kds similar to the inorganic chemicals discussed above and would be expected to have the same low potential for translocation. These chemicals would most likely be bound to the soil and so would move primarily with the transport of soil particles by water rather than as dissolved chemicals. Because contamination at this site is only present in the subsurface, any water driven transport of inorganic chemicals adsorbed on soil particles will be very limited. Based on this information, the small source term, and the site conditions at this PRS, it seems unlikely that inorganic contamination will be transported off-site.

## 5.4 Site Assessments

### 5.4.1 Summary

Section 5.3.4.5 of this report provided an extensive data evaluation which identified those constituents at PRS 16-034(p) that should be carried forward to a screening level assessment of human health and ecological effects. Tables 5.4-1 and 5.4-2 present all the COPCs that have been retained for analysis in the assessments. In addition, these tables identify whether any of the COPCs are retained as COCs or COECs.

A human health screening assessment is provided in Section 5.4.2.1. The screening assessment contains the following sections: (a) scoping, (b) screening evaluation, (c) uncertainty analysis, and (d) interpretation. General methods for the human health screen are presented in Section 5.4.1.1, and additional information is provided in Appendix F, Section F-1.0.

An investigation of potential ecological effects is provided in Section 5.4.2.2. The ecological screening assessment contains the following sections: (a) scoping, (b) screening evaluation, (c) uncertainty analysis, and (d) interpretation. General methods for the ecological scoping and data screening are presented in Section 5.4.1.2. Additional ecological information is provided in Appendix F, Section F-2.0.

#### 5.4.1.1 Human Health Screening General Approach

A human health screening assessment was used in this VCM to determine which COPCs would contribute the greatest amount of risk to potential human receptors. COPCs were evaluated by comparing actual contaminant levels in surface and subsurface soil with human health risk-based concentrations of contaminants in soil. The human health risk-based concentrations used for this evaluation were derived by EPA, Region 9, and reported in "Region 9 RPGs" (EPA 1998, 58751). This document provides action levels for both residential and industrial receptors. For this report, industrial receptor PRGs were used to further evaluate COPCs, according to the following rationale:

- No change in the industrial land-use designation for this area is expected according to the land use master plan map and future land use map for the Laboratory. These maps are a part of the Site Development Plan—Annual Update, 1995 (LANL 1995, 57224, pp. 14, 16).
- At this PRS, the potential for human exposure to contaminants in the environment is very low. This is a highly secure area of the Laboratory and public access is not allowed. Therefore, use of an industrial receptor is appropriate.

Use of Region 9 industrial receptor PRGs as cleanup levels were approved by NMED in the V-site VCM plan (LANL 1997, 55653.2, p. 50).

The maximum detectable concentration in surface and subsurface soils was compared to the Region 9 industrial PRG (see Table 5.4-1). These PRGs are provided in Appendix F-1.0. Those analytes whose maximum concentrations exceeded their PRGs were retained for further evaluation as COCs.

#### 5.4.1.2 Ecological Screening General Approach

An ecological screening assessment was used in this VCM to determine (1) if COECs were present at V-Site and (2) if a quantitative ecological risk assessment was required (to determine if the COECs posed risks to ecological receptors). The ecological screening methodology followed general guidance provided by EPA, NMED (NMED 1998, 57761), and the Laboratory (Kelly et al. 1998, 57916). Other guidance documents that contributed to the ecological screening assessment included

- "Framework for Ecological Risk Assessment" (EPA 1992, 48847.1) and
- "Guidelines for Ecological Risk Assessment" (EPA 1998, 59600.1).

### 5.4.2 Screening Assessments

This section presents the human health and ecological screening assessments.

#### 5.4.2.1 Human Health

The human health screening assessment for PRS 16-034(p) is provided in this section.

### (a) Scoping

The current land use for this site is industrial, and the area is dedicated to continued industrial laboratory operations. Therefore, the use of industrial PRGs is appropriate for screening both current and reasonable future land use.

### (b) Screening Evaluation

Results of the screening evaluation are shown on Table 5.4-1. Arsenic was identified as a COC at PRS 16-034(p).

**Table 5.4-1**
**Human Health Screening for PRS 16-034(p) COPCs**

| COPC | Location ID | Sample ID | Maximum Concentration (mg/kg) | Depth (ft) | VCM Plan Cleanup Level (mg/kg) | Current Region 9 PRG (mg/kg) | Rationale for Elmination/ Retention |
|---|---|---|---|---|---|---|---|
| *Metals* | | | | | | | |
| Arsenic | 16-5963 | RE16-98-0073 | 13.2 | 10.3–10.8 | NA[a] | 3 | >PRG/ Eliminated[b] |
| Barium | 16-5963 | RE16-98-0073 | 93.7 | 10.3–10.8 | 11,000 | 10,000[c] | <PRG/ Eliminated |
| Cadmium | 16-5962 | RE16-98-0071 | 1.3 | 10.3–10.8 | 85 | 93[c] | <PRG/ Eliminated |
| Calcium | 16-5966 | RE16-98-0076 | 7900 | 10.3–10.8 | NA | NA | — |
| Cobalt | 16-5962 | RE16-98-0071 | 14.9 | 10.3–10.8 | NA | 2900[c] | <PRG/ Eliminated |
| Copper | 16-5963 | RE16-98-0073 | 157 | 10.3–10.8 | 6300 | 7000[c] | <PRG/ Eliminated |
| Lead | 16-5963 | RE16-98-0073 | 219 | 10.3–10.8 | 1000 | 1000 | <PRG/ Eliminated |
| Manganese | 16-5962 | RE16-98-0071 | 1450 | 10.3–10.8 | NA | 4500[c] | <PRG/ Eliminated |
| Mercury | NA | RE16-98-0069 | 0.12(U) | NA | NA | 56[c] | <PRG/ Eliminated |
| Silver | 16-5963 | RE16-98-0073 | 1.6 | 10.3–10.8 | NA | 940[c] | <PRG/ Eliminated |
| Zinc | 16-5966 | RE16-98-0076 | 257 | 10.3–10.8 | NA | 10,000[c] | <PRG/ Eliminated |
| *SVOCs* | | | | | | | |
| Pyrene | 16-5964 | RE16-98-0074 | 0.41 | 10.3–10.8 | NA | 2600[c] | <PRG/ Eliminated |

[a] NA = Not available.

[b] See text

[c] These COPCs are noncarcinogenic; therefore, one-tenth of the PRG is used for comparison.

The maximum concentration of arsenic detected (13.2 mg/kg) exceeds the maximum BV of 5 mg/kg and the UTL/ BV for upper Bandelier tuff. The sample was taken in tuff material at 10–11 ft. It is a verification sample of the building footprint.

The maximum concentration (of arsenic) is located in tuff at depth and is covered by 10 ft of fill material. The site has been decontaminated and decommissioned, revegetated, and is inactive. A construction-type scenario where a receptor might be exposed to constituents at this depth (10.2–10.8 ft) is considered unlikely at this location and therefore will not be considered. In addition, arsenic was not identified as a COC in the VCM plan for V-Site because there is no evidence of historical use of this metal or of its release to the environment at V-Site. For these reasons, arsenic is eliminated as a COC.

**(c) Uncertainty Analysis**

Given the past and probable future uses of V-Site, it is unlikely that using industrial PRGs would underestimate any potential effects of chemical constituents. The exposure pathways —incidental ingestion of soil, inhalation of particulates, inhalation of volatiles, and dermal exposure— that were evaluated in the Region 9 PRG document are sufficiently conservative, resulting in equally conservative PRGs for screening purposes.

Concerning use of "Region 9 PRGs" (EPA 1998, 58751), it should be noted that not all toxicity values used in Region 9's database are approved for use by the EPA headquarters workgroup for toxicity criteria. Some are flagged as derived from alternative sources of information (e.g., HEAST, EPA's NCEA, and other sources). These sources are considered valid secondary sources and their values are used as they are listed in the Region 9 document. All constituents retained for this analysis had acceptable toxicity criteria and PRGs.

It should be noted that the PRG for arsenic (3 mg/kg) is approximately equal to the BV for arsenic in tuff (2.79 mg/kg) and is considerably lower than the BV for arsenic in soil (8.17 mg/kg).

**(d) Interpretation**

No COCs are retained at PRS 16-034(p). Although the maximum concentration of arsenic exceeded both the background in tuff and the PRG, the sample was taken at depth and there is no exposure pathway for soil contamination at this depth. Based on this human health screening evaluation, PRS 16-034(p) is recommended for NFA.

#### 5.4.2.2 Ecological

The ecological screening assessment for PRS 16-034(p) is provided in this section.

**(a) Scoping**

The scoping phase of the ecological screening assessment included a site visit and completion of an Ecological Scoping Checklist and an Ecological Pathways CEM, if complete exposure pathways exist. The site visit, checklist, and CEM were used to determine the presence of ecological receptors and completeness of exposure pathways for ecological receptors. The scoping checklist is included in Appendix F-2.0.

PRS 16-034(p) is adjacent to areas of natural habitat with little development. The site is currently covered by barren soil and mulch as a result of the excavation, foundation removal, and subsequent backfilling that took place at the site. The site is bounded by open grassland and scattered ponderosa pines on all sides. Ecological receptors are present at PRS 16-034(p): as sign of elk and fossorial mammals were observed during the site visit. No nesting habitat for threatened or endangered (T&E) species is on or near V-Site, although the area may be considered as within the medium frequency foraging range of the peregrine falcon (LANL 1999, 63130). This is not likely to present any risk to the falcon as the potential contamination is subsurface and complete exposure pathways are unlikely.

Any releases of contaminants occurred in the basement of the extant building TA-16-41 when it was used as a laboratory and an incinerator. These releases took place at least 10 ft below the current surface grade.

No complete exposure pathways are expected for any ecological receptors at these depths. (See the Ecological Scoping Checklist for PRS 16-034(p) in Appendix F-2.0.)

### (b) Screening Evaluation

None of the COPCs shown in Table 5.4-2 were retained as COECs because there are no complete exposure pathways for ecological receptors at PRS 16-034(p).

**Table 5.4-2**
**Ecological COPCs Analysis at PRS 16-034(p)**

| COPC | Location ID | Sample ID | Depth (ft) | Maximum Concentration (mg/kg)[a] | Rationale for Elimination / Retention |
|---|---|---|---|---|---|
| Aluminum | 16-5963 | RE16-98-0073 | 10.3–10.8 | 11,000 | Eliminated; no exposure pathways |
| Arsenic | 16-5963 | RE16-98-0073 | 10.3–10.8 | 13.2 | Eliminated; no exposure pathways |
| Barium | 16-5963 | RE16-98-0073 | 10.3–10.8 | 93.7 | Eliminated; no exposure pathways |
| Cadmium | 16-5962 | RE16-98-0071 | 10.3–10.8 | 1.3 | Eliminated; no exposure pathways |
| Calcium | 16-5966 | RE16-98-0076 | 10.3–10.8 | 7900 | Eliminated; no exposure pathways |
| Cobalt | 16-5962 | RE16-98-0071 | 10.3–10.8 | 14.9 | Eliminated; no exposure pathways |
| Copper | 16-5963 | RE16-98-0073 | 10.3–10.8 | 157 | Eliminated; no exposure pathways |
| Lead | 16-5963 | RE16-98-0073 | 10.3–10.8 | 219 | Eliminated; no exposure pathways |
| Manganese | 16-5962 | RE16-98-0071 | 10.3–10.8 | 1,450 | Eliminated; no exposure pathways |
| Mercury | 16-5963 | RE16-99-0018 | 10.5–11 | 0.11(U) | Eliminated; no exposure pathways |
| Silver | 16-5963 | RE16-98-0073 | 10.3–10.8 | 1.6 | Eliminated; no exposure pathways |
| Zinc | 16-5966 | RE16-98-0076 | 10.3–10.8 | 257 | Eliminated; no exposure pathways |
| Pyrene | 16-5964 | RE16-98-0074 | 10.3–10.8 | 0.41 | Eliminated; no exposure pathways |

[a] Data qualifier flags are defined in the Glossary, Appendix A-2.

### (c) Uncertainty Analysis

There are uncertainties inherent in all phases of ecological risk screening and assessment. Generally, these uncertainties are related to field sampling, laboratory analysis, the use of ESLs for data screening, and the subjective analyses of exposure pathways.

Both the sampling plan and the execution of field sampling were intended to characterize the nature and extent of potential contamination at the site. Sampling in areas with less than maximum concentrations would result in an underestimate of potential risk: conversely, sampling only in areas exhibiting maximum concentrations would result in an overestimate of true ecological risk. Biasing the selection of sampling locations with field-screening helped ensure that samples were taken at locations with maximum contaminant concentrations. These sampling-related uncertainties have had no significant effect on the confidence of this ecological screening assessment.

The uncertainties associated with the laboratory analyses and/or the use of ESLs for data screening have had no significant effect on the confidence of this ecological screening assessment primarily because there are no complete exposure pathways for ecological receptors, which eliminated the need for an ecological data screening.

The primary exposure pathways for ecological receptors are dietary intake, incidental ingestion of soil, plant uptake, and food web transport. Additional potential pathways include dermal contact with contami-

nated soil, inhalation of volatile constituents, inhalation of fugitive dust, and external irradiation. Of all these potential pathways, none were considered to be complete at PRS 16-034(p) because the historical releases of contaminants were well below the depth at which any ecological receptors might be. Any uncertainty related to the subjective opinion regarding complete pathways is not likely to significantly affect interpretations made in this assessment.

**(d) Interpretation**

No complete exposure pathways for ecological receptors were identified at PRS 16-034(p). From an ecological risk perspective, and based on this ecological screening assessment, PRS 16-034(p) is recommended for NFA.

### 5.4.3 Risk Assessments

No risk assessments are necessary or required because no COPCs exceeded human health and/or ecological screening criteria at PRS 16-034(p).

### 5.4.4 Other Applicable Assessments

#### 5.4.4.1 Surface Water

PRS 16-034(p), the basement foundation of former building TA-16-41, was evaluated for surface water concerns using LANL-ER-SOP 2.01, "Surface Water Site Assessment". The PRS was evaluated before the foundation had been decommissioned. The site received an erosion matrix score of 15.3, and there was no evidence of erosion at the site. The PRS is located in a moderately level area and very little surface water run-on or run-off occurs at the site. The area has a slight slope toward the west, and any water entering the site is likely to drain in a westerly direction. Since the site assessment was conducted, the building foundation has been removed and the entire area has been backfilled and leveled.

#### 5.4.4.2 Groundwater

Groundwater was not directly assessed as part of the VCM conducted at PRS 16-034(p); however, it is unlikely that releases from this PRS affected the uppermost perched horizon or any deeper groundwater zones. Contamination is confined to locations immediately beneath the PRS and all locations show a decreasing trend in contamination with depth. Finally, no persistent hydrologic driver for the spread of contamination was ever present at this PRS.

#### 5.4.4.3 Underground Storage Tanks

There have been no underground storage tanks at this PRS.

## 5.5 Conclusions and Recommendations

The objective of the VCM at PRS 16-034(p) was to implement an accelerated cleanup in conjunction with D&D of the basement floor in the former structure. The cleanup strategy for the site included (1) sampling appropriate locations to detect the presence of any contamination, (2) removing contamination if it was present at levels greater than PRGs, (3) bounding the spatial extent of contamination, and (4) determining decreasing trends in remaining contaminant concentrations. The VCM Plan required taking confirmation samples, which were analyzed in fixed laboratories, to ensure that PRGs had been achieved.

Initial site characterization was conducted as D&D personnel removed the basement floor. Site investigation included initial screening/characterization sampling to define the nature of contamination and, upon evaluation of initial analytical results, sampling to bound the extent of contamination. Screening sample locations were distributed approximately uniformly across the footprint of the basement. The data collected is considered adequate for defining the nature and extent of contamination and for determining the need

for any further action at the site. Analyses for inorganic, organic, PAH, and HE contamination showed that 11 inorganics were detected above the Laboratory's BVs beneath the former basement floor. The two bounding samples, which were collected below and beside the original sampling locations, did not contain inorganics above BVs; thus, all detected inorganic contaminants were bounded. HE and HE-degradation products were not detected in any samples. Pyrene was detected at a depth of 10.3–10.8 ft at 0.41 mg/kg (location 16-5947). Subsequent sampling at this location at 11.5-12 ft did not detect the presence of pyrene, thereby effectively bounding pyrene contamination. No other organic compounds were detected at PRS 16-034(p).

In the human health screening assessment, contaminants above BVs or EQLs were compared to EPA's Region 9 PRGs for industrial workers. COPCs were compared to PRGs and it was determined that all were below the PRGs except two: aluminum and arsenic. They were detected at 10.3–10.8 ft at concentrations greater than the PRGs. The original excavation for the basement floor has now been filled with select backfill to the ground surface and the surface has been revegetated. Exposure to a human receptor at this depth is improbable; a human health risk assessment was not performed.

None of the COPCs identified in 16-034(p) were retained as COPECs because no complete exposure pathways exist for the ecological receptors at the PRS. Details of the human health screening assessment are reported in Section 5.4.2.1. Details of the ecological screening assessment are reported in Section 4.4.2.2.

In conclusion, the fundamental requirement of the VCM plan was met: to asses and, if necessary, clean up PRS 16-034(p) in relation to NMED-approved PRGs. Low levels of organic and inorganic contaminants remaining in the soil have been bounded (i.e., sampling data indicate that maximum concentrations at the source of contamination were removed and that remaining contaminant concentrations diminish with distance from the removed source). Therefore, PRS 16-034(p) is recommended for NFA.

# 6.0 WASTE MANAGEMENT

## 6.1 Requirements of Waste Management Plan

A Waste Characterization Strategy Form (WCSF) was submitted to EM/ER and ESH-19 on February 14, 1997. The WCSF requirements are described below. The estimated waste types and volumes listed in the WCSF are summarized in Table 6.1-1. These waste estimates were based on the remediation of all PRSs listed in the VCM plan.

**Table 6.1-1**
**WCSF Waste Description and Volume Estimates**

| Description | Waste Types | Volume |
|---|---|---|
| Soil | HE-contaminated | 5 $yd^3$ |
| Soil | Radioactive | 5 $yd^3$ |
| Soil | Mixed | 5 $yd^3$ |
| Soil | Hazardous | 5 $yd^3$ |
| Sample residues | Hazardous | 30 gal. |
| Decontamination liquid | Non-hazardous, non-radioactive | 100 gal. |
| Decontamination liquid | HE-contaminated | 50 gal. |
| RFI-derived | Municipal refuse | 2 $yd^3$ |
| Concrete | Municipal refuse | 50 $yd^3$ |

### 6.1.1 RCRA Waste Characterization

The WCSF required that soil wastes be characterized based on analytical results from waste samples. Characterization of other wastes was to be based on either direct analysis of the wastes or corresponding analytical results of the soil wastes, using conservative estimates for soil content in the other wastes. Sample residues, which were generated from the field analysis of screening samples, were to be characterized based on analytical results as well as the types and amounts of solvents used in the analytical processes. All investigation-derived waste (IDW) that could be decontaminated was to be decontaminated using approved and proven procedures. After decontamination, this waste was to be characterized as non-hazardous based on acceptable knowledge.

### 6.1.2 Characterization for Radioactivity

The WCSF required that soil, concrete, and RFI-derived wastes be analyzed for radioactivity using gamma speciation when those wastes had been generated in locations where radioactive contamination was suspected. Characterization of other wastes generated from these areas was to be based on either direct analysis of the wastes or corresponding analytical results of the soil wastes, using conservative estimates for soil content in the other wastes. The WCSF required that wastes from areas that were not radioactively suspect be evaluated using a beta-gamma sodium iodide detector following the procedures established in LANL-ER-SOP 10.07, Rev. 1, "Field Monitoring for Surface and Volume Radioactivity Levels."

## 6.2 Remedial Waste Management

Contaminated soil wastes were generated from PRS 16-005(d) because of the need to remove soils exceeding the preliminary cleanup goal criteria of 8 mg/kg for RDX and 32 mg/kg for TNT (based on field analytical results). Analytical residue waste was generated from the field analyses of screening samples

taken from each of the PRSs. Analytical residue waste was comprised of sample material that contained spent acetone and methanol (used in the extraction of HE constituents). IDW and personal protective equipment (PPE) waste was also generated from activities at each of the PRSs. IDW and PPE waste was comprised of disposable inner gloves and empty sample containers. Concrete, metal debris, and asphalt wastes were generated at PRS 16-034(p) during the demolition of the Building TA-16-412 foundation. The actual types and volumes of all wastes generated during this VCM are summarized in Table 6.2-1.

**Table 6.2-1**
**Waste Descriptions and Volume Actuals**

| Item | Waste Type | Actual Volume |
|---|---|---|
| Analytical Residues | Hazardous | 5 gal. |
| Asphalt | Industrial | 30 $yd^3$ |
| Concrete | Industrial | 70 $yd^3$ |
| Contaminated soils | Industrial | 30 $yd^3$ |
| IDW/PPE | Non-hazardous, non-radioactive | 55 gal. |
| Metal Debris | Recyclable | 10 $yd^3$ |

### 6.2.1 Waste Characterization

The characterizations of contaminated soil waste were based on direct sampling of the waste—either before or after removal. Representative samples were taken from the waste soil and analyzed for inorganic chemicals, total uranium, VOCs, SVOCs, gross alpha/beta/gamma, and HE. All wastes were characterized for radioactivity in accordance with LANL-ER-SOP 10.07, Rev. 1, "Field Monitoring for Surface and Volume Radioactivity Levels." Gamma speciation analyses were not performed as no above-background radioactivity had been detected during field screening (per VCM plan, LANL 1997, 55653.2, p. 50).

Based on the flammable nature of the solvents used in the analytical kits, analytical residue wastes were characterized as hazardous. IDW (PPE and equipment) that came in contact with potentially contaminated material was decontaminated and characterized as non-hazardous, non-radioactive waste. Any IDW that could not be decontaminated was characterized for other hazardous constituents based on the results of soil sample analyses.

Decontamination liquids (consisting of Liquinox® detergent and tap water) were placed back in the sites from which they were generated (if the site did not require remediation). For sites that required remediation, decontamination liquids were added to the removed soil as a dust suppressant such that free liquids were not present. Minimal decontamination liquid was generated because a dry decontamination procedure was used to remove most of the potentially contaminated soil waste before wet decontamination occurred.

### 6.2.2 Method of Management and Disposal

All wastes were stored and managed in accordance with all EPA, NMED, DOE, and LANL requirements. No low-level radioactive or mixed wastes were generated. The RCRA hazardous wastes were stored in approved waste satellite storage area #1421 and were managed in accordance with all applicable RCRA hazardous waste management regulations. All wastes were stored in closed containers that were appropriate and approved for that particular waste's type.

The IDW was disposed of at the Los Alamos County Landfill under Waste Profile Form (WPF) 27962. The contaminated soil waste was disposed of at the ChemWaste/Rio Rancho industrial landfill under WPF 28961. The analytical residue waste was disposed of at the TA-16 HE wastewater treatment facility under WPF 29818. The asphalt waste was disposed of at the ChemWaste/Rio Rancho industrial landfill under WPF 30141. The concrete waste was combined with D&D-generated concrete waste (from other sites) for disposal by the D&D group. The metal debris was recycled through Ace Metals, Inc.

## 7.0 REFERENCES

*The following list includes all references cited in this document. The parenthetical information that follows each reference provides the author, publication date, and the Environmental Restoration Record Identification (ER ID) Number. This information also is included in the citations in the text and can be used to locate the documents.*

*ER ID numbers are assigned by the Laboratory's Environmental Restoration (ER) Project to track records associated with the Project. These numbers can be used to locate copies of the actual documents at the ER Project's Records Processing Facility and, where applicable, within the ER Project reference library titled Reference Set for OU 1082.*

*Copies of the reference library are maintained at the New Mexico Environment Department Hazardous and Radioactive Materials Bureau, the Department of Energy-Los Alamos Area Office, United States Environmental Protection Agency, Region 6, and the ER Project 's Remedial Actions Focus Area. This library is a living document that was developed to ensure that the administrative authority (AA) has all the necessary material to review the decisions and actions proposed in this document. However, documents previously submitted to the AA are not included in the reference library.*

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## APPENDIX A ACRONYMS, ABBREVIATIONS, AND GLOSSARY

### A-1.0 List of Acronyms

| | |
|---|---|
| AA | atomic absorption |
| AA | administrative authority |
| AC | accelerated cleanup, area coordinator |
| ADNT | amino-substituted dinitrotoluene |
| AOC | area of concern |
| AP | administrative procedure |
| BMP | best management practice |
| BRET | biological resource evaluation team |
| BV | background value |
| CEM | conceptual exposure model |
| CLP | Contract Laboratory Program |
| COC | chemical of concern |
| COEC | chemical of ecological concern |
| COPC | chemical of potential concern |
| COPEC | chemical of potential ecological concern |
| CSF | Characterization Strategy Form |
| CST | Chemical Science and Technology (division) |
| CVAA | cold vapor atomic absorption |
| D&D | decontamination and decommissioning |
| DL | detection limit |
| DNB | dinitrobenzene |
| DNT | dinitrotoluene |
| DOE | US Department of Energy |
| EDL | estimated detection limit |
| EO | Executive Order |
| EPA | US Environmental Protection Agency |
| EPG | Environmental Protection Group |
| EQL | estimated quantitation limit |
| ER | environmental restoration |
| ES&H | Environment, Safety, and Health (division) |
| ESL | ecological screening limit |
| FIMAD | Facility for Information Management, Analysis, and Display |
| GC | gas chromatograph(y) |
| GFAA | graphite furnace atomic absorption |
| GPC | gel permeation chromatography |
| GPR | ground-penetrating radar |
| HE | high explosive |
| HEAST | Health Effects Assessment Summary Tables |
| HMX | 1,3,5,7-tetranitro-1,3,5,7-tetrazacyclooctane; "High Melting eXplosive" |
| HRMB | Hazardous and Radioactive Materials Bureau |
| HSWA | Hazardous and Solid Waste Amendments of 1984 |
| HT | habitat types |
| ICPAES | inductively coupled plasma atomic emission spectroscopy |
| ICPMS | inductively coupled plasma mass spectroscopy |
| IDW | investigation-derived waste |
| IWP | installation work plan |
| KPA | kinetic phosphorimetry analysis |
| LANL | Los Alamos National Laboratory |
| LCS | laboratory control sample |

| | |
|---|---|
| MDA | material disposal area |
| MS | mass spectrometer (spectrometry) |
| NB | nitrobenzene |
| NCEA | National Center for Environmental Assessment (EPA) |
| NEPA | National Environmental Policy Act |
| NFA | no further action |
| NMED | New Mexico Environment Department (New Mexico Environmental Improvement Division before 1991) |
| NOD | notice of deficiency |
| NPDES | national pollutant discharge elimination system |
| NT | nitrotoluene |
| OU | operable unit |
| PAH | polyaromatic hydrocarbon |
| PE | performance evaluation |
| PID | photoionization detector |
| PPE | personal protective equipment |
| PRG | preliminary remediation goal |
| PRS | potential release site |
| QA | quality assurance |
| QC | quality control |
| RCRA | Resource Conservation and Recovery Act |
| RDX | 1,3,5-trinitro-1,3,5-triazacyclohexane; "Research Department eXplosive" |
| RFI | RCRA facility investigation |
| SAP | sampling and analysis plan |
| SOP | standard operating procedure |
| SVOC | semivolatile organic compound |
| SWMU | solid waste management unit |
| T&E | threatened and endangered |
| TA | technical area |
| TAL | target analyte list (EPA) |
| TIC | tentatively identified compound |
| TNB | trinitrobenzene |
| TNT | 2,4,6-trinitrotoluene |
| TU | total uranium |
| USFWS | US Fish & Wildlife Service |
| UTL | upper tolerance limit |
| VCM | voluntary corrective measures |
| VCP | vitrified clay pipe |
| VOC | volatile organic compound |
| WCSF | Waste Characterization Strategy Form |
| WPF | Waste Profile Form |
| XRF | x-ray fluorescence |

## A-2.0 Glossary

**Accuracy** The extent to which the results of a calculation or measurement approach the true values of the calculated or measured quantities, and are free from error.

**Adsorption** The surface retention of solid, liquid, or gas molecules, atoms, or ions by a solid or a liquid, as opposed to absorption, the penetration of substances into the bulk of the solid or liquid.

**Aliquot** A representative sample of a larger quantity.

**Alluvial** Said of materials or features deposited by running water.

**Alluvium** Clay, silt, sand, gravel, or other rock materials transported by water and deposited in fairly recent geologic time as sorted or semisorted sediments in riverbeds, flood plains, lake shores, and fans at the base of mountain slopes.

**Alpha radiation** The form of radiation composed of alpha particles emitted in the radioactive decay of certain nuclides. The least penetrating of the three common types of radiation (alpha, beta, and gamma), it can be blocked by a sheet of paper or the outer dead layer of skin.

**Analysis** A process used to measure one or more attributes of a sample in a clearly defined, controlled, systematic manner. Often requires treating a sample chemically or physically before measurement.

**Analyte** The particular chemical or radiochemical species to be identified and/or quantified.

**Analytical laboratory data qualifiers** Data qualifiers that are attached to sample results by the analytical laboratory that performed the sample analysis.

The following letter qualifier flags are for **inorganic analyses**:

"U" The compound was analyzed for but was not detected. The associated numerical value is the estimated detection limit.

"B" The reported value was obtained from a reading that was less than the estimated detection limit but greater than or equal to the instrument detection limit.

"E" The reported value is estimated because of the presence of interference.

"M" Duplicate injection precision was not within control limits.

"N" Spiked sample recovery was not within control limits.

"S" The reported value was determined by the Method of Standard Additions.

"W" Post-digestion spike for GFAA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.

"*" Duplicate sample analysis was not within control limits.

"+" Correlation coefficient for the Method of Standard Additions is less than 0.995.

The following letter qualifier flags are for **organic analyses**:

"U" The compound was analyzed for but was not detected. The reported numerical value is the estimated quantitation limit.

"J" Indicates an estimated value. The "J" flag is used if the compound is present but the result is less than the sample estimated quantitation limit and greater then the instrument detection limit.

"B" The analyte was found in the associated method blank as well as in the sample.

"E" The concentrations of the analyte exceeded the calibration range of the instrument.

"D" The analyte was identified in an analysis at a secondary dilution factor.

"C" Identification of a pesticide/PCB has been confirmed by GC/MS.

"P" The percent difference between a pesticide/PCB result obtained on the primary and secondary columns was greater than 25%.

"N" There is presumptive evidence of the presence of a tentatively identified compound based on mass spectral matching.

"A" A tentatively identified compound is a suspected aldol-condensation product.

**Aquifer** A permeable body of geologic material capable of yielding groundwater to wells or springs.

**Area of concern** An area at LANL known or suspected to be contaminated with radionuclides, but not contaminated by hazardous chemicals (or hazardous waste).

**Ash-flow tuff** A tuff deposited by a hot dense volcanic current. Ash-flow tuff can be either welded or non-welded.

**Background level** The naturally occurring concentrations of an inorganic chemical (including naturally occurring radionuclides) in soil.

**Background radiation** The amount of radioactivity naturally present in the environment, including cosmic rays from space.

**Background value** Background values exist for inorganic chemicals and radionuclides. The background values are the upper tolerance limits (UTLs) of background sample results, calculated as the upper 95% confidence limit for the $95^{th}$ percentile. In cases where a UTL cannot be calculated, either the detection limit or maximum reported value is used as a BV. Background values are used as simple threshold numbers to identify potentially contaminated site sample results as greater than background levels.

**Barrier** Any material or structure that prevents or substantially delays movement of solid, liquid, or gaseous phase chemicals in environmental media.

**Basalt** A hard, dense, dark volcanic rock composed chiefly of plagioclase, augite, olivine, and magnetite.

**Baseline level** Anthropogenic, non-site related concentrations of a given chemical in the soil. Examples of baseline levels are nuclear fallout and organic chemicals associated with urban activities.

**Baseline risk assessment** (Also known as ***risk assessment***) A site-specific analysis of the potential adverse effects caused by hazardous substance releases from a site in the absence of any actions to control or mitigate these releases. There are four steps in baseline risk assessment: data collection and analysis, exposure assessment, toxicity assessment, and risk characterization.

**Bentonite** A clay composed of the mineral montmorillonite and variable amounts of magnesium and iron, formed over time by the alteration of volcanic ash. As bentonite can adsorb large quantities of water and expand to several times its normal volume, it is a common additive to drilling mud.

**Best management practice** For facilities that manufacture, use, store, or discharge toxic or hazardous pollutants as defined by the 1977 Clean Water Act, a required program to control the potential spill or release of those materials to surface waters. (*The Facts on File Dictionary of Environmental Science,*edited by L. Harold Stevenson and Bruce Wyman)

**Beta radiation** Radioactive transformation of a nuclide in which the nucleus emits a beta particle (electron or positron). Beta radiation can be blocked by an inch of wood or by a thin sheet of aluminum.

**Bias** (1) The degree to which the value obtained for a measured parameter deviates from the value accepted as the true, or reference, value. (2) A systematic deviation from the true value that remains constant over replicated measurements within the statistical precision of the measurement process.

**Blank sample** A sample expected to have negligible or unmeasurable amounts of analytes. Results of blank sample analyses indicate whether or not field samples might have been contaminated during one or more steps of the sample collection, transport, storage, preparation and analysis process.

**Caldera** A more or less circular volcanic depression, generally on the order of tens of kilometers in diameter, formed during the eruption of large volumes (tens to hundreds of cubic kilometers) of dense rock equivalent, ash flow, and ash fall tuff deposits.

**Chemical** Any naturally occurring or man-made substance characterized by a definite molecular composition, including molecules that contain radionuclides.

**Chemical of concern** A chemical that is identified as a potential risk as the result of performing a site-specific human health or ecological risk assessment.

**Chemical of potential concern** A chemical detected at a site that has the potential to adversely affect human and or ecological receptors due to its concentration, distribution and mechanism of toxicity. The chemical remains a concern until exposure pathways and receptors are evaluated in a site-specific risk assessment.

**Cleanup** Action undertaken to physically remove or treat a hazardous substance that poses a threat or potential threat to human health and welfare and the environment. Sites are considered cleaned up when EPA removal or remedial programs have no further expectation or intention of returning to the site and threats have been mitigated or do not require further action.

**Cleanup levels** Media-specific target concentration levels for contaminants that must be met by a selected corrective action. Cleanup levels are established using criteria such as protection of human health and the environment; compliance with regulatory requirements; reduction of toxicity, mobility, or volume through treatment; long- and short- term effectiveness; implementability; cost; and public acceptance.

**Code of Federal Regulation (CFR)** A codification of all regulations developed and finalized by federal government agencies in the *Federal Register.*

**Collocated sample** One of two or more samples collected as close together in time and space as the sampling equipment allows so that each sample is expected to be equally representative for a given analyte within the common space and time interval.

**Colluvium** Rock debris accumulated at the base of a cliff or on a slope principally by the action of gravity.

**Comparability** A qualitative measure of the degree to which one item or data set can be compared with another.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980.** Amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986. The acts created a special tax that goes into a trust fund, commonly known as Superfund, whose mandate is to investigate and clean up abandoned or uncontrolled hazardous waste sites that may endanger health or the environment. The EPA is responsible for managing Superfund.

**Conceptual model** See also ***Site conceptual model.***

**Conceptual hydrogeologic model** Perception of the occurrence, movement and quality of groundwater in an area and the relationship of groundwater to the surface water, soil water and geologic framework there.

**Confluence** The place where two or more streams meet; the point where a tributary meets the main stream.

**Confined** Said of groundwater in an artesian aquifer.

**Constituent** Any compound or element present in environmental media, including both naturally occurring and anthropogenic elements.

**Contaminant** Any chemical (including radionuclides) present in environmental media or on structural debris at a concentration that may present a risk to human health or the environment.

**Controlled area** Any Laboratory area to which access is controlled to protect individuals from exposure to radiation and/or hazardous materials.

**Corrective Action** A measure taken to rectify conditions adverse to human health or the environment.

**Curie** A unit of radioactivity defined as that quantity of any radioactive nuclide that has an activity of 3.7 x $10^{10}$ disintegrations per second.

**Data quality assessment** A statistical and scientific evaluation of the data set to assess the validity and performance of the data collection design and statistical test, and to establish whether a data set is adequate for its intended use.

**Data validation** A systematic process that applies a defined set of performance-based criteria to a body of data that may result in qualification of the data. This process is performed independently of the analytical laboratory generating the data set and occurs prior to drawing a conclusion from the data. It may comprise a standardized review (routine validation) and/or a problem-specific review (focused validation) of the data.

**Decommissioning** The permanent removal from service of surface facilities and components only, after facility closure, in accordance with regulatory requirements and environmental policies.

**Decontamination** The removal of unwanted material from the surface of or from within another material, or the neutralizing of it.

**Detection limit** The minimum concentration of a substance that can be measured by an instrument with a specified statistical confidence that the analytical concentration is greater than zero.

**Discharge or Hazardous Waste Discharge (As defined under RCRA, 40 CFR 260.10)** The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of hazardous waste into or on any land or water.

**Disposal** The discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

**U.S. Department of Energy (DOE)** The federal agency that sponsors energy research and regulates nuclear materials for weapons production.

**Duplicate analysis** An analysis performed on one of a pair of identically prepared subsamples of the same sample.

**Ecological Screening Level (ESL)** An organism's exposure-response threshold for a given chemical constituent. It is the concentration of a substance in a particular medium that corresponds to a hazard quotient (HQ) of 1.0 for a given organism and below which no risk is indicated.

**Effluent** A liquid discharged as a waste, such as contaminated water from a factory or the outflow from a sewage works; water discharged from a storm sewer or from land after irrigation.

**Eolian** Pertaining to the wind, especially said of sediment deposition by the wind, of structures such as wind-formed ripple marks, or of erosion accomplished by the wind.

**Environmental Surveillance** The collection and analysis of samples of air, water, soil, foodstuffs, biota, and other media to determine environmental quality of an industry or community. It is commonly performed at sites containing nuclear facilities.

**Environmental Protection Agency (EPA)** The federal agency responsible for enforcing environmental laws. While state regulatory agencies may be authorized to administer some of this responsibility, EPA retains oversight authority to ensure protection of human health and the environment.

**Ephemeral stream** Said of a stream or spring that flows only during and immediately after periods of rainfall or snowmelt.

**Error** Any discrepancy between a computed, observed, or measured quantity and the expected or theoretically correct value of that quantity.

**Estimated quantitation limit** The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine analytical laboratory operating conditions. Sample estimated quantitation limits are highly matrix-dependent, and the specified estimated quantitation limits might not always be achievable.

**Evapotranspiration** The combined discharge of water from the earth's surface to the atmosphere by evaporation from lakes, streams, and soil surfaces, and by transpiration from plants.

**Exposure unit** The bounded area or volume within which a person or other receptor may be exposed to contaminants that have been released to the environment.

**Fault** A fracture, or zone of fractures, in rock along which there has been vertical or horizontal movement; adjacent rock surfaces are displaced.

**Field duplicate** A second sample collected as near as possible to the original sample.

**Field split** A field sample that has been divided in the field into equally representative portions (See also *split sample*).

**Flood plain** The portion of a river valley that is built of overbank sediment deposited when the river floods.

**Focused data validation** A technically based analyte-, sample-, and potentially data use-specific process that extends the qualification of data beyond method or contractual compliance and provides a level of confidence that an analyte is present or absent. If the analyte is present, the quality of the quantitation may be obtained through focused validation.

**Gamma radiation** A form of electromagnetic, high-energy radiation emitted from a nucleus. Gamma rays are essentially the same as x-rays and require heavy shieldings, such as concrete or steel, to be blocked.

**Geohydrology** The science that applies hydrologic methods to the understanding of geologic phenomena.

**Grab sample** A specimen collected by a single application of a field sampling procedure to a target population, e.g. the surface soil from a single hole collected following the spade and scoop sampling procedure, or a single air filter left in the field for three months.

**Groundwater** Water in a subsurface saturated zone.

**Half-life** The time required for one-half of the radioactive atoms initially present in a sample to decay. Each radionuclide has a characteristic half-life ranging from a fraction of a second to thousands of years.

**Hazardous and Solid Waste Amendments (HSWA)** Amendments to the Resource Conservation and Recovery Act, 1984. HSWA added land disposal restrictions, minimum technology requirements, and expanded corrective action authorities to the RCRA statue.

**Hazardous substance (As defined by 40 CFR 302.3) Any substance designated pursuant to 40 CFR 302. 40 CFR 302.4 – Designation of Hazardous Substances:**

> ***Listed hazardous substances.*** The elements, compounds and hazardous wastes appearing in Table 302.4 are designated as hazardous substances under section 102(a) of the CERCLA.
>
> ***Unlisted hazardous substances.*** A solid waste, defined in 40 CFR 261.2, which is not excluded from regulation as a hazardous waste under 40 CFR 261.4(b), is a hazardous substance under section 101(14) of the CERCLA if it exhibits any of the characteristics identified in 40 CFR 261.20 through 261.24. See Hazardous Waste. **Note:** This definition incorporates, by reference, substances listed in CWA sections 311 and 307(a); CAA section 112; RCRA section 3001; and TSCA section 7.

**Hazardous waste (As defined by RCRA 40 CFR 261.3)** Any solid waste is generally a hazardous waste if it is not excluded from regulation as a hazardous waste, is listed in the regulations as a hazardous waste, exhibits any of the defined characteristics of hazardous waste (ignitability, corrosivity, reactivity, or toxicity), or is a mixture of solid waste and hazardous waste.

**Holding time** The maximum elapse of time that one can expect to store a sample without unacceptable changes in analyte concentrations. Holding times apply under prescribed storage conditions and deviations in storage conditions may affect the holding time. Extraction Holding Time refers to the time lapse from sample collection to sample preparation; Analytical Holding Time refers to the time lapse between sample preparation and analysis.

**HSWA module** A portion of the Laboratory's permit to operate under RCRA that contains requirements specific to Los Alamos National Laboratory. It is this portion of the permit that contains the list of solid waste management units that must be cleaned up in accordance with RCRA procedures.

**Hydraulic conductivity** The rate at which water moves through a medium in a unit of time under a unit hydraulic gradient through a unit area measured perpendicular to the direction of flow.

**Hydraulic gradient** The rate of change of hydraulic head per unit of distance in the direction of groundwater flow.

**Hydraulic head** Elevation of the water table or potentiometric surface as measured in a well.

**Hydrogeology** The science that applies geologic methods to the understanding of hydrologic phenomena.

**Hypothesis** A proposition stated as a basis for further investigation.

**Industrial use scenario** Industrial use is the future use scenario in which current Laboratory operations continue. Any necessary remediation involves cleanup to standards designed to ensure a safe and healthy work environment for Laboratory workers.

**Infiltration** Entry of water into the ground.

**Interflow** A runoff process that involves lateral subsurface flow in the soil zone.

**Internal standards** Compounds added to the sample after sample preparation for qualitative and quantitative instrument analysis—the compounds serve as a standard of retention time and response, which is

invariant from run to run with the instruments. (*Handbook of Environmental Analysis,* Roy-Keith Smith, 3rd ed.)

**Interference** A chemical or physical entity whose influence results in a decrease or increase in the response of an analytical method or other measurement system relative to the response obtained in the absence of the entity.

**Intermittent stream** Said of a stream that flows only in certain reaches due to losing and gaining characteristics of the channel bed.

**Interrupted stream** Said of a stream whose flow is discontinuous due to man-made structures.

**Laboratory duplicate sample** The portions of a sample taken from the same sample container, prepared for analysis and analyzed independently but under identical conditions. Each duplicate sample is expected to be equally representative of the original material.

**LANL Data validation qualifiers** Data qualifiers used in the LANL ER Project baseline validation process are as follows:

"A" Contractually required data are not available for data review and evaluation.

"U" The analyte was analyzed for but not detected.

"J" The analyte was positively identified, and the associated numerical value is estimated to be more uncertain than would normally be expected for that analysis.

"J+" The analyte was positively identified, and the result is likely to be biased high.

"J-" The analyte was positively identified, and the result is likely to be biased low.

"UJ" The analyte was not positively identified in the sample, and the associated value is an estimate of the sample-specific detection or quantitation limit.

"RPM" Without further review of the raw data, the sample results are unusable due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. Presence or absence cannot be verified. Any results qualified as RPM must be evaluated for relevance to data use.

"P" Professional judgement should be applied to using the data in decision-making.

"PM" Professional judgement should be applied to using the data in decision-making. A manual review of raw data is recommended to determine if the defect impacts data use for decision-making.

"R" The data is rejected as a result of major problems with quality assurance/qualify control (QA/QC) parameters.

**Leachate** A liquid that has percolated through waste, soil or rock material and mobilized chemical species in the process.

**Leaching** The separation or dissolving out of soluble constituents of a solid material by the natural action of percolating water or by chemicals.

**Matrix** See also *sample matrix.*

**Matrix** Relatively fine material in which coarser fragments or crystals are embedded; also called "ground mass."

**Matrix spike** An aliquot of sample spiked with a known concentration of target analyte(s). The spiking typically occurs before sample preparation and analysis.

**Matrix spike duplicate** An intralaboratory duplicate sample spiked with a known amount of target analyte(s). Spiking occurs prior to sample preparation and analysis.

**Maximum contaminant level** Under the Safe Drinking Water Act, the maximum permissible level of a contaminant in water that is delivered to any user of a public water system that serves 15 or more connections and 25 or more people. The standards set take into account the feasibility and cost of attaining the standard.

**Medium (environmental)** Any material capable of absorbing or transporting constituents including tuffs, soils and sediments derived from these tuffs, surface water, groundwater, air, structural surfaces, and debris.

**Medium (geological)** The solid part of the hydrogeological system; may be unsaturated or saturated.

**Method** A body of procedures and techniques for systematically performing an activity.

**Method blank** An analyte-free matrix to which all reagents are added in the same volumes or proportions as those used in the environmental sample processing and which is prepared and analyzed in the same manner as the corresponding environmental samples. The method blank is used to assess the potential for contamination to the sample during preparation and analysis.

**Method detection limit (MDL)** The minimum concentration of a substance that can be measured and reported with a known statistical confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of samples of a given matrix type containing the analyte after subjecting the sample to the usual preparation and analyses. The MDL is used to establish detection status.

**Migration** The movement of inorganic and organic species through unsaturated or saturated materials.

**Migration pathway** A route (e.g., a stream or subsurface flow path that controls the potential movement of contaminants to environmental receptors (plants, animals, humans).

**Mitigation** (1) Avoiding an impact altogether by not taking a certain action or parts of an action. (2) Minimizing impacts by limiting the degree or magnitude of the action and its implementation. (3) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment. (4) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action. (5) Compensating for the impact by replacing or providing substitute resources or environments.

**Mixed waste** Waste that contains both hazardous waste (as defined by RCRA and its amendments) and radioactive waste (as defined by the AEA and its amendments).

**Model** A mathematical approximation of a physical, biological, or social system.

**Monitoring well** A well drilled at a specific location on or off a hazardous waste site for the purpose of sampling groundwater or measuring water levels. Typically constructed with a moderate screen interval placed so as to straddle the water table or potentiometric surface associated with the saturated zone of interest.

**National Pollutant Discharge Elimination System (NPDES)** A federal regulation under the Clean Water Act requiring permits for discharge into surface waterways.

**No further action (NFA)** A decision that no further investigation or remediation is warranted for a PRS, based on risk levels for residential use, recreational use, or industrial use.

**Notice of Deficiency (NOD)** A notice issued to DOE and the Laboratory by EPA or NMED stating that some aspect(s) of a plan or report does not meet their requirements. The ER Project must then propose a solution acceptable to the EPA/NMED before the plan or report will be approved.

**Operable unit (OU)** At LANL, one of 24 areas originally established for administering the ER Project. Set up as groups of potential release sites, the OUs were aggregated based on geographic proximity for the purpose of planning and conducting the cleanup effort. As the project matured, it became apparent that 24 were too many to allow efficient communication and to ensure consistency in approach. Therefore, in 1994, the 24 OUs were reduced to six administrative "field units".

**Outfall** The vent or end of a drain, pipe, sewer, ditch, or other conduit that carries waste water, sewage, storm runoff or other effluent into a stream.

**Out of control** A condition in which a measured quality control parameter does not meet specified control or acceptance criteria.

**Perched groundwater** Groundwater that lies above the regional water table and is separated from it by an unsaturated zone.

**Percolation** Gravity flow of groundwater through the pore spaces in rock or soil below the ground surface.

**Perennial Stream** Said of a stream or reach that flows continuously throughout the year.

**Performance evaluation sample** A sample of known composition with respect to selected analytes which, upon analysis, is expected to yield results that fall within a prescribed range. Performance evaluation samples are selected to mimic as closely as possible those matrices representative of environmental samples from a particular location.

**Permit modification** A process in which changes to requirements of the Laboratory's operating permit is requested by application to the EPA. The process includes a public hearing and a 60-day comment period on the proposed changes.

**Piezometer** A well drilled for the purpose of measuring hydraulic head or water level; ideally only open at the bottom but usually constructed with a very short screen interval.

**Population (statistical)** A set of entities or a continuum in a physical, biological or social system of interest, e.g., the residents of Los Alamos County, the water in an alluvial aquifer, or the plants in Pajarito Canyon.

**Porosity** The ratio of the volume of interstices in rock or soil to its total volume expressed as a percentage or as a fraction.

**Porphyritic** Said of the texture of an igneous rock in which larger crystals (phenocrysts) are set in a finer ground mass.

**Potential release site (PRS)** A site suspected of releasing contaminants into the environment. PRS is a generic term that includes SWMUs, hazardous waste sites listed in Module VII of the Laboratory's Hazardous Waste Facility Permit, and sites that have been identified as potentially contaminated by radioactivity.

**Precision** A concept used to describe dispersion of measurements with respect to a measure of location or central tendency. Precision may be represented by the inverse of the standard deviation of a set of measurements.

**Prepared sample** A sample treated in such a manner as to render it amenable to analysis. May include: digestate, distillate, electroplate, extract, filter retentate, filtrate, homogenate, precipitate, pulverized/sieved portion of sample, residue, etc.

**Qualifier flag** A letter code indicating, on a gross scale, a verifiable or potential data deficiency. Qualifier flags are assigned to data based on the outcome of data validation checks.

**Quality assessment sample** A sample submitted for analysis, the data from which are used to assess the quality of performance of a sampling or analysis process. May include performance evaluation samples, field duplicates, field blanks, etc.

**Quality control (QC) sample** A sample which, upon analysis, provides information useful for adjusting, controlling, or verifying continuing acceptability of sampling and/or analysis activities that are in progress.

**Quaternary** The second period of the Cenozoic Era, following the Tertiary, and including the last 2 – 3 million years.

**Radiation** Energy emitted in the form of rays or particles that are thrown off by disintegrating atoms. The rays or particles emitted may consist of alpha, beta, or gamma radiation.

**Radioactive waste** Waste material containing radionuclides, or contaminated by radionuclides.

**Radionuclide** A nuclide (species of atom) that exhibits radioactivity.

**RCRA facility investigation (RFI)** The second step of a RCRA corrective action, to gather enough data to fully characterize the nature, extent, and rate of migration of contaminants to determine the appropriate response action. The RFI is generally equivalent to the RI portion of the Superfund process.

**Reason code** A code used in the ER data validation process to indicate why a qualifier flag has been assigned to a datum.

**Receptor** A person, plant, animal, or geographical location that is exposed to a chemical or physical agent released to the environment by human activities.

**Recharge** The process by which water is added to the zone of saturation, either directly from the overlying unsaturated zone or indirectly by way of another material in the saturated zone.

**Recreational use scenario** Recreational use refers to current and future use scenarios in which cleanup of a PRS is completed to a level that permits the public to safely use it on an intermittent basis for activities such as hiking and camping. The standards are more stringent than they are for the industrial use scenario but not as stringent as those for residential use.

**Regulatory standard** Media-specific contaminant concentration levels of potential concern that are mandated by federal or state legislation or regulation (e.g., the Safe Drinking Water Act, New Mexico Water Quality Control Commission regulations).

**Release** Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant), but excludes

(A) any release which results in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons;

(B) emissions from the engine exhaust of a motor vehicle, rolling, stock, aircraft, vessel, or pipeline pumping station engine;

(C) release of source, byproduct, or special nuclear material from a nuclear incident, as those terms are defined in the Atomic Energy Act, if such release is subject to requirements with respect to financial protection established by the Nuclear Regulatory Commission under Section 170 of such act, or, for the purposes of Section 104 of this title or any other response action, any release of source, byproduct, or special nuclear material from any processing site designated under Section 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act of 1978, and

(D) the normal application of fertilizer. **[CERCLA 101(22)]**

**Remediation** The process of reducing the concentration of a contaminant (or contaminants) in air, water, or soil media to a level that poses an acceptable risk to human health; the act of restoring a contaminated area to a usable condition based on specified standards.

**Remedy or remedial action** Those actions consistent with permanent remedy instead of or in addition to removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment. The term includes, but is not limited to, such actions at the location of the release as storage, confinement, perimeter protection using dikes, trenches, or ditches, clay cover, neutralization, cleanup of released hazardous substances and associated contaminated materials, recycling or reuse, diversion, destruction, segregation of reactive wastes, dredging or excavations, repair or replacement of leaking containers, collection of leachate and run-off, on-site treatment or incineration, provision of alternative water supplies, and any monitoring reasonably required to assure that such actions protect the public health and welfare and the environment. **[CERCLA 101(24)]** Activities conducted at DOE facilities to reduce potential risks to people and/or harm to the environment from radioactive and/or hazardous substance contamination. **(DOE Order 5820.2A)**

**Remove or removal** The cleanup or removal of released hazardous substances from the environment; such actions as may be necessary taken in the event of the threat of release of hazardous substances into the environment, such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances, the disposal of removed material, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment, which may otherwise result from a release or threat of release. **[CERCLA 101 (23)]**

**Replicate measurement** A re-analysis (remeasurement) of a prepared sample.

**Representativeness** The degree to which data accurately and precisely represent a characteristic of a population or an environmental condition.

**Request number** An identifying number assigned to a group of samples that are prepared and analyzed together.

**Residential use scenario** The standards for residential use are the most stringent of the three current and future use scenarios being considered by the ER Project and is the level of cleanup EPA is currently specifying for SWMUs located off the Laboratory site and for those released for non-Laboratory use.

**Resource Conservation and Recovery Act (RCRA)** The RCRA regulations establish a comprehensive hazardous waste management system under the authority of RCRA Subtitle C. RCRA regulates hazardous waste from its point of generation through its point of final disposal. RCRA also regulates solid waste under Subtitle D.

**Respond or response (As defined by Section 101 (25) of CERCLA)** remove, removal, remedy, or remedial action, including enforcement activities related thereto. **(DOE 1991)**

**Retardation** The act or process that reduces the rate of movement of a chemical substance in water relative to the average velocity of the water. The movement of chemical substances in water can be retarded by adsorption and precipitation reactions, and by diffusion into the pore water of the rock matrix.

**Risk** A measure of a negative or undesirable impact associated with an event.

**Risk assessment** see also *Baseline Risk Assessment*

**Risk assessment, preliminary** A risk assessment conducted using conservative assumptions and scenarios and assuming no mitigating or corrective measures beyond those already in place.

**Risk characterization** The summarization and integration of the results of toxicity and exposure assessments into quantitative and qualitative expressions of risk. The major assumptions, scientific judgments, and sources of uncertainty related to the assessment are also presented.

**Risk management** Risk management is the integration of risk characterization with other nonscientific considerations specified in applicable statutes to make and justify regulatory decisions. ***(RCRA/CERCLA Update*, June 1992)**

**Routine analysis** The analysis categories of inorganics, metals, organics, radiochemistry and high explosives as defined in the current contract laboratory statement of work.

**Routine Data Validation** The process of reviewing analytical data relative to quantitative routine acceptance criteria. The objective of routine data validation is two-fold: one objective is to estimate the technical quality of the data relative to minimum national standards adopted by LANL ER; the other objective is to indicate to data users the technical data quality at a gross level by assigning qualifier flags to environmental data whose quality indicators do not meet acceptance criteria.

**Sample** A portion of a material (e.g., rock, soil, water, air), which, alone or in combination with other samples, is expected to be representative of the material or area from which it is taken. Samples are typically sent to a laboratory for analysis or inspection or are analyzed in the field. When referring to samples of environmental media, the term *field sample* may be used.

**Sample matrix** In chemical analysis, that portion of a sample which is exclusive of the analytes of interest. Together, the matrix and analytes of interest form the sample.

**Screening Assessment** A process designed to determine whether contamination detected in a particular medium at a site may present a potential unacceptable human health and /or ecological risk. The assessment utilizes screening levels that are either human-health or ecologically-based concentrations derived using chemical specific toxicity information and standardized exposure assumptions below which no additional actions are generally warranted.

**Site characterization** The program of exploration and research, both in the laboratory and in the field, undertaken to establish the geological, hydrological, and chemical conditions at a site. Site characterization includes borings, surface excavations, excavation of exploratory shafts, limited subsurface lateral excavations and borings and geophysical testing. **(10 CFR 60.2)**

**Site conceptual model** A qualitative or quantitative description of sources of contamination, environmental transport pathways for contamination, and biota that may be impacted by contamination (called receptors) and whose relationships describe qualitatively or quantitatively the release of contamination from the sources, the movement of contamination along the pathways to the exposure points, and the uptake of contaminant by the receptors.

**Soil gas** Those gaseous elements and compounds that occur in the void spaces in rock or soil. Such gases can move through or leave the soil or rock, depending on changes in pressure.

**Soil water** Water in the unsaturated zone, regardless of whether it occurs in soil or rock.

**Solid waste** Any discarded material, including any material which is abandoned, recycled, inherently waste-like, or certain military munitions.

**Solid waste management unit (SWMU)** Any discernible unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste.

**Split sample** A sample that has been subdivided into two or more portions expected to be of the same composition. Used to characterize within-sample heterogeneity, sample handling, and measurement variability.

**Standard operating procedure (SOP)** A written document that details the method for an operation, analysis, or action with thoroughly prescribed techniques and steps, and is officially approved as the method for performing certain routine or repetitive tasks.

**Stratification** Classification of the target population into two or more non-overlapping and exhaustive categories (strata) on the basis of characteristics which are known *a priori* for the entire population.

**Stratigraphy** The science dealing with the succession, age, composition and history of strata.

**Surrogate compound (Surrogate)** An organic compound used in the analyses of organic target analytes that is similar in composition and behavior to target analytes but is not normally found in field samples. Surrogates are added to every blank and spike sample to evaluate the efficiency with which analytes are recovered during extraction and analysis.

**Target analyte** A chemical or parameter, the concentration, mass or magnitude of which is designed to be quantified by use of a particular test method.

**Technical area (TA)** The Laboratory established technical areas as administrative units for all its operations. There are currently 49 active TAs spread over 43 square miles.

**Topography** The physical features of a place or region.

**Transmission loss** Reduction in surface water flow by seepage into the channel bed.

**Transmissivity** A measure of the amount of water that can be transmitted horizontally by the full saturated thickness of the aquifer under a hydraulic gradient of 1. **(DOE 1991)**

**Transport or transportation** The movement of a hazardous substance by any mode, including pipeline (as defined in the Pipeline Safety Act), and in the case of hazardous substance which has been accepted for transportation by a common or contract carrier, the term "transport" or "transportation" shall include any stoppage in transit which is temporary, incidental to the transportation movement, and at the ordinary operating convenience of a common or contract carrier, and any such stoppage shall be considered as a continuity of movement and not as the storage of a hazardous substance. **[CERCLA 101(26)]**

**Tuff** A compacted deposit of volcanic ash and dust that contains rock and mineral fragments accumulated during an eruption.

**Unconfined** Said of water in a saturated zone that is open to the atmosphere (that is, not beneath a confining bed or under artesian pressure).

**Underflow** Groundwater flow beneath the bed of a non-flowing stream; such water is often perched in the channel alluvium atop the bedrock surface.

**Underground storage tank (As defined in Section 9001(1) of the Solid Waste Disposal Act)** The term "underground storage tank" means any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10% or more beneath the surface of the ground. Such term does not include any

(A) farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes;

(B) tank used for string heating oil for consumptive use on the premises where stored;

(C) septic tank;

(D) pipeline facility (including gathering lines) regulated under

i) the Natural Gas Pipeline Safety Act of 1968 (49 USC App. 1671 et seq.),

ii) the Hazardous Liquid Pipeline Safety Act of 1979 (49 USC App. 2001 et seq.), or

iii) which is an intrastate pipeline facility regulated under state laws comparable to the provisions of law referred to in Clause (i) or (ii) of this subparagraph;

(E) surface impoundment, pit, pond, or lagoon,

(F) storm water or waste water collection system;

(G) flow-through process tank;

(H) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or

(I) storage tank situated in an underground area (such as a basement, cellar, mine working, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

**Unsaturated zone** The zone between the land surface and the regional water table. Generally, fluid pressure in this zone is less than atmospheric pressure, and some of the voids may contain air or other gases at atmospheric pressure. Alternatively, the unsaturated zone generally has moisture contents less than saturation.

**Water balance** The relationship between water input (precipitation) and output (runoff, evapotranspiration, and recharge) in a hydrological system; the portioning of precipitation into these components of the hydrological cycle.

**Water content** (also gravimetric moisture content) The amount of water in an unsaturated medium, expressed as the ratio of the weight of water in a sample to the weight of the oven-dried sample; often expressed as a percent.

**Water table** The top of the saturated zone; the water level associated with an unconfined aquifer.

**Welded Tuff** A volcanic deposit hardened by the action of heat, pressures from overlying material, and hot gases.

# APPENDIX B. OPERATIONAL AND ENVIRONMENTAL SETTING

This appendix provides background information about TA-16, information derived from the RFI work plan for OU 1082 (LANL 1993, 20948) as well as new information obtained since the work plan was submitted in 1993. Sections B-1.0 through B-4.0 of the appendix provide a foundation for the conceptual geologic/hydrologic model presented in Section B-4.3. This model pictorially summarizes environmental factors that are likely to influence contaminant migration at TA-16. Therefore, this model can serve as a framework for considering remediation alternatives, as a conceptual exposure model for risk assessment, and as a tool for SWMU-specific sampling plans. Section B-5.0 provides information about biological resources. This information may be used to formulate decisions that incorporate ecological considerations. Section B-6.0 discusses cultural resources.

## B-1.0 Geographic Setting, Operational History, and Future Land Use

TA-16 and associated TAs (11, 13, 24, 25, 28, 29, 37) are located in the southwestern corner of the Laboratory (Figure B-1.0-1, Figure B-1.0-2). TA-16 contains 2410 acres or 3.8 square mi. The land is a portion of that which was acquired by the Department of Army for the Manhattan Project in 1943. It was used prehistorically by the ancestral Indians of the Pajarito Plateau, and prior to World War II, for farming and a sawmill operation. TA-16 is bordered by Bandelier National Monument along New Mexico (NM) State Highway 4 to the south and the Santa Fe National Forest along NM State Highway 501 to the west (Figure B-1.0-1). To the north and east, it is bordered by TA-8, -9, -14, -15, and -49. TA-16 is fenced and posted along NM State Highway 4 (Figure B-1.0-2). Water Canyon, a 200-ft-deep ravine with steep walls, separates State Highway 4 from active sites at TA-16. Cañon de Valle forms the northern border of TA-16. Security fences surround the HE-production facilities.

TA-16 was established to develop explosive formulations, to cast and machine explosive charges, and to assemble and test explosive components for the US nuclear weapons program. The work performed at TA-16 was conducted in support of the development, testing, and production of explosive charges for the implosion method. Present-day and future use of this site is essentially unchanged, although facilities have been upgraded and expanded as explosive and manufacturing technologies have advanced.

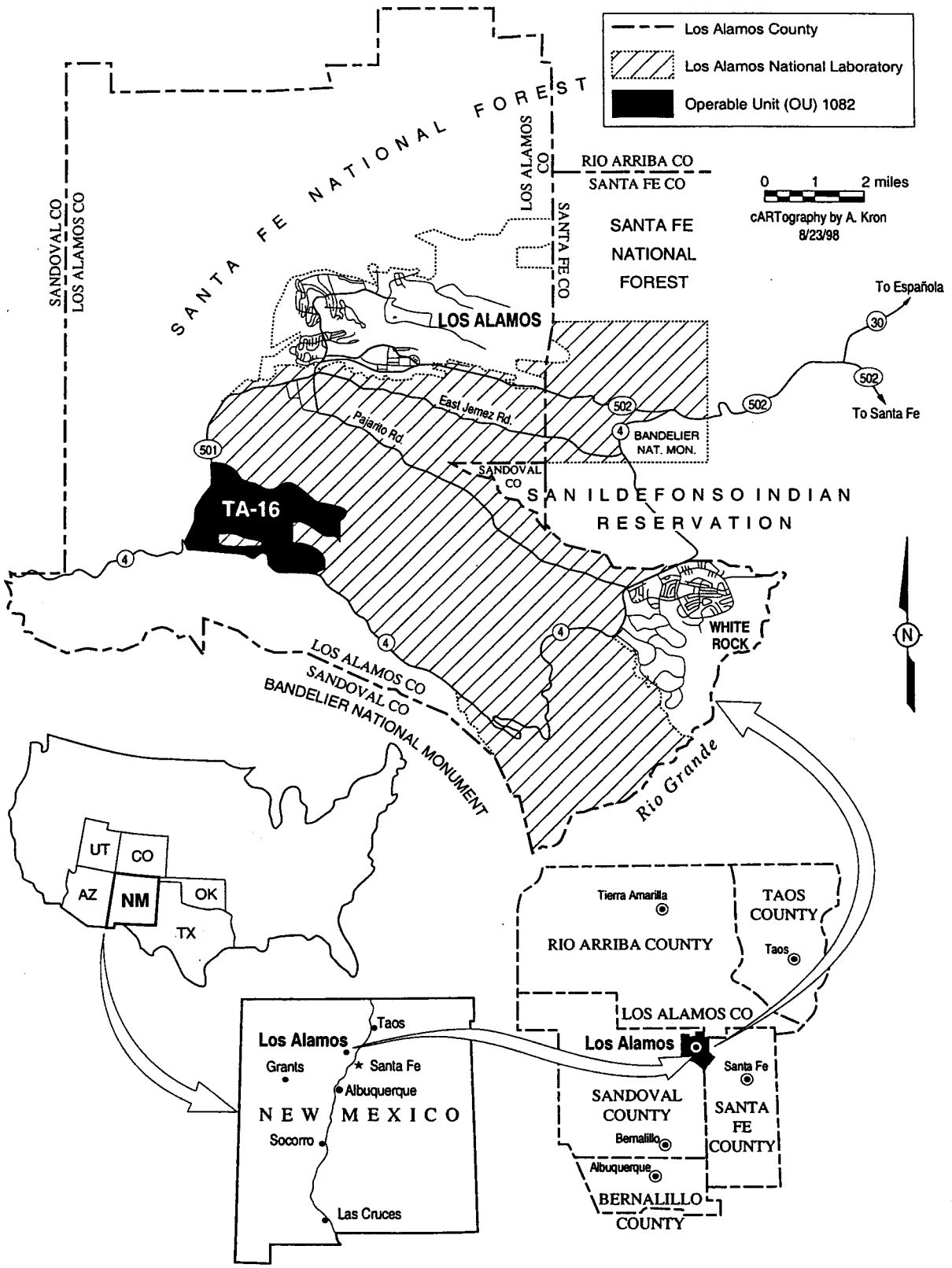



**Figure B-1.0-1. Location of LANL and TA-16**

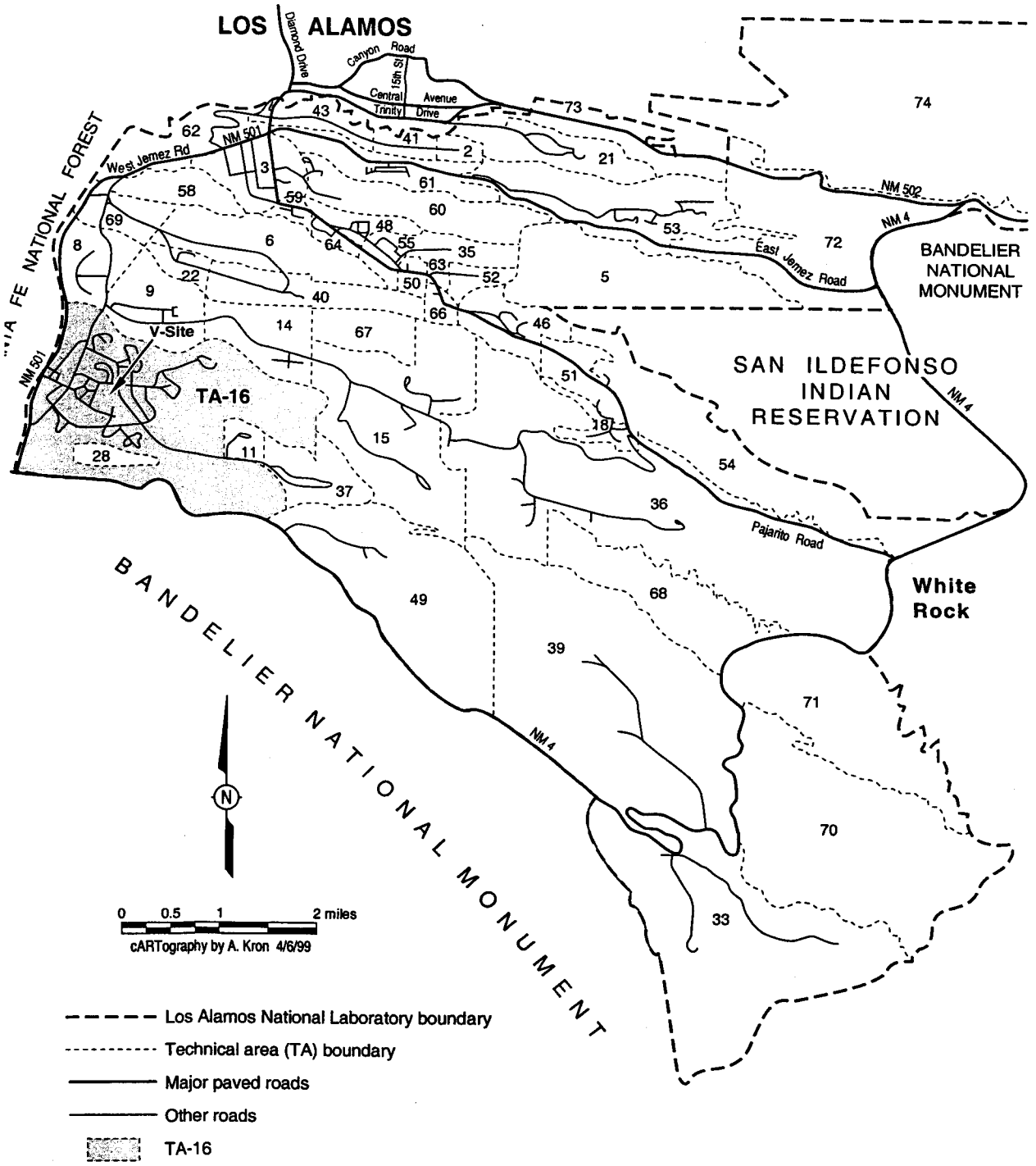



**Figure B-1.0-2. Location of TA-16 with respect to Laboratory technical areas and surrounding landholdings; V-Site area is shown**

## B-2.0 Climate

Los Alamos County has a semiarid temperate mountain climate with four distinct seasons. Spring tends to be windy and dry. Summer begins in June with warm, often dry, conditions followed by a two-month rainy season. Autumn brings a return to drier—as well as cooler and calmer—weather. In winter, mid-latitude storms drop far enough south to keep the ground covered with snow for about two months. Summers are generally sunny with moderate warm days and cool nights. High altitude, light winds, clear skies, and a dry atmosphere allow mean summer temperatures to range from 60°F to 68°F at TA-16. Mean winter temperatures typically range from 30°F to 37°F.

### B-2.1 Atmospheric State

In July, the warmest month of the year, the temperature ranges from an average daytime high of 27.2°C (81°F) to an average nighttime low of 12.8°C (55°F). The highest recorded daytime temperature is 35°C (95°F). In January, the coldest month, temperatures range from an average daytime high of 4.4°C (40°F) to a nighttime low of -8.3°C (17°F). The lowest recorded temperature is -27.8°C (-18°F). The wide range in temperatures results from the area's relatively dry, clear atmosphere, which allows strong solar heating during the daytime and rapid radiative cooling at night.

The average atmospheric pressure in Los Alamos is 58.22 cm (22.92 in.) of mercury (776 mb), which is 76% of standard sea-level pressure. Average near-surface air density, calculated on the basis of the mean pressure and temperature at the TA-6 station, is 0.958 kg/m$^3$ (0.06 lb/ft$^3$).

Although relative humidity can vary considerably over 24 h, monthly average values vary little during the year. Relative humidity ranges from a low of 3% in June to a high of 56% in December, averaging 51% over the year. Absolute humidity, which is measured as the amount of water per volume of air, is a better indicator of atmospheric moisture content. It ranges from a low of 2.4 g/m$^3$ (1.5 x 10$^{-4}$ lb/ft$^3$) in January to a high of 8.7 g/m$^3$ (5.4 x 10$^{-4}$ lb/ft$^3$) in July and August. Consequently, fog is very rare in Los Alamos, occurring less than five times a year on average.

### B-2.2 Precipitation

The average annual precipitation (rainfall plus the water equivalent of frozen precipitation) for the Los Alamos area is 47.6 cm (18.7 in.). However, the annual total fluctuates considerably from year to year; the standard deviation for these fluctuations is 12.2 cm (4.8 in.). The lowest recorded annual precipitation is 17.3 cm (6.8 in.), and the highest is 77.1 cm (30.3 in.). Maximum precipitation records are 8.8 cm (3.5 in.) for a 24-h period and 2.3 cm (0.9 in.) for a 15-min period. Because of the eastward slope of the terrain, there is a significant east-to-west increase in precipitation across the plateau. White Rock, a town on the eastern edge of the plateau, often receives 13 cm (5.1 in.) less annual precipitation than does the official meteorological station, whereas the flanks of the Jemez Mountains, on the western edge of the plateau, often receive 13 cm (5.1 in.) more. Figure B-2.2-1 shows the annual precipitation in the area of TA-59 between 1911 and 1988.

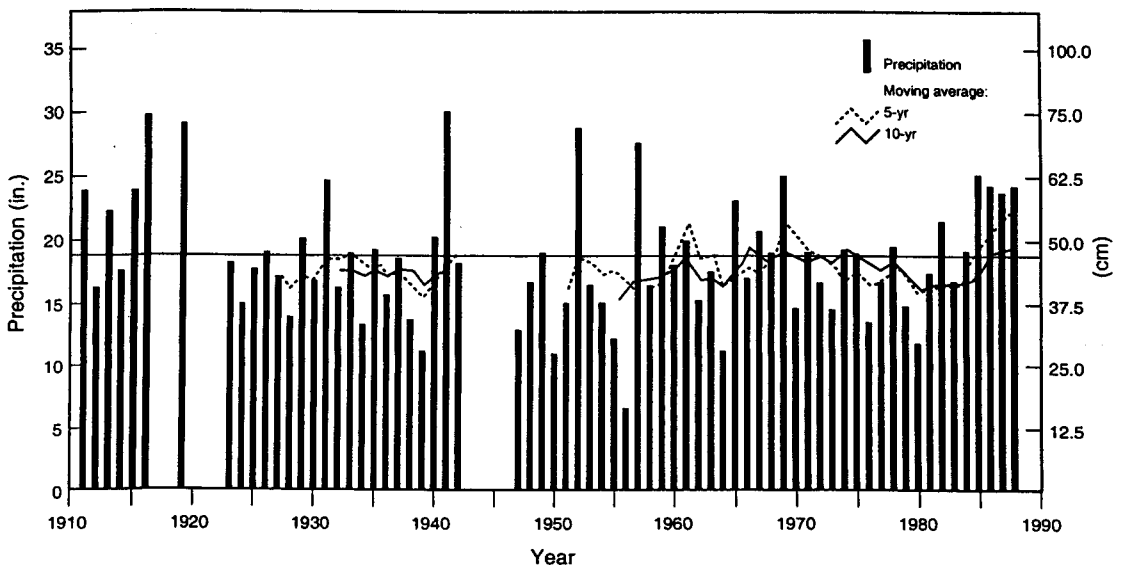



**Figure B-2.2-1. Historical annual precipitation at TA-59 (Bowen 1990, 06899)**

About 36% of the annual precipitation comes from convective storms during July and August. Most of these storms are of the single-cell type (local conditions do not support the development of supercells and the severe weather associated with them). This period of maximum precipitation is often referred to as the "monsoon" season, even though it lacks the signature of true monsoon circulation: large and persistent changes in wind direction. A more accurate characterization would probably be the "rainy" season.

Lightning is very frequent in Los Alamos, where an average year has 61 thunderstorm days (days on which thunder is heard or a thunderstorm occurs), which is about twice the national average. Only in the southeastern part of the country is this frequency exceeded. In addition to lightning, hail often accompanies these summertime convective storms. Hailstones of 0.6 cm (0.35 in.) are common, but stones of 2.54 cm (1 in.) have been reported. Hail can cause significant damage to property and vegetation, and localized accumulations of 7.6 cm (3 in.) have been observed.

Winter precipitation occurs mostly as snow; freezing rain is rare. The snow is generally dry (on average, 20 units of snow is equivalent to 1 unit of water). Annual snowfall averages 150 cm (59 in.), but amounts can vary significantly from year to year. The standard deviation in the annual value is 71 cm (28 in.). The highest recorded snowfall for one season is 389 cm (153 in.) and that for a 24-h period is 56 cm (22 in.). In a typical winter season, snowfalls equal to or exceeding 2.6 cm (1 in.) occur on 14 days, and snowfalls equal to or exceeding 10.2 cm (4 in.) occur on 4 days. The highest recorded snowfall for a single storm is 122 cm (48 in.).

## B-2.3 Wind Conditions

Winds in Los Alamos are generally light. The annual average speed is 2.5 m/s (5.5 mph) at the TA-6 station. The period from mid-March to early June is generally the windiest: daytime wind speeds exceed 4 m/s (8.8 mph) 20% of the time, and daily maximum wind gusts exceed 14 m/s (31 mph) 20% of the time. The highest recorded wind gust is 34.4 m/s (77 mph). High winds are associated with passing fronts, thunderstorms, and mid-latitude storm systems. No tornadoes are known to have touched ground in the Los Ala-

mos area; however, funnel clouds have been observed in Los Alamos and Santa Fe counties.

In the western sections of the Laboratory the prevailing wind direction is primarily from the south during the day and from the west at night. Wind roses for TA-50, which has been chosen to represent the western portions of the Laboratory, are shown in Figure B-2.3-1. Wind was measured at heights of 37 ft (at left) and 300 ft (at right) above the ground surface.

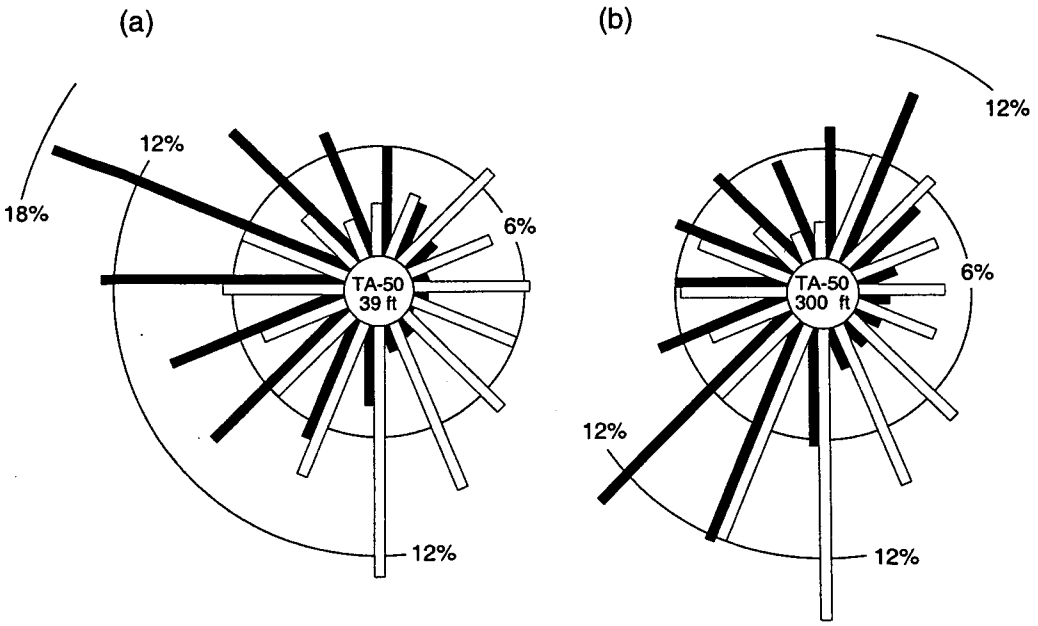



**Figure B-2.3-1. Annual daytime and nighttime wind roses for TA-50; wind measured at heights of about (a) 39 ft (12 m) and (b) 300 ft (91 m) above the surface (Bowen, 1992, 12016.1)**

### B-2.4 Energy Exchange at the Surface

Solar irradiance measurements show that Los Alamos receives more than 75% of possible sunshine annually. (*Possible sunshine* is defined as the total amount of sunshine that would be received if the sky were cloud-free all year.) During most of the year, when there is no snow on the ground, about 80% of this incoming solar energy is absorbed at the surface; about half of the absorbed short-wave energy is offset by a net loss of long-wave radiation to space. The remainder of the radiant energy, "net all-wave radiation," is dissipated as it heats the soil, heats the lower layer of the atmosphere, and evaporates water from the soil and from plants (evapotranspiration). Preliminary analyses suggest that monthly total evapotranspiration is highest in July, when it reaches about 6.4 cm (2.5 in.). Monthly totals during the winter months are less than 0.6 cm (0.25 in.). Total annual evapotranspiration, as measured at TA-6, varies little from year to year and is equal to approximately 90% of the average annual precipitation.

## B-3.0 Geology

TA-16 and adjacent areas are situated on mesatops and upper canyon slopes of the generally eastward-dipping Pajarito Plateau. The operations area at TA-16 is bounded on the north and south by Cañon de Valle and Water Canyon, respectively. Cañon de Valle joins Water Canyon at the east end of TA-16, approximately 3 mi (4.8 km) east of the operational areas at TA-16 (Figure B-3.0-1). Water Canyon drains into the

Rio Grande approximately 7 mi (11.2 km) east of TA-16. The V-Site area is located on a level portion of the mesatop in the central portion of TA-16. The elevation of V-Site and TA-16-27 ranges from 7580 ft to 7610 ft.

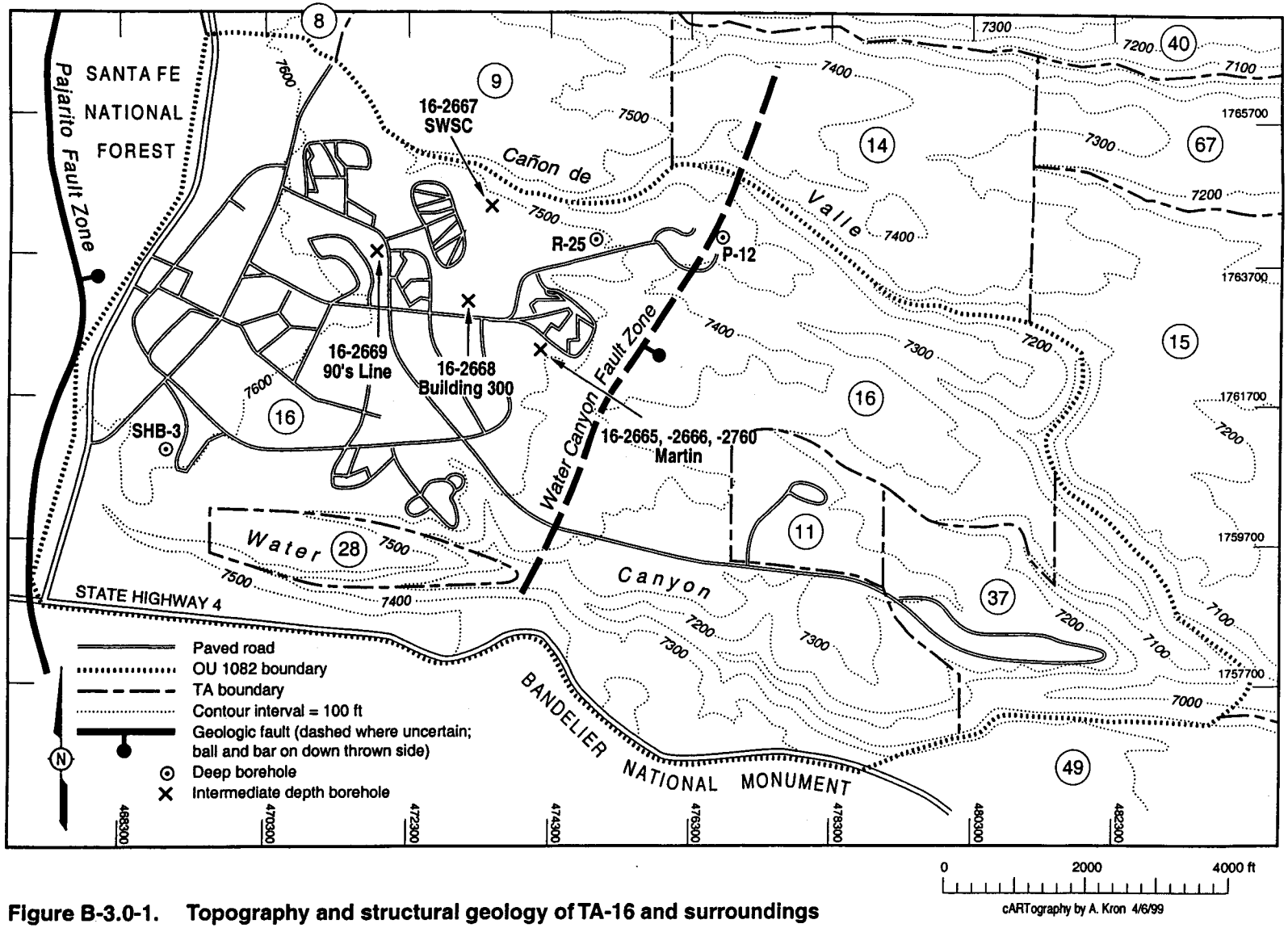



**Figure B-3.0-1. Topography and structural geology of TA-16 and surroundings**

## B-3.1 Geologic Setting

### General

A detailed discussion of general geology of the entire Los Alamos area can be found in Section 2.4.1 of the Installation work plan (IWP) (LANL 1996, 55574). This section integrates information about the geologic setting from Section 3.4 of the RFI work plan for OU 1082 with new information about the geologic setting of OU 1082 that has been obtained since the work plan was completed. Because the stratigraphic nomenclature for the Laboratory has been formalized since completion of the work plan, Tschirege subunit names are not consistent between these two sections.

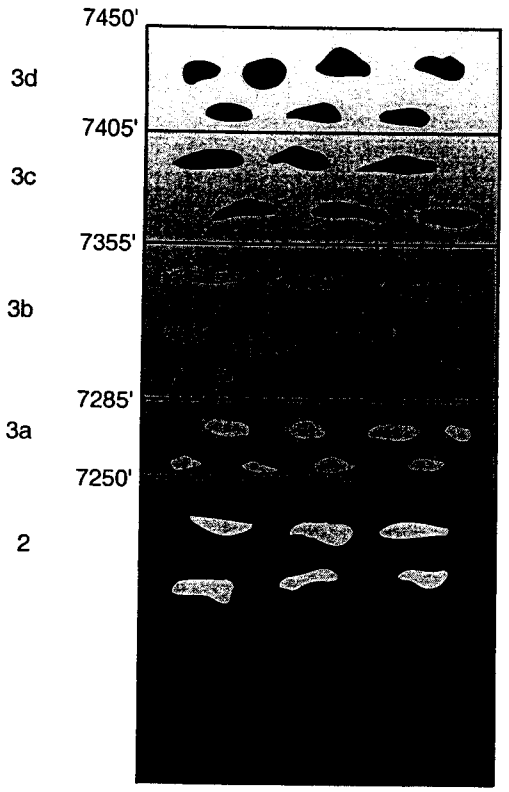
The mesatop surfaces at TA-16 are immediately underlain by the Bandelier Tuff of Pleistocene Age, which makes outcroppings in a few places on top and is exposed canyon walls. Stratigraphic relations within TA-16 are inferred from shallow and deep coreholes, logs of which are depicted in Figure B-3.1-1 through Figure B-3.1-3. Locations of these boreholes are shown on Figure B-3.0-1.

A series of 17 shallow boreholes was drilled in the vicinity of Area P during the summer of 1987 (Brown et al. 1988, 06871, pp. 3–4). Drilling depths ranged from 35 to 205 ft. Borehole logging of lithologies was done based on four characteristics of the tuff: (1) color, (2) degree of welding, (3) shape and abundance of pumice lapilli, and, (4) distribution of lithic fragments. Two major units, called Unit 3 and Unit 2, were logged, as were four subunits within Unit 3 (Brown et al. 1988, 06871, pp. 3–5). A composite stratigraphic log for the Area P landfill area is provided in Figure B-3.1-1. Subsequently, detailed lithologic descriptions of the cores were made. In general, the Bandelier Tuff units surrounding and underlying Area P range from welded to moderately welded, from yellowish-brown to gray, containing abundant porphyritic quartz latite, gray to red rhyolitic lithic fragments. Mapped Unit 3d is overlain locally by El Cajete pumice.

A deep borehole (SHB-3) was drilled at TA-16 in November 1991 as part of the Laboratory's Seismic Hazards Program. The drilling site is located in the southwest corner of TA-16 (Figure B-3.0-1) with a total accessible depth of 860 ft. Core recovery from this drill hole was nearly 70%. The stratigraphy of this hole is depicted in Figure B.3.1-2 and summarized below (Gardner et al. 1993, 12582).

Borehole SHB-3 penetrates the Tshirege Member of the Bandelier Tuff in its uppermost 335 ft. At this locality, the Tshirege Member is over 95% welded tuff, primarily densely welded material. Cooling breaks between subunits of the tuff are few, with one at a depth of 60 ft and another at a depth of 230 ft. Examination of the core of SHB-3 and the lithologic descriptions of core drilled near the Burning Ground suggest that the cooling break at 230 ft in SHB-3 probably correlates with the top of Unit 3a (Brown et al. 1988, 06871, p. 5). The lowermost 15 ft of the Tshirege Member in this hole apparently contains the non-welded base of this unit and an unknown thickness of Tsankawi pumice.

Underlying the Tshirege Member of Bandelier Tuff is an almost 100-ft-thick sequence of unconsolidated sands and sandy gravels. These units are lithologically identical to the older Puye Formation and represent epiclastic alluvial deposits shed from the Sierra de los Valles dacite highlands during the hiatus between eruptions. Interbedded with this epiclastic sequence is a coarse, sand-sized pumice fall deposit containing obsidian fragments. This unit is probably genetically related to the Rabbit Mountain Tuff of the Cerro Toledo rhyolite. An unconsolidated alluvial unit such as this would be a likely site for a perched aquifer.




Lithologic description

Moderately welded, yellowish-brown tuff with rare pebble-sized rhyolite lithic fragments and common pumice fragments

Moderately welded brownish-grey to yellowish-brown tuff with common grey pumice lapilli (noticeably flattened) and rare pebble-sized lithic fragments; clay-filled fractures

Welded pale yellowish-brown tuff w/common grey & red pumice lapilli (noticeably flattened) and rare pebble-sized rhyolite lithic fragments; weathers to dark brown with clayey pumice lapilli in northwest

Welded dark yellowish-brown tuff with rare pumice lapilli (slightly flattened) and abundant pebble-sized quartz latite

Welded to densely welded tuff, light grey to pinkish grey, common pumice lapilli and pebble-sized rhyolite fragments

Source: Brown et al. 1988 (06871.1)

**Figure B-3.1-1. Composite lithologic log of Area P coreholes (Brown et al. 1988, 06871.1)**

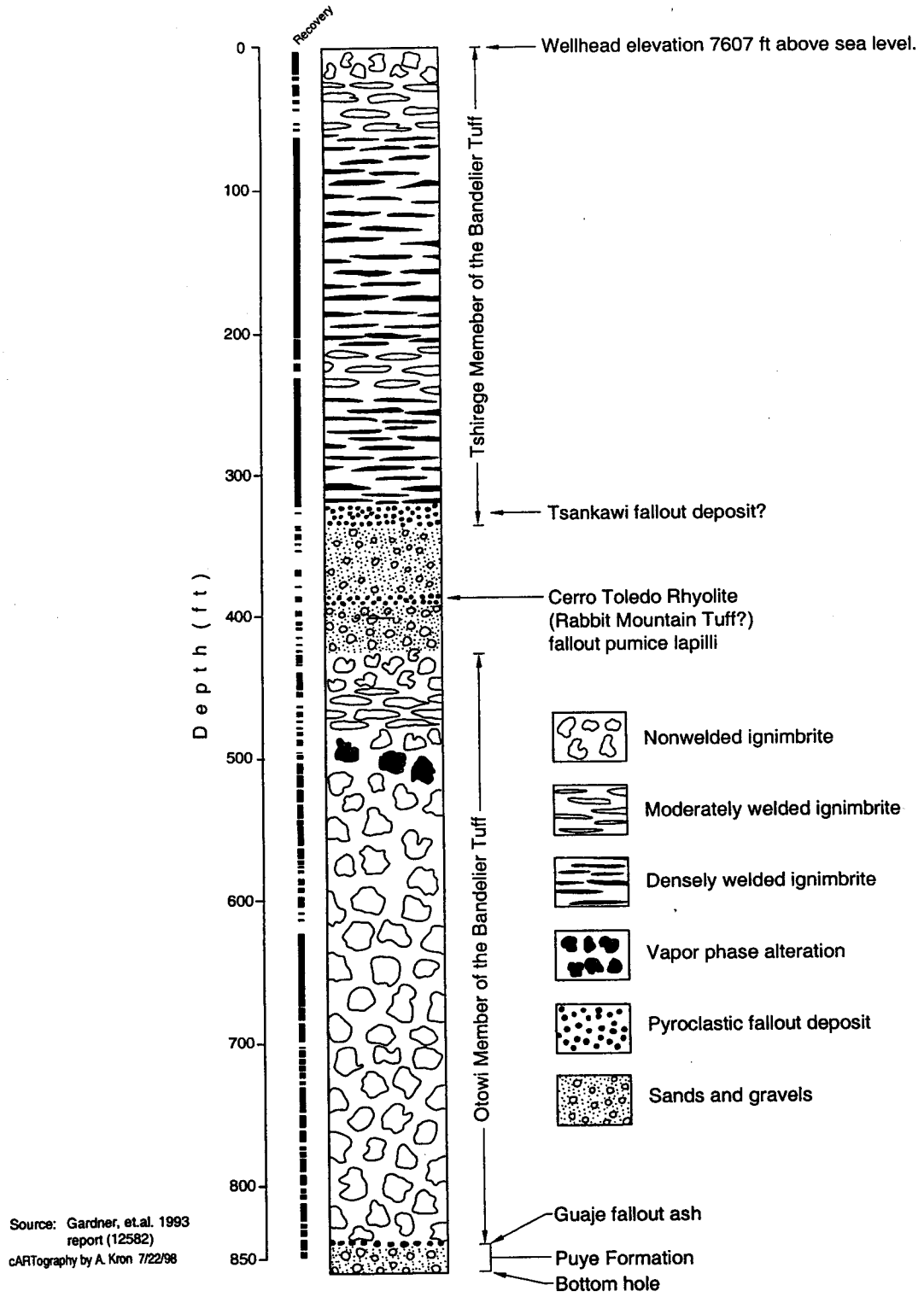



**Figure B-3.1-2. Graphic lithologic log for corehole SHB-3 (Gardner et al. 1993, 12582)**

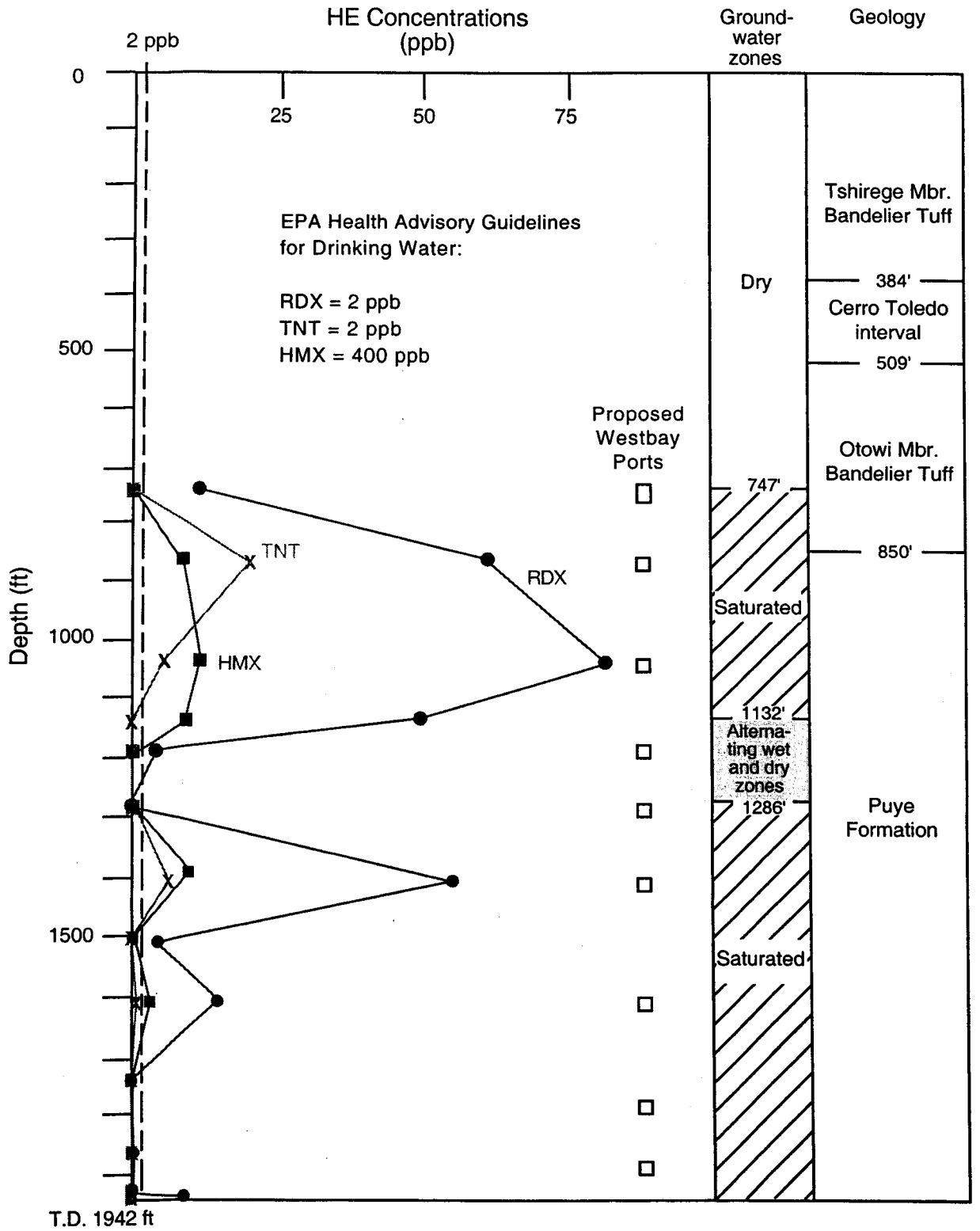



**Figure B-3.1-3. HE concentrations, saturated zones, and lithology of R-25 corehole**

The Otowi Member of the Bandelier Tuff extends from about 424 to 839 ft in SHB-3. It consists almost entirely of non-welded tuff with a zone of minor welding from 450 to 480 ft. The Guaje pumice unit is only 1-ft thick at the base of the Otowi Member in SHB-3.

Puye Formation sands and boulder-rich gravels underlie the Otowi Member from a depth of 839 ft to the bottom of the drill hole. Cobbles and clasts of these epiclastic alluvial deposits consist primarily of dacitic lithologies of the Tschicoma Formation in the Sierra de los Valles. The main aquifer lies within the lower Puye Formation and the Santa Fe Group at a depth likely to be greater than 1000 ft.

- Borehole R-25 (Figure B-3.0-1), drilled during late 1998 and 1999, penetrates the Bandelier Tuff stratigraphs and the underlying Puye formation to a depth of 1942 ft. It provided additional constraints on the subsurface geology at TA-16 (Figure B-3.1-3).
- R-25 intersects 384 ft of the Tschirege Member of the Bandelier Tuff. This subunit consists of densely welded tuff with interbedded high-permeability zones.
- The Cerro Toledo formation is over 100-ft thick in R-25, extending from a depth of 384 ft to 509 ft. It consists of unconsolidated sands and gravels similar to the Puye Formation.
- The Otowi Member of the Bandelier Tuff extends from 509 ft to 843 ft in R-25. As in SHB-3, it is a monotonous zone of non-welded tuff.
- The Puye Formation extends from 843 ft to the bottom of borehole R-25 at a depth of 1942 ft.

**Upper Bandelier Tuff Stratigraphy**

Significant additional information about the geology of TA-16 has become available during the last 6 years (described below), resulting in the adoption of the lab-wide stratigraphy of Broxton and Reneau (1995, 49726). Based on elevation data, Unit 3d of Brown et al. (1988, 06871, p. 5) appears to correspond to Unit 4 (Qbt 4) of Broxton and Reneau, Units 3a through 3c of Brown correspond to Broxton and Reneau's Unit 3 (Qbt 3), and Unit 2 of Brown et al. (1988, p. 5) corresponds to Unit 2 (Qbt 2) of Broxton and Reneau. Recent mapping has also provided additional insights into the presence of surge bed and vitric units within the Tschirege Member of the Bandelier Tuff directly underlying TA-16.

Operational areas at TA-16 are located on the mesatops, which are composed of Unit 4 (Qbt 4), depending on location of the Tshirege Member of the Bandelier Tuff. Unit 3 (Qbt 3) of the Tshirege Member of the Bandelier Tuff crops out on the mesatops at the east end of TA-16 and in the bottoms and walls of Cañon de Valle and Water Canyon. Correlation of recent mapping at MDA P to the bedrock geologic map of Rogers (Rogers 1995, 544191) and detailed core descriptions (LANL 1998, 59891, Appendix G) suggest that mesatop portions of TA-16 are underlain by approximately 80–110 ft of Unit 4 of the Tshirege Member of the Bandelier Tuff.

At MDA-P, Qbt 4 is a lithologically complex unit consisting of the following material in ascending order: (1) a poorly indurated, white to light gray, nonwelded ignimbrite; (2) an indurated, light tan, nonwelded, cliff-forming tuff overlain by a broad bench; (3) a varicolored, nonwelded, cliff-forming tuff with devitrified base and a 10-ft-thick glassy upper part; (4) a crystal-rich surge bed up to 1-ft thick; and (5) a hard, densely welded tuff that forms the caprock for the mesa (Broxton et al. 1996, 54948). The latter subunit correlates with Unit Qbtf (Qbt 5) and the first three units correlate with Unit Qbte (Qbt 4) of Rogers (Rogers 1995, 54419). The crystal-rich surge bed was mapped by Rogers as the boundary between her Units Qbte and Qbtf. This

high-permeability sandy parting may represent a possible perched zone—provided it also overlies a low-permeability zone. Examination of this contact in the walls of Cañon de Valle and examination of cores drilled in the vicinity of TA-16-260 suggest that the surge bed is discontinuous. The Rogers subunit Qbte contains a unit characterized by horizontal fractures that may also represent a possible perched-flow pathway.

The Qbt 3 in Cañon de Valle that is adjacent to MDA-P consists of two hard, pinkish-brown, partially to moderately welded, cliff-forming ignimbrites that are separated by a soft, pinkish-orange, nonwelded, slope-forming tuff. The uppermost subunit within Unit 3 contains significant horizontal fractures.

Detailed information about the mineralogy, modes, whole-rock chemistry, and outcrop characteristics of Unit 3 and Unit 4 at TA-16 are provided in Broxton et al (1996, 54948).

#### B-3.1.1 Structure

Two major faults with a significant component of vertical offset may exist in the vicinity of TA-16. The first is the Frijoles segment of the Pajarito fault zone, which is located west of the western boundary of TA-16. This segment has the greatest vertical displacement of the Pajarito fault system in the Los Alamos area, with down-to-the-east displacement ranging up to 400 ft during the last 1.1 million years (Gardner and House 1987, 06682) (Figure B-3.0-1).

The Water Canyon fault, which is mapped as passing through the TA-16 Burning Ground (Figure B-3.0-1), is inferred in the subsurface from interpretation of seismic lines (Dransfield and Gardner 1985, 06612). It is unlikely that the fault breaks units of the Bandelier Tuff. Unpublished mapping south of TA-16 (Hickmott 1993, 58907) suggests that the fault does not break the surface south of Water Canyon along its projected trace. Broad zones of intense fracturing superimposed on primary cooling joints are associated with major faults in the Los Alamos region (Vaniman and Wohletz 1990, 09995). Analogous clay-filled vertical fractures were mapped in Subunit 3c (Brown et al. 1988, 06871, p. 5). Unlike cooling joints, such tectonic fractures are likely to cross flow units and may provide a deeply penetrating flow path for groundwater migration.

Recent drilling in the TA-16-260 outfall area has revealed significant numbers of clay-lined fractures at a depth of greater than 70 ft beneath the mesa surface. These fractures appear to be concentrated in the lower portions of Unit 4 (QBt 4). They may represent a potential pathway for contaminant migration at TA-16. No fracture density map has yet been completed for TA-16. The nearest TA to TA-16 for which such a study has been completed is TA-67, the former site of a proposed mixed-waste disposal facility.

### B-3.2 Soils

A detailed discussion of soils and colluvium in the Los Alamos area can be found in Section 2.4.1.3 of the IWP (LANL 1996, 55574).

#### Alluvium and Colluvium

On the plateau surface of TA-16 surficial deposits consist of coarse-grained colluvium on steep hill slopes and along the bases of cliffs, finer-grained alluvial and colluvial sediments with a thin cover of eolian sediments on the flatter parts of mesa surfaces, and alluvial to colluvial fan deposits at the mouths of steeper drainages or on escarpments related to post-Bandelier faulting. The deposits in the major canyons (Cañon de Valle and Water Canyon) consist of colluvial materials on and at the base of cliffs and canyon walls (rep-

resenting large volume mass wasting) and fluvial sediments deposited by intermittent streams along the axes of the canyon floors.

During June 1992 a trench more than 100-ft long by 10-ft deep was excavated within TA-16 as part of the Laboratory's Seismic Hazards Program. The trench exposed colluvial wedges derived from the Sierra de los Valles west of the Pajarito fault system. At least four major colluvial deposits, each overlain by a soil horizon, were exposed in the trench. The underlying colluvial unit is 4-ft thick and tapers westward. It is overlain by a well-developed paleosol horizon, which is overlain in turn by a second, thinner (up to 3 ft) colluvial wedge consisting of coarse-grained poorly sorted El Cajete pumice fragments.

### Soil

The nature and thickness of soils at TA-16 may influence the transport of hazardous contaminants within the local environment. Soil mineralogy, permeability, grain size, organic content, and chemistry are all factors that may impede or enhance the movement and concentration of individual hazardous constituents.

Soils in Los Alamos County were mapped and described by Nyhan et al. (1978, 05702). The soils were all formed in a semiarid climate and include material derived from Bandelier Tuff bedrock. Table B-3.2-1 and Figure B-3.2-1 show the spatial distribution and nature of soils at TA-16 (Nyhan et al. 1978, 05702).

**Table B-3.2-1**

**Spatial Distribution and Nature of Soils at TA-16**

| Abbreviation | Name | Location | Permeability | Water-Holding | Thickness (cm) |
|---|---|---|---|---|---|
| TC | Typic Eutroboralfs, clayey-skeletal | Administration area | Low | Low | 46–122+ |
| TS | Typic Eutroboralfs, fine | 260-Line, 340-Line | Low/Moderate | Medium | 51–94 |
| TO | Tocal very fine sandy loan | Burning Ground, WW II area | Low/Moderate | Low | 28–36 |
| TR | Typic Ustorthents | South TA-16 | Moderate | Low | 15–35 |
| PG | Pogna fine sandy loam | Scattered | Moderate/high | Low | 13–30 |
| TV | Totavi gravelly loam | Scattered | Very high | Low | 0–152 |
| SA | Sanjue-Arriba complex | Rare-east | High/very high | Very low | 46–153 |
| FR | Frijoles very fine sandy loam | East S-Site | Very high in subsoil | Very low | 46–152+ |
| CR | Carjo loam | TA-37 | Moderate | Medium | 51–102 |

A wide variety of soil types occur at TA-16 (Table B-3.2-1, Figure B-3.2-1). These include Typic Eutroboralfs (both clayey-skeletal and fine), Tocal very fine sandy loam, Frijoles very fine sandy loam, Pogna fine sandy loan, Totavi gravelly loam, Sanjue-Arriba complex, Carjo loam, and Rabbit-Tsankawi rock outcrop. These soil units grade into outcrops of Bandelier Tuff along the margins of the mesatops. Soils are generally thicker in the western portions of TA-16 (Figure B-3.2-2).

A recent study of soils on the north and south slopes of Cañon de Valle near the TA-16 Burning Ground recognized nine soil profiles in a soil zone previously characterized as Tocal very fine sandy loam (Nyhan et al. 1978, 05702). This work suggests that (1) soil horizons ranged from 40 to 237 cm in depth; (2) soils are poorly developed and consist of A-R, A-Bw-R, or A-Bw-C soil profiles; (3) soils are classified as Lithic Ustorthents, Typic Haplumbredt, Cumulic Haplumbredt, Typic Ustochrept, and Udic Paleoustalf; and (4) elevated barium was identified in near-surface soils, probably due to air dispersal of barium at the TA-16 burning ground (McDonald et al. 1996, 54827, pp. 28–30). Typical soil sections for TA-16 are shown in Figure B-3.2-2.

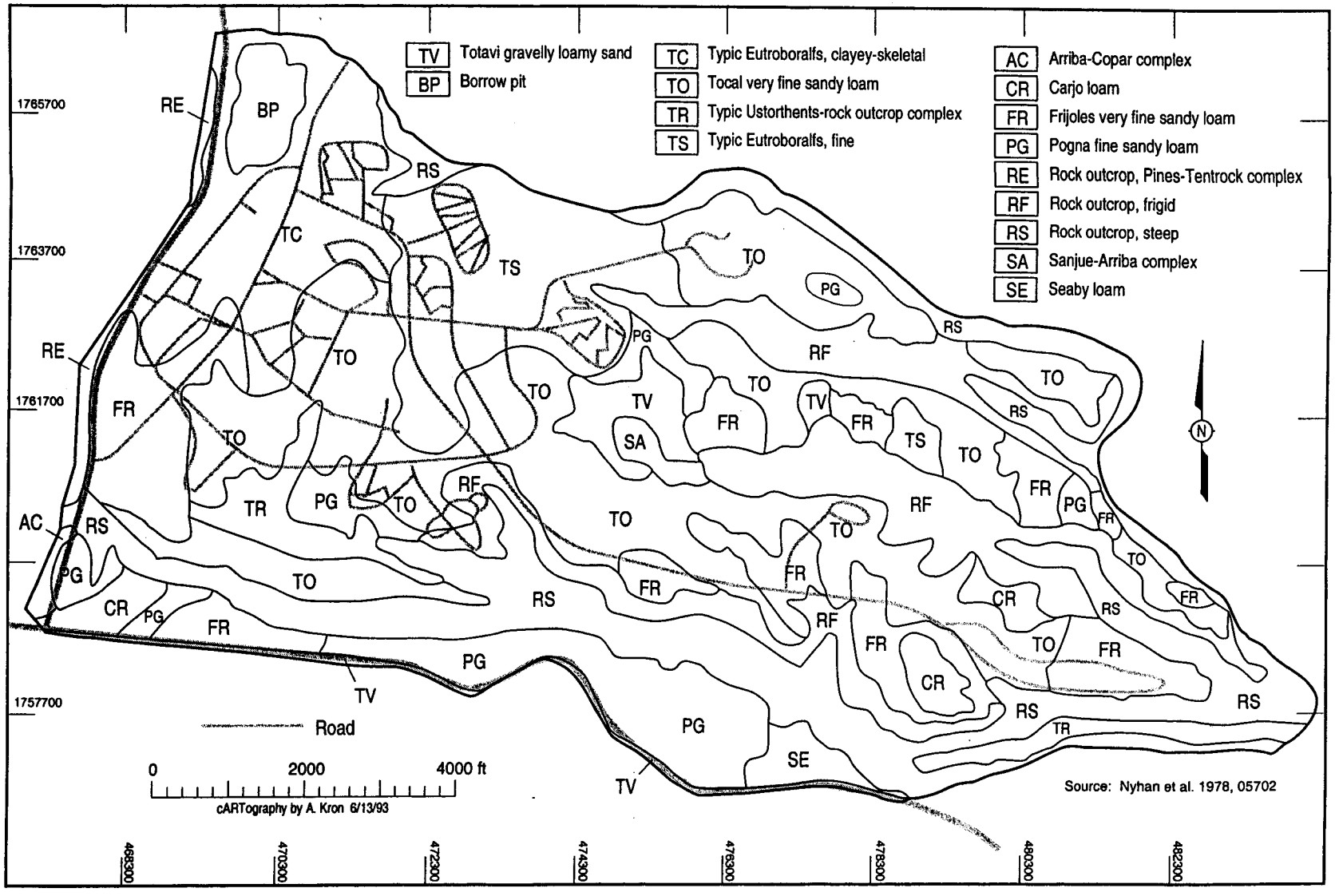



**Figure B-3.2-1. Soil map for TA-16 (Nyhan et al. 1978, 05702)**

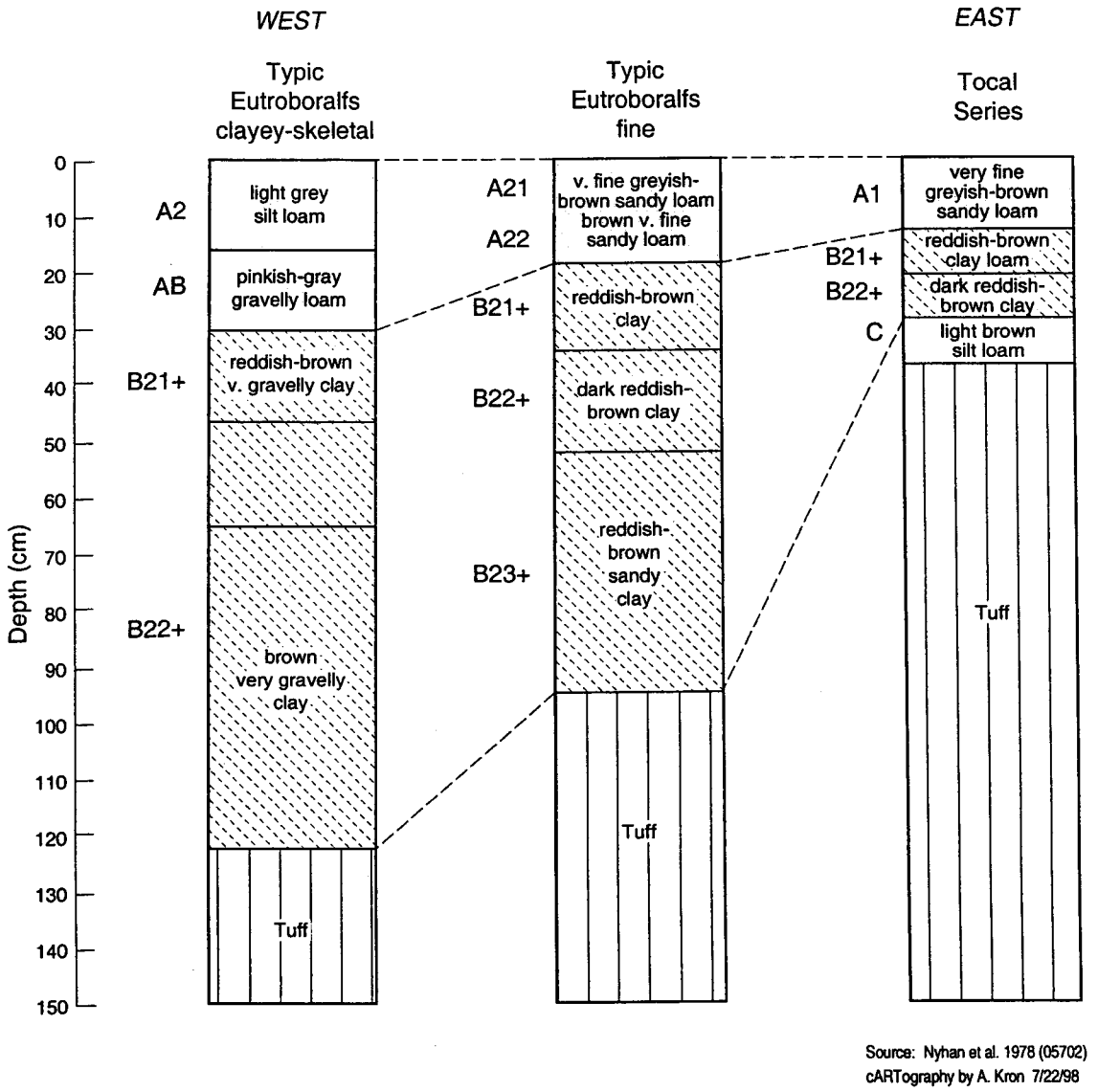



**Figure B-3.2-2. Typical sections of common soils at TA-16 (Nyhan et al. 1978, 05702)**

## B-3.3 Erosional Processes

Erosion on the mesatops at TA-16 is caused primarily by shallow run-off on the relatively flat mesa surfaces, by deeper run-off in channels cut into the mesa surfaces, and by rock falls and colluvial transport from the steep canyon walls. Erosion within the canyon bottoms occurs primarily by channelized flow along stream courses on the canyon floors.

Erosion of colluvial materials may occur as (1) small masses of material that tumble down canyon walls, (2) small debris flows that issue from the mouths of subsidiary channels to the main canyon drainages, or (3) slides of large, relatively coherent landslide blocks from the steeper mesa edges.

Contaminants stored in sediments on mesatops may be transported into the canyons, and potentially off site, by large-scale run-off events on the mesa surfaces. Or they may be carried via large masses of rock and debris as they slide down valley walls into the canyon bottoms. Contaminated sediments in the canyon bottoms are most likely to be transported off-site in major run-off events. The waste sites most likely to be susceptible to off-site mobilization are those that lie close to the edges of mesas or near active channels in canyon bottoms.

## B-4.0 Hydrology

The hydrology of the Pajarito Plateau is summarized in Section 2.4.2 of the IWP (LANL 1996, 55574). Site-specific conditions are summarized below.

The shallowest depth to the regional aquifer at TA-16 is approximately 1286 ft (based on drilling results in the R-25 well). The regional aquifer was intersected at a depth of 1286 ft in that borehole. Shallow and deep perched aquifers are present at TA-16 and appear to be very heterogeneous. Three perennial springs and two seeps have been identified within TA-16 (Figure B-4.0-1). Several moderate-depth (up to 200 ft) boreholes drilled at the TA-16 Burning Ground near MDA-P (Figure B-3.0-1) encountered no saturated zone. Thirteen moderate-depth boreholes drilled near the TA-16-260 outfall in fiscal year 1997 encountered no perennial saturated zone. Moderate-depth boreholes drilled near Martin Spring and the 90s-Line Pond encountered saturated zones that dried up one month after drilling (LANL 1998, 59891, Chapter 4). Well SHB-3, which is located on the western side of TA-16 (Figure B-3.0-1), contained perched water at a depth of 664 ft in 1993. The R-25 well contained a thick perched zone that extended from a depth of 747 ft. to 1132 ft. This zone is hypothesized to correlate with the 664-ft depth zone observed in SHB-3.

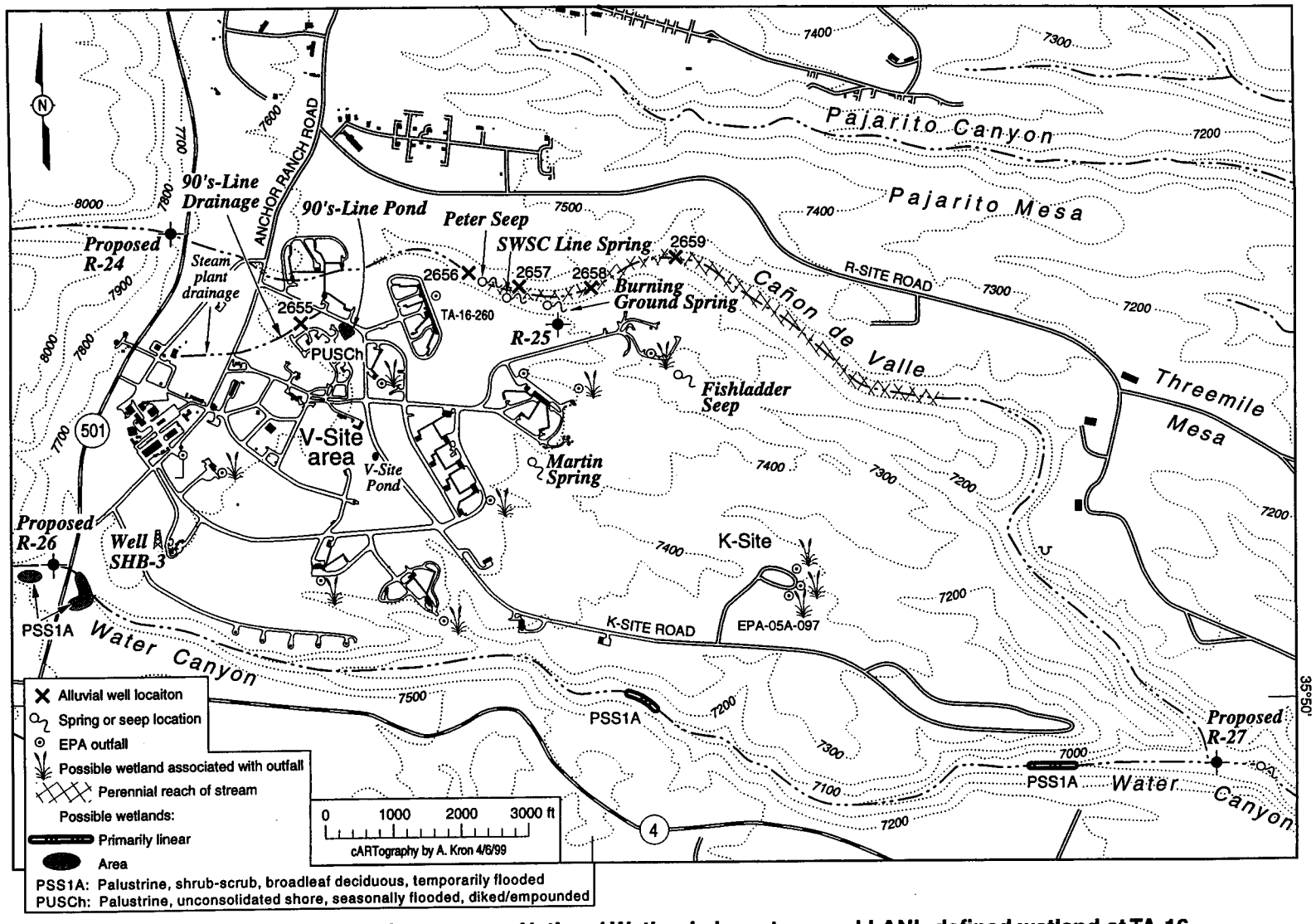



**Figure B-4.0-1. Topography, springs, seeps, National Wetlands Inventory, and LANL-defined wetland at TA-16**

### B-4.1 Surface Water

Surface water run-off and infiltration into soil are hypothesized to be the most important hydrologic transport pathways at TA-16. Both HE and barium, the principal contaminants at TA-16, are moderately to strongly soluble (Layton et al. 1987, 14703; Brown et al. 1992, 59094), and thus may be transported in surface water. Aspects of the surface hydrology at TA-16 that may be relevant to contaminant transport include (1) the location of pathways of surface water run-off and associated sediment deposition; (2) rates of soil erosion, transport, and sedimentation; (3) the effects of operational disturbances on surface hydrology; (4) the relative importance of surface run-off versus infiltration as a transport pathway in different soil types; (5) the solubility behavior of TA-16 contaminants (particularly HE and barium) in surface aquifers; (6) the nature of interactions between soils and water-borne TA-16 contaminants; and (7) the ultimate fate of surface water at TA-16.

It is recognized that (1) a perennial, contaminated surface water body exists in Cañon de Valle downgradient from the TA-16-260 outfall; (2) the Cañon de Valle surface waters are mobilizing contaminants downgradient; and (3) surface water infiltration from ponded areas to shallow perched aquifers is a significant contaminant transport mechanism at the TA-16-260 outfall. Figure B-4.0-1 shows the locations of surface water reaches, possible wetlands, springs and seeps, and other features relevant to surface water investigations at TA-16.

Perennial and intermittent surface water exists at many locations at TA-16, due to both natural and anthropogenic sources. Cañon de Valle contains what appears to be a perennial reach: the surface water between the TA-16-260 outfall and a location beyond MDA-P has flowed continuously since initial investigations in 1992. Several small saturated areas are present in small tributary drainages to Cañon de Valle and Water Canyon. Many of these zones were due to the discharge of process waters from TA-16 operations. Process water discharges at most of the TA-16 National Pollution Discharge Elimination System (NPDES) outfalls were shut off during 1996 and 1997.

#### B-4.1.1 Surface Water Run-off

Surface water run-off is an effective means of transporting many contaminants, particularly highly soluble contaminants, in environmental media at TA-16. Run-off can mobilize contaminants and transport them off-site or concentrate dispersed surficial contaminants through solution and reprecipitation or sorption processes. Contamination observed in Canon de Valle is probably due in part to surface water run-off from the TA-16-260 outfall and other sites. Surface water run-off from TA-16 flows from ephemeral streams on the mesatops into Cañon de Valle and Water Canyon and ultimately into the Rio Grande, or infiltrates downgradient. Results from the recently drilled R-25 well indicate elevated levels of HE in the regional groundwater aquifer. This elevated HE could include a component of water that recharged via surface water run-off into Cañon de Valle. The results indicate hydraulic connectivity from the surface to the regional aquifer on a scale of 53 years or less.

No comprehensive study of surface run-off from the mesatops and canyons constituting the surface watershed of the Pajarito Plateau has been completed. An experimental study (Nyhan et al. 1984, 11757; Nyhan and Lane 1986, 06539) suggests that run-off is up to three times greater from backfilled soil than from naturally vegetated areas. Much of TA-16 has been disturbed by construction, so run-off will be a significant transport pathway in the operational section of this TA.

Water quality data have been collected downstream from TA-16 in Water Canyon for the past 30 years (e.g., Environmental Protection Group (EPG) 1992, 07004). Generally, water chemistry analyses over this period have shown that contaminant abundances are below levels of concern (by EPA, NMED and DOE standards) for barium and other metals. It is interesting to note that the soluble barium concentration at the confluence of Water Canyon with the Rio Grande is larger (0.187 mg/l) than in the other sampled Canyons: Pajarito, 0.043 mg/l; Ancho, 0.043 mg/l; and Frijoles, 0.015 mg/l (EPG 1992, 07004).

### B-4.1.2 Surface Water Infiltration

Surface water infiltration is a potential mechanism for surface contaminants to move into subsurface soils and tuffs and to eventually reach perched or regional aquifers. Surface water infiltration has, in the past, been considered a minor transport mechanism at the Laboratory because of the great depth of the regional aquifer, the high evaporative potential of the upper tuff, the likelihood of vegetative transpiration, and the resulting naturally low moisture content and high porosity of the tuffs (LANL 1996, 55574). However, based on recent TA-16-260 investigations, surface water infiltration is considered a major transport mechanism as it is almost certainly recharging perched aquifers at TA-16 (LANL 1998, 59891, Chapter 5).

### B-4.1.3 Narrative of SOP 2.0.1

For the Laboratory, surface water run-off and sediment transport are among the potential migration pathways of concern for transport of contaminants to off-site receptors. Soil erosion may expose or allow water to access subsurface contaminants. Erosion of soils may be dependent on several factors, including soil properties; vegetative cover; slope; exposure; intensity and frequency of precipitation; and seismic activity.

The ER Project has developed SOP 2.01, Rev 0, "Surface Water Site Assessments," to assess sediment transport and erosion concerns at specific PRSs. SOP 2.01 provides a basis for prioritizing and scheduling actions for controlling the erosion of potentially contaminated soils at a specific PRS. The procedure is a two part evaluation. Part A is a compilation of existing PRS analytical data, site maps, and knowledge of process information. Part B is an assessment of the erosion/sediment transport potential at each PRS. Part A is initiated and completed by the ER Project; Part B is completed by LANL's Water Quality and Hydrology Group (ESH-18). A surface water assessment team comprised of representatives from the ER Project, ESH-18, the Facility Management Group (FSS-7), and the DOE Oversight Bureau, evaluates each completed assessment. If necessary, a "best management practice" or other action is implemented.

### B-4.1.4 Surface Water Data

General surface water conditions at the Laboratory are described in Section 2.4.2.1 of the IWP for the ER Project (LANL, 1996, 55574). Surface water in many locations at TA-16 has been analyzed as part of Framework Studies surface water characterization activities, sampling that was performed by NMED Agreement in Principle (AIP) personnel as part of their surveillance activities, and as part of non-RFI hydrogeologic sampling at TA-16. These data are provided in Appendix C of the RFI report for PRSs 16-003(k) and 16-021(c) (LANL 1996, 55077).

Numerous surface water data have also been collected during RFI investigations for PRS 16-021(c). Information from the PRS 16-021(c) investigation of constituents above background values in surface waters is provided in two documents, (LANL 1996, 55077, Appendix C) and in Chapter 3 of the Phase II RFI Report for PRS 16-021(c) (LANL 1998, 59891, Chapter 3).

Surface waters in Cañon de Valle are contaminated with constituents at levels above drinking water standards and above background levels (LANL 1998, 59891, Chapter 3). Barium in the Cañon de Valle alluvial system is as high as 16 ppm, which is above the New Mexico drinking water quality control commission (WQCC) standard of 1 ppm. The HE, RDX, is also consistently found; at levels above 100 ppb. Many other constituents in Cañon de Valle appear to be at levels above regional spring background value (LANL 1998, 59891, Chapter 3).

Other surface waters at TA-16 that have anomalously high levels of constituents include the pond behind the 90s-Line, which contains barium at levels above the WQCC standard, and a surface water zone at K-Site, which contains barium and boron above background levels.

Most of the constituents observed in TA-16 surface waters are attributed to contamination associated with PRS 16-021(c), the TA-16-260 outfall.

### B-4.2 Groundwater

The groundwater hydrogeology of the Laboratory is summarized in Section 2.4.2.2 of the IWP for the ER Project (LANL 1996, 55574). Canyon and mesa topography and the ash deposits of the Bandelier Tuff control the hydrogeology of TA-16. The hydrology (occurrence and movement of water in surface and subsurface environments) of individual SWMUs in TA-16 is controlled by the physiographic location of each SWMU in canyon bottoms, canyon rims, or mesatops. The majority of TA-16's SWMUs lie on the mesatops, although a few SWMUs, such as SWMU 16-018 (MDA P), are located on the rims of the canyons.

#### B-4.2.1 Vadose Zone

The mesatop within TA-16 overlies approximately 750 ft of largely unsaturated Bandelier Tuff, interbedded epiclastic sediments and pumice falls of the Cerro Toledo. The hydrology of the mesatop vadose zone is discussed in Section 2.4.2 of the ER Project's IWP (LANL 1996, 55574). In general, the IWP suggests that the Bandelier Tuff is not saturated, except in very shallow and localized areas. TA-16 and other technical areas on the western side of Los Alamos appear to contain more saturated layers within the vadose zone than do sites to the east of the Laboratory.

Hydrologic characteristics of unfractured Bandelier Tuff depend on degree of welding. Porosity and hydraulic conductivity generally decrease with the increase of welding. Brown et al. (1988, 06871, pp 5–7) investigated hydraulic conductivity and gravimetric moisture for tuff samples recovered during 1987 drilling operations at Material disposal area (MDA)-P. According to these authors, samples obtained during drilling were not saturated. At Los Alamos, saturated hydraulic conductivity for a moderately welded tuff ranges from 0.1 to 1.7 ft/day and for a welded tuff ranges from 0.009-0.26 ft/day (Abeele et al. 1981, 06273). However, because fracture density is generally greatest in welded tuffs, saturated hydraulic conductivities are often highest in the welded parts of ash flow deposits (Crowe et al. 1978, 05720).

The TA-16-260 investigations included a determination of hydrologic properties in four intermediate-depth boreholes at TA-16 (Figure B-3.0-1).

Table B-4.2-1 summarizes hydrologic data collected during the TA-16-260 investigations. These data suggest that the hydrologic properties of the Tshirege Member at TA-16 are extremely heterogeneous. Saturated hydrologic conductivities (Ksat) range over five orders of magnitude within a single subunit of the Tshirege. These variations are due to the rapid variation in degree of welding within these units. Subunits

range from extremely densely welded ash flow units to quite permeable surge bed units.

**Table B-4.2-1**
**Hydrologic Properties of Upper Bandelier Tuff in TA-16-260 boreholes**

| Borehole | Depth (ft) | Unit | θv | Density gm/cm$^3$ | Porosity (%) | Ksat (cm/sec) | Welding |
|---|---|---|---|---|---|---|---|
| Building 300 | 10.5 | Upper Qbt 4 | 7 | 1.73 | 34.9 | 1.4E-05 | Partly |
| Building 300 | 19 | Upper Qbt 4 | 4 | 1.97 | 25.8 | 1.2E-06 | Partly |
| Building 300 | 31 | Lower Qbt 4 | 2 | 1.3 | 51 | 3.8E-03 | Surge |
| SWSC | 70.5 | Lower Qbt 4 | 8 | 2.13 | 19.8 | 1.7E-08 | Densely |
| 90's Line | 90 | Qbt 4t | 7 | 2.17 | 18 | 2.0E-08 | Densely |
| SWSC | 89 | Qbt 4t | 5 | 2.21 | 16.5 | 9.8E-09 | Densely |
| SWSC | 100.5 | Qbt 3t | 7 | 2.16 | 18.4 | 2.8E-08 | Densely |
| SWSC | 120.5 | Qbt 3t | 15 | 1.42 | 46.6 | 5.0E-04 | Surge |
| SWSC | 129.5 | Qbt 3 | 5 | 1.71 | 35.6 | 5.8E-05 | Poorly |

### B-4.2.2 LANL Hydrologic Work Plan

Four deep groundwater wells to the regional aquifer are due to be installed in and around TA-16 as part of sitewide hydrogeologic studies scheduled for FY98 to FY05 (LANL 1996, 55430). These four wells will be drilled in the following locations: (1) east of TA-16-260 (R-25), (2) at the confluence of Cañon de Valle and Water Canyon (R-27), (3) at NM State Highway 501 and Cañon de Valle (R-24), and (4) at NM State Highway 501 and Water Canyon (R-26) (Figure B-4.0-1). Well R-25 was completed in 1999.

### B-4.2.3 Alluvial Waters

The material presented directly below is extracted from Section 3.5 of the RFI work plan for TA-16. The material that follows that extract is new information on alluvial aquifers at TA-16 that has been obtained since 1993.

> Surface water in saturated alluvium within canyons is discussed in Section 2.4.2 of the IWP (LANL 1996, 555741). Surface water occurs primarily as ephemeral streams in the two major canyons adjacent to TA-16, although perennial water flow occurs in parts of Cañon de Valle and Water Canyon because of spring and seep discharge. Stream flow moves downgradient into the alluvium for an unknown distance. Stream loss caused by infiltration into the underlying alluvium typically prevents water flow from discharging across the eastern boundary of the TA-16. During periods of voluminous stream run-off or snowmelt, surface flow may reach the Rio Grande.

An extensive near-surface alluvial system is present in Cañon de Valle.

Six alluvial wells were drilled at five locations at TA-16 during fall 1997 as part of the RFI Phase II activities for PRS 16-021(c). Results for these wells are provided in Section 3 of the Phase II RFI Report for PRS 16-021(c) (LANL 1998, 59891, Chapter 3). Locations of these wells are shown on Figure 4.0-1. Depths to tuff

ranged from 4-6 ft. All five locations contained saturated intervals at depths starting from 1 to 3 ft. Alluvial wells were installed at all locations. Wells are being sampled quarterly.

The downgradient extent of this alluvial system is unknown. Alluvial wells installed in Water Canyon 2-4 miles east of TA-16 have not contained a saturated zone since they were installed during 1989.

### B-4.2.4 Perched Waters

Perched water may occur in surge zones, epiclastic sediments, and basalts in the Pajarito Plateau (IWP, Section 2.6.5) (LANL 1996, 55574).

Borehole SHB-3, which was drilled in November 1991 near the western margin of TA-16 (Figure B-3.0-1), erupted large quantities of water (estimated at 10–15 gal. per minute) following injection of air at a depth of 750 ft. Either the regional aquifer or a perched aquifer was reached at this depth. Calculations suggest that the top of the water column filling SHB-3 could have been no deeper than 365 ft. This result implies that the groundwater system has sufficient head to drive water up natural conduits such as faults and fractures, potentially forming a perched aquifer. Water samples were taken from SHB-3 during the summer of 1993, analysis of which suggests that they represent groundwater. These data show sporadically elevated values of lead, phosphate, rubidium, and ammonium relative to background spring data (Blake et al. 1995, 49931). Static water depth in SHB-3 was roughly 664 ft during 1992 (EPG 1994, 52951). The possible nature and location of perched aquifers in and around TA-16 is not fully known. Further investigation of fluids in SHB-3 is required to determine whether the fluids represent perched water or the main aquifer.

Regional well R-25 intersected a thick, HE-contaminated, perched zone that extended from a depth of 747–1132 ft. This zone is hypothesized to represent a perched zone, due to differences in hydrologic head between it and the underlying regional aquifer.

Several springs and seeps have been identified at TA-16 during the past six years (Figure B-4.0-1). All three springs, SWSC, Burning Ground, and Martin Spring, appear to discharge from near the $Qbt_3/Qbt_4$ contact. All the springs and seeps are contaminated with constituents (e.g., barium, boron, HE, solvents) at levels above background value (LANL 1998, 59891, Chapter 4). Martin Spring appears to be the most highly contaminated. The presence of these springs shows the existence of one or more shallow perched zones at a shallow level beneath TA-16.

The Phase II sampling and analysis campaign for PRS 16-021(c) (1) sampled these springs on a quarterly basis; (2) implemented a tracer study that suggest hydrologic connectivity between the TA-16-260 outfall and SWSC Spring; and (3) drilled several intermediate-depth hydrologic boreholes, two of which contained water for less than one month (LANL, 1998, 59891, Chapter 4). All of these data suggest a complex heterogeneous perched system at TA-16.

### B-4.2.5 Regional Aquifer

As described in the ER Project's IWP, the regional aquifer is located primarily in the Santa Fe Group and Puyé Formation at depths of several hundred to greater than 1000 ft below the mesatops of the Pajarito Plateau (LANL 1996, 55574, Section 2.4.2.2). Well R-25 intersected a thick water body that is hypothesized to represent the regional aquifer at a depth of 1286 ft. This water body contained HE constituents at levels greater than detection limits. The nearest production well to TA-16 is PM-2, located in Pajarito Canyon 4–5 miles east of the operational areas at TA-16. HE analyses of the production wells show no evi-

dence of HE constituents. No boreholes into the regional aquifer have been drilled to the west of TA-16, in the presumed upgradient direction for the regional aquifer.

### B-4.3 Conceptual 3-D Geologic/Hydrologic Model of TA-16

A general conceptual model for TA-16 is described in the RFI Work Plan for OU 1082 (LANL 1993, 20948) and the RFI Report for PRS 16-021(c ) (LANL 1998, 59891, Chapter 5). The figure has been updated to incorporate results from regional borehole R-25, and is presented in simplified diagrammatic form in Figure 4.3-1. The physical processes and major pathways included in the model are based on current knowledge of the geology and hydrology of TA-16. The processes and pathways discussed below provide the basis for SWMU-specific conceptual models for potential contaminant releases presented in the body of this document. The primary release mechanisms and migration pathways of concern are

- surface run-off and sediment transport
- erosion and surface exposure
- fluid transport via alluvial aquifer, perched water and springs and seeps
- infiltration and transport in the vadose zone
- atmospheric dispersal of particulates (valid for areas where explosives are burned)

These pathways are believed to provide the greatest potential for release and transport of contaminants within the environment at TA-16.

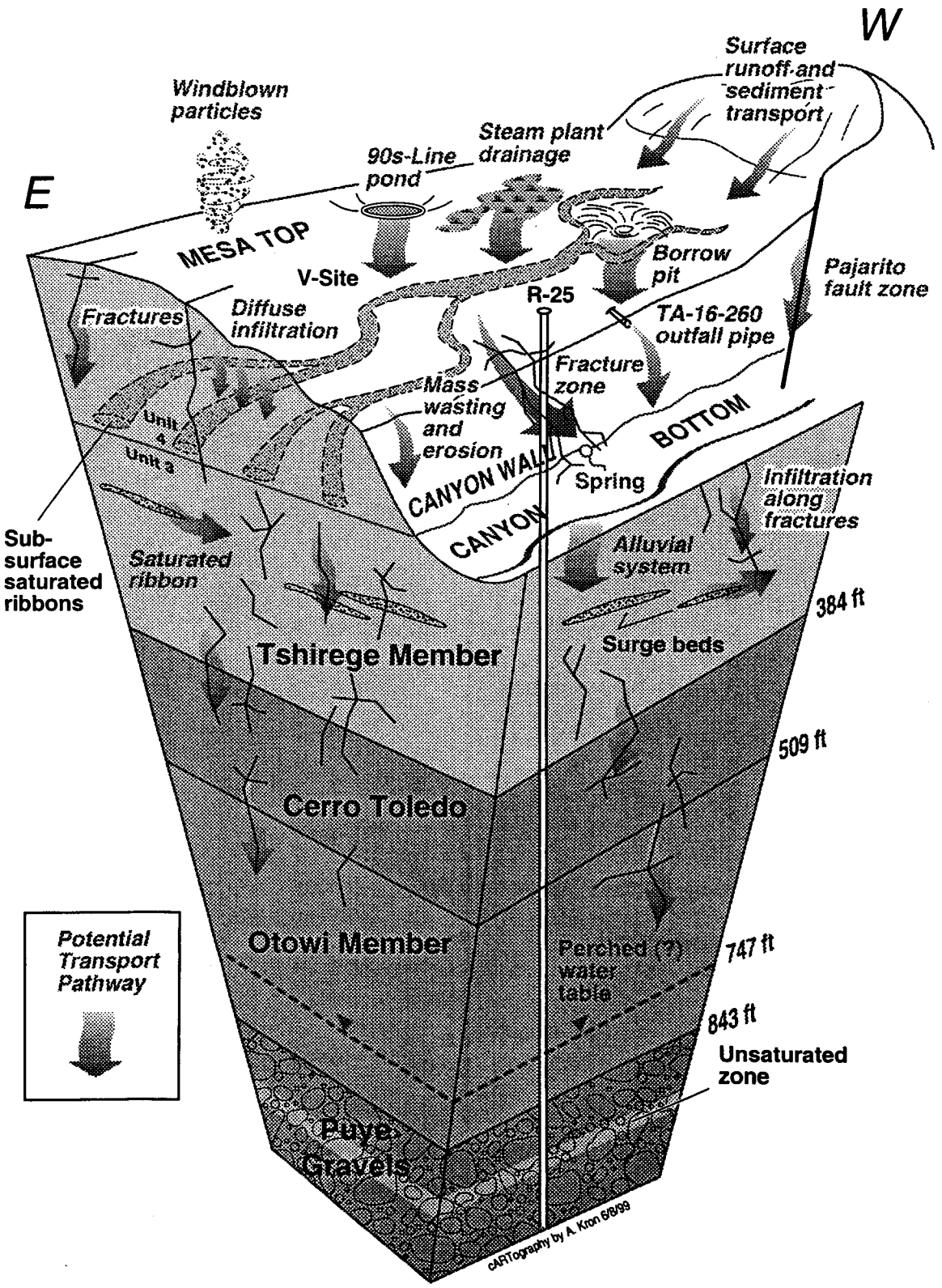



**Figure B-4.3-1. Conceptual hydrogeologic model of TA-16**

### B-4.3.1 Surface Water Run-off and Sediment Transport

Surface water run-off and sediment transport are the migration pathways of greatest concern for transport of contaminants to off-site receptors. Surface water run-off is concentrated by natural topographic features and man-made diversions, and flows into the canyons. A topographic low can cause run-off to pond and infiltrate into the mesatop, or facilitate sorption of contaminants onto fine-grained clay-rich sediments or into organic particles. Contaminant transport by surface water run-off can occur in solution, by adsorption on suspended colloids, or with movement of heavier bedload sediments. Surface soil erosion and sediment transport are functions of soil properties and run-off intensity. Contaminants transported in run-off can disperse or concentrate in sediment traps in drainages. Erosion of drainage channels can disperse contaminants downgradient in a drainage.

### B-4.3.2 Erosion and Surface Exposure

Soil erosion and mass wasting are long-term release mechanisms that may expose subsurface contaminants or allow water to access previously contained wastes. Erosion of surface soils depends on soil properties, vegetative cover, slope, exposure, intensity and frequency of precipitation, and seismic activity. Mass movements of rock from canyon walls is a discontinuous process that generally proceeds at a slow rate, but can be an important mechanism for exposing subsurface contaminants located near canyon rims.

### B-4.3.3 Fluid Transport via Alluvial Aquifers, Perched Water, and Springs and Seeps

Transport of fluids via perched alluvial aquifers to springs and seeps is thought to be an important mechanism for contaminant transport at TA-16. Infiltration of fluids into the subsurface may occur by porous flow into the soil, alluvium, and bedrock, and by flow through fractures which intersect the surface of the bedrock. Water may be concentrated within units of the Bandelier Tuff, particularly those overlying more densely welded units which retard downward transport of water. Within the Bandelier Tuff, water may move laterally in response to gradients on the welded horizons until it is able to move downward, either through porous flow through the tuff or along fractures. The more heavily welded units of the Bandelier tuff may fracture more readily than the intervening porous (i.e., powder) units, promoting transport of contaminants through the bedrock tuff.

### B-4.3.4 Infiltration and Transport in the Vadose Zone

Infiltration into surface soils and tuffs depends on the rates of precipitation and snowmelt, the amount of ponding, the nature of vegetation, *in situ* moisture content, and the hydraulic properties of soil and tuff. Joints and faults may provide pathways for infiltration and release of contaminants into the shallow subsurface. Movement of liquids in soil and tuff is dominated by transient, unsaturated flow processes influenced by infiltration and evapotranspiration. The movement of contaminants by liquids in the unsaturated zone can occur in a free-liquid phase, in solution, or by adsorbed particles on colloids. Contaminants may be retarded as a result of adsorption on tuff or on organic material present in soil or alluvium. Precipitation of insoluble, contaminant-rich minerals such as barite may also retard the mobility of specific contaminants. Lateral flow of perched water may occur at unit contacts, between layers whose hydraulic properties differ, and in alluvial aquifers. Saturated lateral flow may discharge as springs or seeps on canyon walls or in canyon bottoms. Vapor phase movement in the unsaturated zone is a potentially important transport mechanism for volatile contaminants. Movement of contaminants in the vapor phase is influenced by concentration gradients, temperature gradients, density gradients, and/or air pressure gradients. Fractures

may enhance liquid-phase or vapor-phase contaminant transport in the subsurface.

### B-4.3.5 Atmospheric Dispersion

Wind entrainment of contaminated particulates, detonation or burn products, material releases from point sources such as stacks, or VOCs are potential pathways for atmospheric dispersal of contaminants. This dispersal mechanism is limited to HE detonation and combustion by-products, surface contaminants, and vapors released from soil pore gases, as well as point sources. Entrainment and deposition of particulates is controlled by soil properties, surface roughness, vegetative cover, terrain, and atmospheric conditions including wind speed, wind direction, and precipitation. Vapor dispersion is controlled by similar factors.

Not all release mechanisms and migration pathways discussed in this section are believed to be significant for all SWMUs.

## B-5.0 ECOLOGICAL RESOURCES

### B-5.1 Introduction

The material in this section summarizes the information gathered from previous field surveys conducted to provide biological background information about TA-16 and surrounding areas. The surveys were organized (1) to determine if species protected by the state or federal government were present; (2) to determine if sensitive habitats were present; and (3) to gather baseline data for future studies on plant and wildlife species in the project area. This information was needed to resolve whether or not the project being performed would affect any or all regions of the ecological habitat and the mitigation measures needed to protect these aspects. These assessments also contain data that may aid in defining ecological pathways and site restoration.

### B-5.2 Pertinent Regulations

Field surveys were conducted to comply with the amended Federal Endangered Species Act of 1973 (USFWS 1988, 58699), New Mexico's Wildlife Conservation Act (1974, 58859), New Mexico Endangered Plant Species Act (New Mexico Natural Resource Department 1985, 0546), Executive Order 11990 "Protection of Wetlands" (The White House 1977, 0634), Executive Order 11988 "Floodplain Management" (The White House 1977, 0635), 10 CFR 1022 "Compliance with Floodplain/Wetland Environmental Review Requirements" (DOE 979, 58702), and DOE Order 5400.1 (DOE 1988, 55610). Table B-5.2-1 (Raymer 1996, 59095, p. 75) provides a summary of these pertinent regulations.

**Table B-5.2-1**
**Summary of Pertinent Regulations**

| | |
|---|---|
| Bald Eagle Protection Act | Provides guidelines and requirements for the protection of Bald Eagles and their habitats. |
| Code of Federal Regulations 10 CFR 1022 | Establishes policy and procedures for discharging the Department of Energy's responsibilities with respect to compliance with EO 11988 and EO 11990. |
| Department of Energy Order 5400.1 | Establishes the environmental protection program for DOE operations. |
| The Endangered Species Act (16 USC 1531 et seq) | Declares the intention of Congress to conserve threatened and endangered species and the ecosystems on which those species depend. |

**Table B-5.2-1**
**Summary of Pertinent Regulations (continued)**

| | |
|---|---|
| Executive Order (EO)11990 | Protection of Wetlands. In furtherance of the National Environmental Policy Act of 1969, this EO calls for avoidance, "to any extent possible, the long and short term adverse impacts associated with the destruction or modification of wetlands...avoid direct or indirect support of new construction in wetlands." |
| Executive Order 11998 | Floodplain Management. This EO was initiated to "protect lives and property with the need to restore and preserve natural and beneficial floodplain values..." |
| Migratory Bird Treaty Act (16 USC 703-711) | Declares the protection of wild birds from collecting and maiming. Wild birds exclude resident game bird, English sparrows, starlings, and feral pigeons. |
| National Environmental Policy Act | Declares a national policy to encourage a productive and enjoyable harmony between man and his environment. Section 102 requires "that presently unquantified environmental amenities and values may be given appropriate consideration in decision-making along with economic and technical considerations..." |
| New Mexico Endangered Plant Species Act | Provides protection for all threatened and endangered plant species as listed by the state of New Mexico. |
| New Mexico Wildlife Conservation Act | Gives jurisdiction to the New Mexico Department of Game and Fish over all indigenous, non-domestic vertebrate species, crustaceans, and mollusks. Also states that federal activities that result in harassment or attempted harassment are prohibited. |
| Resource Conservation and Recovery Act | Public Law 94-80. Outlines requirements for hazardous waster storage and improvement of solid waste systems and promotes recycling. |
| Section 404 Clean Water Act | Provides for issuance of "permits" after notice and opportunity for public hearings of discharged or dredged or fill materials into navigable waters. |

## B-5.3 Methodology

The purpose of the surveys was three-fold. The first was to determine the presence or absence of critical habitat for any State or Federal, sensitive, threatened, or endangered plant or animal species within TA-16 boundaries. Second, surveys were conducted to determine the presence of sensitive areas, such as flood plains and wetlands, within the areas to be sampled and the extent of such areas and their general characteristics. The third purpose was to provide additional plant and wildlife data concerning the habitat types within TA-16. These data provide further baseline information about the biological components of the site characterization and a determination of pre-sampling conditions. This information is also necessary to support the National Environmental Policy Act (NEPA) documentation and determination of a categorical exclusion for the sampling plan based on site characterization.

After searching the bi-annually updated database, maintained in ESH-20, which contains the habitat requirements for all State and Federally threatened, endangered, and sensitive plant and animal species known to occur within the boundaries of the Laboratory and surrounding areas, a habitat evaluation survey (Level 2) was conducted. A Level 2 survey is performed when there are areas that are not highly disturbed and which could potentially support threatened and/or endangered species. Techniques used in a Level 2 survey are designed to gather data about per cent cover, density, and frequency of both the understory and overstory components of the plant community. The details of these surveys were then incorporated into a full report "Biological and Floodplain/Wetland Assessment for Environmental Restoration Program, Operable Unit 1082," sent to the U.S. Fish and Wildlife Service (USFWS) for concurrence.

The habitat information gathered during the field surveys was then compared to the habitat requirements for species of concern as identified in the database search. If habitat requirements were not met, then no further surveys were conducted and the site was considered cleared for impact on State- and Federally-listed species. If habitat requirements were met, then specific surveys for the species of concern were conducted. These surveys were done in accordance with pre-established survey protocols. These protocols often require certain meteorological and/or seasonal conditions to perform them.

At each location, all wetlands and floodplains within the survey area were noted using a National Wetlands Inventory Map and field checks. Characteristics of wetlands, floodplains, and riparian areas are noted using criteria outlined in the "Army Corps of Engineers (ACOE) Wetlands Delineation Manual" (ACOE 1987, 12540).

## B-5.4 Threatened, Endangered, and Sensitive Species

### B-5.4.1 Regional Lists

Table B-5.4-1 presents the list of T&E species potentially occurring in or near TA-16.

**Table B-5.4-1**
**Federally T&E Wildlife Species**
**Potentially Occurring Within or Near the Project Area**

| Scientific Name | Common Name | Status[a] | Habitat | Potential to Occur[b] |
|---|---|---|---|---|
| *Empidonax traillii extimus* | Southwestern willow flycatcher | FE | Riparian areas with stands of willow, buttonbush, or tamarisk. | Low |
| *Falco peregrinus anatum* | American peregrine falcon | FE | Ponderosa-piñon; cliffs and rock outcrops on cliffs. | Low |
| *Falco peregrinus tundrius* | Arctic peregrine Falcon | FE (Ap) | Occasional during migration. | Low |
| *Grus americana* | Whooping crane | FE (Ex) | Rivers, marshes, and swamps. | Low |
| *Haliaeetus leucocephalus* | Bald eagle | FT | Permanent rivers, lakes, and large streams cliffs or large trees. | Low |
| *Mustela nigripes* | Black-footed ferret | FE | Greater than 32 ha (80 ac) of prairie dog towns. | Low |
| *Strix occidentalis lucida* | Mexican spotted owl | FT | Forested mountains and canyons. Generally uneven-aged, multi-storied forest with closed canopy. | High |

[a] Codes for Legal Status: FE = federally endangered; FT = federally threatened; FE (Ap) = although *F. p. tundrius* was delisted, the peregrine falcon in general is considered federally endangered by similarity of appearance; FE (Ex) = federally endangered, but New Mexico population is an experimental nonessential population.

[b] Potential to Occur: High = species is known to occur in the area; Moderate = the area has some species habitat components; Low = the area does not have species habitat components.

## B-5.5 Results and Mitigation

### B-5.5.1 Habitat Description

#### B-5.5.1.1 Previous Vegetation Studies

A few vegetation analyses and surveys have been conducted within portions of the canyons and mesatops of the project area and in surrounding areas. These surveys are noted on Table B-5.5-1 (Dunham 1996,

52032 pp. 3-4; Raymer 1996, 59095 p. 27). These studies include previous (before 1993) floristic surveys at the Laboratory, a study conducted on outfalls throughout the Laboratory, and observational data. All of these studies and surveys were conducted as observational data or by quadrat method on a line transect.

**Table B-5.5-1**
**Previous Surveys on Plant Species Within or Near the Project**

| Project | Date | Authors |
|---|---|---|
| Biological survey 77-008 | 1977–78 | Foxx and Tierney |
| Status of the flora of the Los Alamos Environmental Research Park | 1980 | Foxx and Tierney |
| Status of the flora of the Los Alamos Environmental Research Park: A historical perspective | 1984 | Foxx and Tierney |
| Preliminary vegetation survey of Area P | 1985 | Foxx |
| Vegetation survey of the waste-fired boiler site TA-16 | 1988 | Foxx |
| Inventory and mapping of LANL's floodplains and wetlands | 1990 | USFWS, NWI |
| Potential use of NPDES outfalls for wildlife watering | 1992 | Edeskuty, Foxx, and Raymer |
| Determination of 100-year floodplain elevations at Los Alamos National Laboratory | 1992 | McLin |

A complete checklist of plant species identified during these surveys, in addition to the species found in more recent field surveys, is provided in Table B-5.5-2 (Raymer 1996, 59095, pp. 84–91).

**Table B-5.5-2**
**Plant Species Confirmed and Potentially Occurring within OU 1082**

| Family | Scientific Name | Common Name | Indicator Status[a] |
|---|---|---|---|
| *Aceraceae* | *Acer glabrum neomexicanum* | New Mexico maple | FAC |
| | *Acer negundo* | box elder | FACU |
| *Anacardiaceae* | *Rhus radicans* | poison ivy | — |
| | *R. trilobata* | squawbush | — |
| *Apocynaceae* | *Apocynum androsaemifolium* var. *Androsaemifolium* | spreading dogbane | — |
| *Asclepiadaceae* | *Asclepias tuberosa* | butterflyweed | — |
| *Berberidaceae* | *Berberis fendleri* | Colorado barberry | — |
| *Betulaceae* | *Betula occidentalis* | water-birch | FACW |
| *Boraginaceae* | *Hackelia hirsuta* | beggerlice | — |
| | *Lappula texana* | stickseed | — |
| | *Lithospermum incisum* | fringed puccoon | — |
| | *L. multiflorum* | many-flowered stoneseed | — |
| | *Mertensia lanceolata fendleri* | bluebells | — |
| | *M. lanceolata secundorum* | bluebells | — |
| *Cactaeae* | *Echinocereus triglochidiatus* | claret-cup cactus | — |
| *Campanulaceae* | *Campanula rotundifolia* | harebell | FAC |
| *Caryophyllaceae* | *Arenaria fendleri* | Fendler sandwort | — |
| | *Cerastium* sp. | chickweed | — |
| | *Stellaria jamesiana* | James starwort | — |
| *Celastraceae* | *Pachystima myrsinites* | myrtle boxleaf | — |

**Table B-5.5-2**
**Plant Species Confirmed and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name | Indicator Status[a] |
|---|---|---|---|
| *Chenopodiaceae* | *Chenopodium album* | lamb's quarters | FAC, FACU |
| | *C. fremontii* | Fremont goosefoot | — |
| | *C. gigantospermum* | chenopodium | — |
| | *C. graveolens* | chenopodium | — |
| *Compositae* | *Achillea lanulosa* | western yarrow | — |
| | *Ambrosia coronopifolia* | ragweed | — |
| | *A. psilostachya* | western ragweed | FAC |
| | *Anaphalis margaritaceae* | pearly-everlasting | — |
| | *Anatennaria parvifolia* | pussytoes | — |
| | *Artemisia bigelovii* | bigelow sagebrush | — |
| | *A. carruthii* | wormwood | — |
| | *A. dracunculus* | false tarragon | — |
| | *A. francunculus* | ragweed sagebrush | — |
| | *A. frigida* | estafiata | — |
| | *A. ludoviciana* | wormwood | — |
| | *A.* spp. | wormwood | — |
| | *Aster bigelovii* | bigelow aster | — |
| | *A. laevis* | smooth aster | — |
| | *A.* sp. | golden aster | — |
| | *Bahia dissecta* | wild chrysanthemum | — |
| | *Brickellia californica* | California brickellia | FACU |
| | *B. grandiflora* | tasselflower | — |
| | *B.* spp. | bricklebush | — |
| | *Chrysopsis villosa* | golden aster | — |
| | *Chrysothamnus nauseosus* | chamisa, rubber rabbit brush | — |
| | *Cirsium neomexicanum* | New mexico thistle | — |
| | *C. pallidum* | thistle | FACW |

**Table B-5.5-2**
**Plant Species Confirmed and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name | Indicator Status[a] |
|---|---|---|---|
| *Compositae (continued)* | *Brickellia californica* | California brickellia | FACU |
| | *C.* spp. | thistle | — |
| | *Conyza canadensis* | horseweed | FAC, FACU |
| | *Erigeron divergens* | fleabane daisy | — |
| | *E. flagellaris* | trailing fleabane | FAC |
| | *E. nudiflorus* | fleabane | — |
| | *E. philadelphicus* | common fleabane | — |
| | *E.* spp. | daisy | — |
| | *E. subtinervis* | three-nerve fleabane | — |
| | *Franseria acanthicarpa* | bursage | — |
| | *Grindelia aphanactis* | gumweed | — |
| | *G.* spp. | gumweed | — |
| | *Gutierrezia sarothrae* | snakeweed | — |
| | *Helianthus petiolaris* | prairie sunflower | — |
| | *Hymenopappus filifolius* | white ragweed | — |
| | *Hymenoxys argentea* | perky sue | — |
| | *H. richardsonii* | bitterweed | — |
| | *Pericome caudata* | taperleaf | — |
| | *Ratibida columnifera* | prairie coneflower | — |
| | *R.* spp. | coneflower | — |
| | *Rudbeckia hirta* | black-eyed susan | FACU |
| | *R. lanciniata* | cutleaf coneflower | FACW |
| | *R.* spp. | black-eyed susan | — |
| | *Senecio bigelovii* | bigelow groundsel | — |
| | *S. Cymbalarioides* | groundsel | — |
| | *S. dimorphophyllus* | groundsel | — |
| | *S. eremophilus* var. *Macdougalii* | groundsel | — |
| | *S. fendleri* | groundsel | — |
| | *S. mutabilis* | groundsel | — |
| | *Solidago* spp. | goldenrod | FACU |
| | *Taraxacum officinale* | dandelion | FACU |
| | *Thelesperma trifidum* | greenthread | — |
| | *Townsendia escapa* | Easter daisy | — |
| | *T. incana* | Townsend's aster | — |
| | *Tragopogon dubius* | salisfy, goatsbeard | — |
| | *T.* spp. | salisfy | — |
| | *Verbesina encelioides* | crownbeard | FAC |
| | *Viguiera multiflora* | showy goldeneye | — |

**Table B-5.5-2**
**Plant Species Confirmed and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name | Indicator Status[a] |
|---|---|---|---|
| *Cruciferae* | *Arabis fendleri* | Fendler's rockcress | FACU |
| | *Capsella bursa-pastoris* | shepherd's purse | FAC |
| | *Descurainia richardsonii* | tansy mustard | — |
| | *incisa* | | |
| | *D. sophia* | tansy mustard | — |
| | *Erysimum capitatum* | western wallflower | — |
| | *Rorippa nasturtium-aquaticum* | watercress | — |
| | *Thlaspi alpestre* | mountain candytuft | FACU |
| *Cupressaceae* | *Juniperus monosperma* | one-seeded juniper | — |
| | *J. scopulorum* | rocky mountain juniper | — |
| *Cyperaceae* | *Carex* spp. | sedge | FACW/FAC/O/BL |
| | *Cyperus esculentus* | nutsedge | FACW |
| | *Scirpus* spp. | bulrush | — |
| *Equisetum* | *Equisetum hiemale* | horsetail | — |
| | *E. laevigatum* | smooth horsetail | FACU |
| *Ericaceae* | *Arctostaphylos uva-ursi* | bearberry | — |
| | *Pterospora andromedea* | pinedrop | — |
| *Fagaceae* | *Quercus gambelii* | Gambel oak | — |
| | *Q.* spp. | oak | — |
| | *Q. undulata* | wavyleaf oak | — |
| *Fumariaceae* | *Corydalis aurea* | golden smoke | — |
| *Gentianaceae* | *Gentiana bigelovii* | bigelow gentian | — |
| | *G.* spp. | gentian | — |
| *Geraniaceae* | *Geranium caespitosum* | James geranium | — |
| | *G. richardsonii* | Richardson geranium | FAC |
| | *G.* spp. | geranium | FAC |

**Table B-5.5-2**
**Plant Species Confirmed and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name | Indicator Status[a] |
|---|---|---|---|
| *Gramineae* | *Agropyron cristatum* | crested wheatgrass | — |
| | *A. desertorum* | Russian wheatgrass | — |
| | *A.* sp. | wheatgrass | — |
| | *A. smithii* | western wheatgrass | FAC |
| | *A. trachycaulum* | slender wheatgrass | FAC |
| | *Agrostis alba* | redtop bent | FACW |
| | *Andropogon gerardii* | big bluestem | FAC |
| | *A. scoparius* | little bluestem | — |
| | *Aristida* sp. | threeawn | — |
| | *Blepharoneuron tricholepsis* | pine dropseed | — |
| | *Bouteloua curtipendula* | side-oats grama | — |
| | *B. gracilis* | blue grama | — |
| | *Bromus anomalus* | nodding brome | — |
| | *B. inermis* | smooth brome | — |
| | *B. japonicus* | Japanese brome | FACU |
| | *B.* spp. | bromegrass | FACU |
| | *B. tectorum* | downy chess | — |
| | *Dactylis glomerata* | orchard grass | — |
| | *Echinochloa colonum* | junglegrass | — |
| | *E. crusgalli* | barnyard grass | — |
| | *Elymus canadensis* | Canada wildrye | FAC |
| | *Festuca ovina* | sheep fescue | — |
| | *Koeleria cristata* | junegrass | — |
| | *Muhlenbergia montana* | mountain muhly | — |
| | *M. wrightii* | spike muhly | FACU |
| | *Phleum pratense* | common timothy | FACU |
| | *Poa fendleriana* | mutton grass | — |
| | *P. interior* | inland bluegrass | — |
| | *P. pratensis* | Kentucky bluegrass | FACU |
| | *P.* spp. | bluegrass | FAC/FACU |
| | *Sitanion hystrix* | bottlebrush squirreltail | — |
| | *Stipa* spp. | needle grass | — |
| *Juncaceae* | *Juncus interior* | inland rush | FACW |
| | *J.* spp. | rush | FACW |
| *Labiatae* | *Moldavica parviflora* | dragonhead | — |
| | *Monarda menthaefolia* | beebalm, horsemint | — |
| | *M. pectinata* | ponymint | — |

**Table B-5.5-2**
**Plant Species Confirmed and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name | Indicator Status[a] |
|---|---|---|---|
| *Leguminosae* | *Lathyrus arizonicus* | peavine | — |
| | *Lotus wrightii* | deervetch | — |
| | *Lupinus caudatus* | tall lupine | — |
| | *L.* spp. | lupine | — |
| | *Medicago sativa* | alfalfa | — |
| | *Melilotus albus* | white sweet clover | FACU |
| | *M. ospficinalis* | yellow sweet clover | FACU |
| | *M. Sp* | clover | — |
| | *Robinia neomexicana* | New mexico locust | — |
| | *Thermopsis pinetorum* | pine goldenpea | — |
| | *Trifolium procumbens* | clover | — |
| | *T. repens* | white clover | — |
| | *Vicia americana* | American vetch | — |
| *Liliaceae* | *Allium cernuum* | nodding onion | — |
| | *A.* spp. | wild onion | — |
| *Linaceae* | *Linum neomexicana* | New mexico yellow flax | — |
| *Loasaceae* | *Mentzelia pumila* var. *Pumila* | blazing star | — |
| *Loranthaceae* | *Phoradendron juniperinum* | juniper mistletoe | — |
| *Moraceae* | *Humulus americanus* | hop | — |
| *Nyctaginaceae* | *Mirabilis linearis* | four-o'clock | — |
| | *Oxybaphus linearis* | desert four-o'clock | — |
| *Oleaceae* | *Forestiera neomexicana* | New mexico olive | FACU |
| *Onagraeae* | *Epilobium angustifolium* | fireweed | FAC |
| | *E. ciliatum* | willowweed | FACW |
| | *E.* spp. | fireweed | — |
| | *Gaura coccinea* | gaura | — |
| | *Oenothera coronopifolia* | cutleaf evening primrose | — |
| | *O. hookeri* | Hooker's primrose | — |
| *Orchidaceae* | *Corallorhiza maculata* | spotted coralroot | — |
| | *Habenaria sparsiflora* | bog orchid | — |
| *Oxalidaceae* | *Oxalis violacea* | violet wood-sorrel | — |
| *Pinaceae* | *Abies concolor* | white fir | — |
| | *Pinus edulis* | pinon pine | — |
| | *P. flexilis* | limber pine | — |
| | *P. ponderosa* | ponderosa pine | FACU |
| | *Pseudotsuga menziesii* | Douglas fir | — |
| *Plantaginaceae* | *Plantago purshii* | woolly indianwheat | — |
| *Polemoniaceae* | *Ipomopsis aggregata* | desert trumpet | — |
| *Polygonaceae* | *Eriogonum jamesii* | antelope sage | — |
| | *E. racemosum* | wild buckwheat | — |
| | *E.* spp. | wild buckwheat | — |
| | *Polygonum convolvulus* | black bindweed | FACU |
| | *Rumex* spp. | dock | FACU |

**Table B-5.5-2**
**Plant Species Confirmed and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name | Indicator Status[a] |
|---|---|---|---|
| *Polypodiaceae* | *Cystopteris fragilis* | brittle fern | — |
| *Primulaceae* | *Androsace septentrionalis* | rock-jasmine | FAC |
| | var.*subulifera* | | |
| *Ranunculaceae* | *Actaea arguta* | western baneberry | — |
| | *Clematis pseudoalpina* | rocky mountain clematis | — |
| | *Pulsatilla ludoviciana* | pasque flower | — |
| | *Rununculus cardiophyllus* | buttercup | FACW |
| | *Thalictrum fendleri* var. *Fendleri* | meadowrue | FACU |
| *Rhamnaceae* | *Ceanothus fendleri* | buckbrush | — |
| *Rosaceae* | *Agrimonia striata* | agrimony | FAC |
| | *Cercocarpus montanus* | mountain mahogany | — |
| | *Fallugia paradoxa* | Apache plume | — |
| | *Fragaria americana* | wild strawberry | — |
| | *Petentilla fruticosa* | shruby potentilla | FACW |
| | *P. hippiana* | cinquefoil | — |
| | *P. norvejica* | Norway potentilla | FAC |
| | *P. pulcherrima* | beauty cinquefoil | — |
| | *P.* spp. | cinquefoil | OLB/FACU/FACW |
| | *Prunus virginiana* | chokecherry | FAC |
| | *Rosa woodsii* var. *Fendleri* | Fendler's rose | FACU |
| | *Rubus strigosus* | wild raspberry | FAC |
| *Rubiaceae* | *Galium asperrimum* | rough-stemmed bedstraw | — |
| | *G. boreale* | northern bedstraw | FAC |
| | *G.* spp. | bedstraw | — |
| *Salicaceae* | *Populus tremuloides* | aspen | FACU |
| | *Salix exigua* | sandbar willow | — |
| | *S.* spp. | willow | FACW |
| *Saxifragaceae* | *Heuchera parvifolia* | alumroot | — |
| | *Jamesia americana* | cliff bush | FACU |
| | *Philadelphus microphyllus* | mockorange | — |
| | *Ribes cereum* | wax current | — |
| | *R. inerme* | gooseberry | FACW |
| *Scrophulariaceae* | *Castilleja integra* | Indian paintbrush | — |
| | *Orthocarpus luteus* | yellow owl-clover | FACU |
| | *Penstemon barbatus* var. *Torreyi* | scarlet bugler | — |
| | *P.* spp. | penstemon | — |
| | *P. secundiflorus* | beardstongue | — |
| | *P. virgatus* | variegated penstemon | FACU |
| | *Verbascum thapsus* | mullein | — |
| | *Veronica americana* | American brooklime | OBL |
| *Solanaceae* | *Physalis neomexicana* | ground cherry | — |
| *Typhaceae* | *Typha angustifolia* | narrow-leaved cattail | OBL |
| | *T. latifolia* | cattail | OBL |

**Table B-5.5-2**
**Plant Species Confirmed and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name | Indicator Status[a] |
|---|---|---|---|
| *Umbelliferae* | *Heracleum lanatum* | cow parsnip | OBL |
| | *Ligusticum porteri* | lovage | — |
| | *Pseudocymopterus montanus* | mountain parsley | — |
| *Valerianaceae* | *Valeriana acutiloba* | valeriana | — |
| | *V. Capitata* | tabacco root | — |
| | *V.* spp. | valeriana | — |
| *Violaceae* | *Viola adunca* | western dog violet | FAC |
| | *V. canadensis* | Canada violet | — |
| | *V. pedatifida* | larkspur violet | — |
| *Vitaceae* | *Parthenocissus inserta* | Virginia creeper | — |
| *Lichen* | *Usnea* sp. | old man's beard lichen | |
| | *Xanthroparmelia* sp. | green rock lichen | |
| | *Xanthroparmelia* sp. | green rock lichen | |

[a]Indicator Status definitions:

FAC = Facultative: Equally likely to occur in wetlands or nonwetlands.

FACU = Facultative Upland: Usually occur in nonwetlands; occasionally found in wetlands.

FACW = Facultative Wetland: Usually occur in wetlands; occasionally found in nonwetlands.

OBL = Obligate Wetland: Occur almost always under natural conditions in wetlands.

UPL = Obligate Upland: Occur in wetland in another region, but occur almost always under natural conditions in nonwetlands in the region specified.

If a species does not occur in wetlands in any region, it is not on the National List.

### B-5.5.1.2 Summary of Current Habitat Composition

Table B-5.5-3 lists climatic zones and communities found in north-central New Mexico and typical plant species of each (LANL 1997, 59378, p.118). Many of these plant communities are found over the eastern slopes of the Jemez Mountains and the Pajarito Plateau (which extends eastward from the Jemez Mountains) and thus occur in Los Alamos county or relatively close to the county borders.

**Table B-5.5-3**
**Climatic Zones and Plant Communities of North-Central New Mexico**

| Climatic Zone | Plant Community | Typical Plant Species[a] |
|---|---|---|
| | ***Uplands*** | |
| Boreal Forests and Woodlands | Rocky Mountain Subalpine | Englemann spruce |
| | Conifer Forest and Woodland | corkbark fir |

**Table B-5.5-3**
**Climatic Zones and Plant Communities of North-Central New Mexico (continued)**

| Climatic Zone | Plant Community | Typical Plant Species[a] |
|---|---|---|
| Cold Temperate Forests and Woodlands | Rocky Mountain Montane | Colorado spruce |
| | Conifer Forest | white fir |
| | | Douglas fir |
| | | Gambel oak |
| | | ponderosa pine |
| | Great Basin Conifer Woodland | pinyon pine |
| | | one-seed juniper |
| | | Gambel oak |
| | | ponderosa pine |
| Arctic-Boreal Grassland | Rocky Mountain Alpine and Subalpine Grassland | sedge/forb mixture |
| Cold Temperate Grassland | Plains Grassland Community | blue grama |
| | | western wheatgrass |
| | | galleta |
| | Great Basin Shrub Grassland | wheatgrass |
| | | galleta |
| | | sagebrush |
| | | saltbush |
| | Rocky Mountain Montane | Thurber fescue |
| | Grassland | Arizona fescue |
| | | mountain muhly |
| | | sedge |
| ***Wetland*** | | |
| Cold Temperate Swamp and Riparian Forest | Plains and Great Basin Riparian | Fremont cottonwood |
| | Deciduous Forest | willow |
| | Rocky Mountain Riparian | narrowleaf cottonwood |
| | Deciduous Forest | willow |
| Arctic-Boreal Swamp-Scrub | Rocky Mountain Alpine and Sub-Alpine Swamp and Riparian Scrub | boxelder |
| | | narrowleaf alder |
| | | sandbar willow |
| | | Scouler willow |
| | Plains and Great Basin Riparian Scrub | willow |
| | | salt cedar |
| Arctic-Boreal Marshland | Rocky Mountain Alpine and Sub-Alpine Marshland | rush |
| | Plains Interior Marshland | cattail |
| | | bulrush |
| | Rocky Mountain Montane Marshland | rush |
| Arctic-Boreal Strand | Rocky Mountain Alpine and Sub-Alpine Stream and Lake Strand | b |
| Cold Temperate Strand | Rocky Mountain Montane Stream and Lake Strand | b |

[a] Plant species listed are intended as generally representative of a community; they are not necessarily present in all such communities.

[b] These zones are open water; no plant species are associated with them.

The vegetation surveys indicate that there is primarily one vegetation community present within or adjacent to TA-16: the Rocky Mountain Montane Conifer Forest. This community can be further separated into series, and more specifically, habitat types.

Based on the species composition of the transects and their locations within the project area, it could be seen that differences in species dominance were associated with the various topographic differences. Following an overview of the Rocky Mountain Montane Conifer Forest, evaluations of the overstory and understory vegetation community and its phase or habitat type for TA-16 will be presented.

**Rocky Mountain Montane Conifer Forest**

This community consists of two vegetation series: the ponderosa pine series and the Douglas fir series. Each of these series could be further divided into habitat types (HT). The ponderosa pine series can be further divided into six HTs. The ponderosa pine/Gambel oak HT is found on the mesa and north-facing slopes. Another HT on the mesa is the ponderosa pine/bluegrass HT found in areas previously used as fields or pastures. Mesa areas burned in the 1977 La Mesa fire are characterized as ponderosa pine/aspen HT. Two HTs are found on south-facing slopes: ponderosa pine/one-seed juniper HT; and, in burned areas, Gambel oak/mountain muhly HT. Canyon bottoms in TA-16 exhibit ponderosa pine/Douglas fir HTs. The Douglas fir series contains the Douglas fir/Gambel oak HT which is found on the burned north-facing slopes of Water Canyon. Burned areas typically show proportionally more species of earlier succession stages and cannot be considered to be in the climax stage.

Vegetation transects in TA-16 were established to evaluate the understory and overstory components of the general habitats and locations shown in Table B-5.5-4.

**Table B-5.5-4**
**General Habitats and Locations**

| Location | Habitat Type |
|---|---|
| Mesa | Ponderosa pine/bluegrass |
| | Ponderosa pine/Gambel oak |
| | Ponderosa pine/aspen |
| North-facing slopes | Ponderosa pine/Gambel oak |
| | Douglas fir/Gambel oak |
| South-facing slopes | Ponderosa pine/juniper |
| | Gambel oak/mountain muhly |
| Canyon bottoms | Ponderosa pine/Douglas fir |

Within TA-16 there are an estimated 230 species of plants, 70 species of nesting birds, 39 species of mammals, 2 species of amphibians, and 4 species of reptiles.

**Mesatop**

The dominant trees within the mesa overstory vegetation of TA-16 are ponderosa pine (*Pinus ponderosa*) and aspen (*Populus tremuloides*). The mesatop shrub layer is primarily composed of Gambel oak (*Quercus gambelii*) and New Mexico locust (*Robinia neomexicana*). Dominant forbs and grasses include bluegrass (*Poa* spp.), mountain muhly (*Muhlebergia montana*), blue grama (Bouteloua gracilis), pine dropseed (*Blepharoneuron tricholepis*), wormwood (*Artemisia ludoviciana*), false tarragon (*Artemisia dracunculus*),

tall lupine (*Lupinus caudatus*), and cinquefoil (*Potentilla* spp.). In areas burned by the La Mesa fire, there is extensive regeneration of New Mexico locust and Gambel oak.

**North-Facing Slopes**

The north-facing slopes of canyons within TA-16 have overstories dominated by ponderosa pine and Douglas fir (*Pseudotsuga menziesii*). Dominant shrubs are wax currant (*Ribes cereum*) and New Mexico olive (*Forestiera neomexicana*). The understory layer is dominated by slender wheatgrass (*Agropyron trachycaulum*), mountain muhly, spike muhly (*Muhlenbergia wrightii*), western yarrow (*Achillea lanulosa*), mosses, and wild chrysanthemum (*Bahia dissecta*).

**South-Facing Slopes**

South-facing slopes consisted of overstories dominated by ponderosa pine and juniper (*Juniperus monosperma*); shrub layers dominated by Gambel oak and New Mexico locust; and understories dominated by mountain muhly, little bluestem (*Andropogon scoparius*), pine dropseed, and wormwood.

**Canyon Bottom/Riparian**

The canyon bottom of Cañon de Valle within TA-16 shows ponderosa pine and Douglas fir as the dominant tree species; Gambel oak, New Mexico locust, and cliff bush (*Jamesia americana*) as the dominant shrub species; and, bluegrass and inland rush (*Juncus interior*) as the dominant understory species.

### B-5.5.2 Wildlife Description

The wide range of plant communities in the Los Alamos County area contain a correspondingly wide range of micro- and macrohabitats. This diversity of habitat results in a relatively wide diversity of wildlife species, including both invertebrates and vertebrates.

#### B-5.5.2.1 Previous Wildlife Studies

Table B-5.5-5 (Dunham 1996, 52032, pp. 3–4; Raymer 1996, 59095, p. 27) lists several surveys and observational data describing the fauna within portions of the canyons and mesatops within or adjacent to the project area and surrounding areas. These studies are discussed below with species lists provided for each section.

**Table B-5.5-5**
**Previous Surveys on Wildlife Species within or Near TA-16**

| Project | Date | Authors |
|---|---|---|
| Movements of mule deer on the Los Alamos National Environmental Research Park | 1979 | Eberhart and White |
| Mammals of Bandelier National Monument, NM | 1980 | Guthrie and Large |
| Effects of fire on small mammals in Bandelier National Monument | 1981 | Guthrie |
| Biotelemetry studies on elk | 1981 | White |
| The amphibians and reptiles of the Los Alamos National Research Park | 1986 | Bogart |
| The ants of Los Alamos County, NM | 1986 | MacKay et. al |
| Biological evaluation of proposed Weapon Subsystem Laboratory site | 1990 | Morrison, 58698 |

**Table B-5.5-5**
**Previous Surveys on Wildlife Species within or Near TA-16 (continued)**

| Project | Date | Authors |
|---|---|---|
| Atlas of the breeding birds of Los Alamos County, NM | 1992 | Travis, 12015 |
| Inventory survey of bats | unpublished | BRET |
| Jemez mountains salamander survey behind building16-260 | unpublished | Edeskuty, Raymer, and Bennett |
| Small mammal survey | unpublished | Kent |

#### 5.5.2.1.1 Invertebrates

Numerous surveys for terrestrial and aquatic invertebrates have been conducted at LANL and Bandelier National Monument. However, these surveys are restricted to localized areas and results are limited in regional application.

The information provided below includes the most recent studies and surveys conducted at the Laboratory. In addition, an extensive study has been conducted at Bandelier National Monument; some of the results of that study are discussed here as well.

Studies of terrestrial arthropods have been conducted since the 1970s, and since 1990 they have been conducted on a yearly basis. These studies have been done at various locations within the Laboratory, as well as at control sites outside the Laboratory. To date, 164 families of terrestrial arthropods have been identified on Laboratory property, many down to genus or species. Eighteen species of terrestrial mollusk from 11 families have also been found at LANL. Table B-5.5-6 (Dunham 1996, 52032, Appendix B) provides a checklist of the insects in the TA-16.

**Table B-5.5-6**
**Checklist of Insects in TA-16 and TA-9**

| Subfamily | Scientific Name | Habitat |
|---|---|---|
| *Chrysopidae* | *Chrysopa* spp. | Riparian |
| *Culicidae* | *Aedes* spp. | Riparian |
| *Dolichoderinae* | *Liometopum apiculatum* | Ponderosa pine/riparian |
| | *L. luctuosum* | Ponderosa pine/riparian |
| | *Tapinoma sessile* | Ponderosa pine/riparian |

**Table B-5.5-6**
**Checklist of Insects in TA-16 and TA-9 (continued)**

| Subfamily | Scientific Name | Habitat |
|---|---|---|
| *Formicinae* | *Acanthomyops interjectus* | Ponderosa pine |
| | *A. latipes* | Ponderosa pine/riparian |
| | *Campontonus herculeanus* | Spruce, riparian |
| | *C. laevigatus* | Ponderosa pine/riparian |
| | *C. sansabeanus* | Ponderosa pine |
| | *C. vicinus* | Pond.pine/riparian-Pond.pine |
| | *Formica argentea* | Pond.pine/riparian; disturbed site |
| | *F. densiventris* | Ponderosa pine/riparian |
| | *F. fusca* | Ponderosa pine/riparian |
| | *F. hewitti* | Pond.pine/riparian;grassy areas |
| | *F. lasioides* | Ponderosa pine/riparian |
| | *F. limata* | Ponderosa pine/riparian |
| | *F. neogagates* | Highly disturbed areas |
| | *F. neorufibarbis* | Riparian |
| | *F. obscuripes obscuripes* | Ponderosa pine/riparian |
| | *F. obscuriventris clivia* | Ponderosa pine/riparian |
| | *F. occulta* | Ponderosa pine/riparian |
| | *F. pergandei* | Disturbed areas |
| | *F. planipilis* | Ponderosa pine/riparian |
| | *F. pozolica* | Ponderosa pine/riparian |
| | *F. subnuda* | Ponderosa pine |
| | *Lasius alienus* | Ponderosa pine/riparian |
| | *L. crypticus* | Ponderosa pine/riparian |
| | *L. flavus* | Ponderosa pine/riparian |
| | *L. neoniger* | Ponderosa pine/riparian |
| | *L. pallitarsis* | Pond.pine/riparian;Pond.pine |
| | *L. sitiens* | Ponderosa pine |
| | *L. subumbratus* | Ponderosa pine/riparian |
| *Libellulidae* | *Libellula* spp. | |

**Table B-5.5-6**
**Checklist of Insects in TA-16 and TA-9 (continued)**

| Subfamily | Scientific Name | Habitat |
|---|---|---|
| *Myrmicinea* | *Crematogaster cerasi* | Ponderosa pine/riparian |
| | *Leptothorax crassipilis* | Ponderosa pine/riparian |
| | *L. muscorum* | Pond.pine/riparian;Pond.pine |
| | *L. nitens* | Pond.pine/riparian disturbed areas |
| | *L. obliquicanthus* | Highly disturbed areas |
| | *L. texanus texanus* | Ponderosa pine/riparian |
| | *L. tricarinatus* | Ponderosa pine/riparian |
| | *Monomorium cyaneum* | Juniper, disturbed areas |
| | *M. minimum* | Ponderosa pine/riparian |
| | *Myrmecina americana* | Ponderosa pine/riparian |
| | *Myrmica bravispinosa* | Riparian |
| | *M. emeryana* | Riparian/Ponderosa pine |
| | *M. hamulata* | Ponderosa pine/riparian |
| | *Polyerqus breviceps* | Ponderosa pine |
| | *Pheidole ceres* | Pond. pine; Pond. pine/riparian; disturbed areas |
| | *P. hyatti hyatti* | Riparian |
| | *P. sitarches soritis* | Disturbed areas |
| | *P. wheelerorum* | Pond. pine/riparian; disturbed areas |
| | *Pogonomyrmex occidentalis* | Pond.pine/riparian; Pond.pine; disturbed areas |
| | *Solenopsis molesta* | Riparian; Pond.pine/riparian; disturbed areas |
| | *Stenamma occidentale* | Ponderosa pine/riparian |
| *Nymphalidae* | *Phyciodes* spp. | |
| | *Vanessa virginiensis* | |
| *Papilioidae* | *Papilio polyxenes asterius* | |
| | *Papilio bairdii* | |
| *Ponerinae* | *Hypoponera opaciceps* | Riparian |

The Laboratory has conducted, and continues to conduct, numerous studies of aquatic invertebrates in Los Alamos County and its surrounding watersheds. At present, LANL is monitoring aquatic stations at springs along the Rio Grande and on Laboratory property, in the lower canyon confluences with the Rio Grande, and at various Laboratory outfalls. The aquatic communities of Sandia, Guaje, Los Alamos, and Pajarito canyons are also being investigated.

Three species of aquatic snails and two species of freshwater clams have been found on LANL property. Segmented worms, water mites, horsehair worms, scuds, water fleas, copepods, roundworms, and flatworms have also been collected. To date, eight families of stoneflies, six families of mayflies, five families of dragonflies, four families of damselflies, five families of true bugs, thirteen families of caddisflies, one family of nerve-wing, two families of butterflies and moths, ten families of beetles, and sixteen families of true flies

have been recorded living in the waters of Los Alamos county and its surrounding watersheds. Table B-5.5-7 (Cross 1997, 59096, pp. 73-75) lists the aquatic invertebrate taxa collected in Cañon de Valle. The aquatic insects belong to 178 genera, and LANL studies have found several taxa in Los Alamos county not previously reported by the State of New Mexico.

#### 5.5.2.1.2 Fish

Due to the ephemeral nature of the waterways, no fish have been found on Laboratory property. Fish have been observed in nearby Guaje Canyon, Los Alamos Canyon on U.S. Forest Service lands, and at the confluence of White Rock Canyon and the Rio Grande. A current U.S. Fish and Wildlife study will determine if fish can survive within LANL canyons, including Cañon de Valle and upper Pajarito Canyon.

**Table B-5.5-7a**
**Aquatic Invertebrate Taxa Collected in Cañon de Valle and Starmer's Gulch**

| Order | Family | Genus(species) | Location[a] |
|---|---|---|---|
| | | ***Aquatic Insects*** | |
| COLLEMBOLA | NA[b] | NA | SG |
| EPHEMEROPTERA | *Baetidae* | *Baetis (tricaudatus)* | CV, SG |
| | *Baetidae* | *Diphetor (hageni)* | SG |
| | *Baetidae* | *Centroptilum* | CV |
| | *Leptophlebiidae* | *Paraleptophlebia* | CV |
| | *Siphlonuridae* | *Ameletus* | SG |
| | *Tricorythidae* | *Tricorythodes* | CV |
| PLECOPTERA | *Capniidae* | *Capnia* | CV |
| | *Chloroperlidae* | *Suwallia* | SG |
| | *Chloroperlidae* | *Sweltsa* | CV, SG |
| | *Nemouridae* | *Amphinemura* | CV, SG |
| | *Nemouridae* | *Malenka* | CV, SG |
| | *Nemouridae* | *Prostoia* | CV |
| | *Nemouridae* | *Zapada (cinctipes)* | CV, SG |
| | *Perlidae* | *Hesperoperla (pacifica)* | SG |
| | *Perlodidae* | *Isoperla* | CV |
| HEMIPTERA | *Gerridae* | *Gerris* | CV |
| TRICHOPTERA | *Glossosomatidae* | *Agapetus* | SG |
| | *Glossosomatidae* | *Glossosoma* | SG |
| | *Hydropsychidae* | *Ceratopsyche (oslari)* | CV, SG |
| | *Hydroptilidae* | *Hydroptila* | CV |
| | *Hydroptilidae* | *Stactobiella* | CV |
| | *Lepidostomatidae* | *Lepidostoma* | SG |
| | *Limnephilidae* | *Hesperophylax* | CV, SG |
| | *Limnephilidae* | *Oligophlebodes* | SG |
| | *Rhyacophilidae* | *Rhyacophila (brunnea)* | SG |
| ODONATA | *Aeshnidae* | *Boyeria* | CV |
| | *Aeshnidae* | *Oplonaeschna* | CV |
| | *Coenagrionidae* | *Argia* | CV |
| | *Cordulegastreridae* | *Cordulegastor* | CV |

**Table B-5.5-7a**
**Aquatic Invertebrate Taxa Collected in Cañon de Valle and Starmer's Gulch (continued)**

| Order | Family | Genus(species) | Location[a] |
|---|---|---|---|
| | | ***Aquatic Insects*** | |
| COLEOPTERA | *Curculionidae* | | SG |
| | *Dytiscidae* | *Agabus* | CV |
| | *Dytiscidae* | *Agabinus* | CV |
| | *Elmidae* | *Heterlimnius* | SG |
| | *Elmidae* | *Narpus* | SG |
| | *Elmidae* | *Optioservus* | CV, SG |
| | *Hydrophilidae* | | CV, SG |
| | *Staphylinidae* | | CV |
| DIPTERA | *Ceratopogonidae* | | CV |
| | *Chironomidae* | *Brillia* | CV |
| | *Chironomidae* | *Corynoneura* | SG |
| | *Chironomidae* | *Cricotopus* | CV |
| | *Chironomidae* | *Diamesa* | CV |
| | *Chironomidae* | *Macropelopia* | CV |
| | *Chironomidae* | *Micropsectra* | CV, SG |
| | *Chironomidae* | *Orthocladius* | CV, SG |
| | *Chironomidae* | *Pagastia* | CV, SG |
| | *Chironomidae* | *Parochlus* | CV |
| | *Chironomidae* | *Paraphaenocladius* | CV, SG |
| | *Chironomidae* | *Paratendipes* | CV |
| | *Chironomidae* | *Pentaneura* | CV, SG |
| | *Chironomidae* | *Psectrocladius* | CV, SG |
| | *Chironomidae* | *Pseudodiamesa* | CV, SG |
| | *Chironomidae* | *Robackia* | CV |
| | *Chironomidae* | *Tanytarsus* | CV |
| | *Chironomidae* | *Thienemannimyia* | CV |
| | *Chironomidae* | *Tvetenia* | CV, SG |
| | *Chironomidae* | *Zavrelimyia* | CV, SG |
| | *Dolichopodidae* | | CV |
| | *Empididae* | *Chelifera* | CV |
| | *Psychodidae* | *Maruina* | SG |
| | *Psychodidae* | *Pericoma* | SG |
| | *Simulidae* | *Simulium* | CV, SG |
| | *Tabanidae* | *Chrysops* | CV |
| | *Tipulidae* | *Dicranota* | CV, SG |
| | *Tipulidae* | *Limonia* | CV |
| | *Tipulidae* | *Ormosia* | SG |
| | *Tipulidae* | *Pedicia* | SG |
| | *Tipulidae* | *Tipula* | CV, SG |

[a] *Location abbreviations: CV= Cañon de Valle; SG= Starmer's Gulch*

[b] *Not Applicable*

**Table B-5.5-7b**

**Aquatic Invertebrate Taxa Collected in Cañon de Valle and Starmer's Gulch**

| Phylum | Class | Family | Location[a] |
|---|---|---|---|
| ***Non-Insect Invertebrates*** | | | |
| ANNELIDA | Oligochaeta | Lumbricidae | SG |
| | Oligochaeta | Tubificidae | SG |
| MOLLUSCA | Pelecypoda | Sphaeridae, genus *Pisidium* | CV |
| PLATYHELMINTHES | Turbellaria | | CV, SG |

[a] *Location abbreviations: CV= Cañon de Valle; SG= Starmer's Gulch*

### 5.5.2.1.3 Reptiles and Amphibians

A variety of reptiles are common throughout much of the county and include at least 14 species of skinks, lizards, and snakes. The presence of wetlands adds additional habitat for water-associated species. At least seven species of amphibians are found in the county. Table B-5.5-8 (Raymer 1996, 59095, p. 95) provides a checklist of the reptiles and amphibians collected in TA-16 and Cañon de Valle.

**Table B-5.5-8**

**Amphibian and Reptile Species Actually (Confirmed) and Potentially Occurring within OU 1082**

| Family | Scientific Name | Common Name |
|---|---|---|
| ***Amphibians*** | | |
| HYLIDAE | *Hyla arenicolor* | canyon treefrog |
| | *Pseudacris triseriata* | striped chorus frog |
| ***Reptiles*** | | |
| COLUBRIDAE | *Diadophis punctatus* | ringneck snake |
| IGUANIDAE | *Phrynosoma douglassi* | short-horned lizard |
| | *Sceloporus undulatus* | eastern fence lizard |
| VIPERIDAE | *Crotalus atrox* | western diamondback rattlesnake |

### 5.5.2.1.4 Birds

Birds are the most diverse group of wildlife found in the area due, in part, to the wide range of habitats. This group includes a variety of nesting and migrating raptors that occupy some of the relatively undisturbed areas and the steeper canyon walls. Over 200 bird species have been recorded in Los Alamos County, including at least 112 species of breeding birds (Travis 1992, 12015), most being migratory summer residents. Table 5.5-9 (Raymer 1996, 59095, pp. 96-98) is a checklist of the birds reported in the TA-16 area.

**Table B-5.5-9**
**Bird Species Confirmed and Potentially Occurring within OU 1082**

| Family | Scientific Name | Common Name |
|---|---|---|
| ACCIPITRIDAE | *Accipiter gentilis* | northern goshawk |
| | *Buteo albonotatus* | zone-tailed hawk |
| | *B. jamaicensis* | red-tailed hawk |
| APODIDAE | *Aeronautes saxatalis* | white-throated swift |
| CAPRIMULGIDAE | *Chordeiles minor* | common nighthawk |
| | *Phalaenoptilus nuttalii* | common poorwill |
| CARTHARTIDAE | *Cathartes aura* | turkey vulture |
| CERTHIIDAE | *Certhia americana* | brown creeper |
| COLUMBIDAE | *Columba fasciata* | band-tailed pigeon |
| CORVIDAE | *Zenaida macroura* | morning dove |
| | *Aphelocoma coerulescens* | scrub jay |
| | *Corvus corax* | common raven |
| | *Cyanocitta stelleri* | Steller's jay |
| | *Nucifraga columbiana* | Clark's nutcracker |
| | *Pica pica* | black-billed magpie |
| EMBERIZIDAE | *Agelaius phoeniceus* | red-winged blackbird |
| | *Dendroica coronata* | yellow-rumped warbler |
| | *D. graciae* | Grace's warbler |
| | *Junco hyemalis* | dark-eyed junco |
| | *Molothrus ater* | brown-headed cowbird |
| | *Oporornis tolmiei* | Macgillivray's warbler |
| | *Pheucticus melanocephalus* | black-headed grosbeak |
| | *Pipilo chlorurus* | green-tailed towhee |
| | *P. erythrophthalmus* | rufous-sided towhee |
| | *Piranga flava* | hepatic tanager |
| | *P. ludoviciana* | western tanager |
| | *Pooecetes gramineus* | vesper sparrow |
| | *Spizella passerina* | chipping sparrow |
| | *Sturnella neglecta* | western meadowlark |
| | *Vermivora celata* | orange-crowned warbler |
| | *V. virginiae* | Virginia's warbler |
| FALCONIDAE | *Falco sparverius* | American kestrel |
| FRINGILLIDAE | *Carduelis pinus* | pine siskin |
| | *C. psaltria* | lesser goldfinch |
| | *Coccothraustes vespertinus* | evening grosbeak |
| | *Loxia curvirostra* | red crossbill |
| HIRUNDINIDAE | *Hirundo pyrrhonota* | cliff swallow |
| | *Tachycineta thalassina* | violet-green swallow |

**Table B-5.5-9**
**Bird Species Confirmed and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name |
|---|---|---|
| MUSCICAPIDAE | *Catharus guttatus* | hermit thrush |
| | *Myadestes townsendi* | Townsend's solitaire |
| | *Polioptila caerulea* | blue-grey gnatcatcher |
| | *Regulus calendula* | ruby-crowned kinglet |
| | *Sialia currucoides* | mountain bluebird |
| | *S. mexicana* | western bluebird |
| | *Turdus migratorius* | American robin |
| PARIDAE | *Parus gambeli* | mountain chickadee |
| | *P. inornatus* | plain titmouse |
| PICIDAE | *Colaptes auratus* | northern flicker |
| | *Melanerpes formicivorus* | acorn woodpecker |
| | *M. lewis* | Lewis' woodpecker |
| | *Picoides pubescens* | downy woodpecker |
| | *P. tridactylus* | northern three-toed woodpecker |
| | *P. villosus* | hairy woodpecker |
| SITTIDAE | *Sitta carolinensis* | white-breasted nuthatch |
| | *S. pygmaea* | pygmy nuthatch |
| STURNIDAE | *Sturnus vulgaris* | European starling |
| TROCHILIDAE | *Selasphorus platycercus* | broad-tailed hummingbird |
| TROGLODYTIDAE | *Salpinctes obsoletus* | rock wren |
| | *Thryomanes bewickii* | Bewick's wren |
| | *Troglodytes aedon* | house wren |
| TYRANNIDAE | *Contopus sordidulus* | western wood-pewee |
| | *C. borealis* | olive-sided flycatcher |
| | *Empidonax hammondii* | Hammond's flycatcher |
| | *E. oberholseri* | dusky flycatcher |
| | *E. occidentalis* | cordilleran flycatcher |
| | *Myiarchus cinerascens* | ash-throated flycatcher |
| | *Sayornis saya* | Say's phoebe |
| | *Tyrannus vociferans* | Cassin's kingbird |
| STRIGIDAE | *Bubo virginianus* | great horned owl |
| | *Otus flammeolus* | flammulated owl |
| VIREONIDAE | *Strix occidentalis lucida* | Mexican spotted owl |
| | *Vireo gilvus* | warbling vireo |
| | *V. solitarius* | solitary vireo |

### 5.5.2.1.5 Mammals

At least 29 species of small ground-dwelling mammals (i.e., mice, wood rats, voles, squirrels, chipmunks) occur in the area, some of which are specific to particular elevation ranges. Deer mice (*Peromyscus* spp.), wood rats (*Neotoma mexicana*), and least chipmunks (*Tamias minimus*) inhabit most areas of the region. Piñon mice (*Peromyscus truei*) are found primarily in piñon-juniper woodlands; the red-backed vole (*Clethrionomys californicus*) occurs in the higher elevations; the western harvest mouse (*Reithrondontomys megalotis*) and long-tailed voles (*Microtus longicaudus*) are found in moist canyon bottoms; and

shrews (*Sorex* spp.) occur near flowing water. Thirteen species of bats have been recorded within LANL boundaries.

The most commonly seen large mammals in Los Alamos county are mule deer (*Odocoileus hemionus*) and elk (*Cervus elaphus*). These species generally winter in the lower elevations of the Pajarito Plateau, including mesas and canyons along the central and eastern portions of the county and surrounding areas, and spend their summers at higher elevations of the Jemez Mountains. However, recent surveys in the Los Alamos county area indicate growing population numbers of these species residing year-round at lower elevations. Little population data is available for the other large and medium size mammals of the area, but at least 12 species of carnivores are also present, including mountain lion (*Felis concolor*), bobcat (*Lynx rufus*), red fox (*Vulpes vulpes*), and coyote (*Canis latrans*). A list of both the small and large mammals observed within TA-16 is provided in Table B-5.5-10 (Raymer 1996, 59095, pp. 99–100).

**Table B-5.5-10**
**Mammal Species Actually and Potentially Occurring within OU 1082**

| Family | Scientific Name | Common Name |
|---|---|---|
| CANIDAE | *Canis latrans* | coyote |
| | *Vulpes vulpes* | red fox |
| CERVIDAE | *Cervus elaphus* | elk |
| | *Odocoileus hemionus* | mule deer |
| CRICETIDAE | *Neotoma mexicana* | mexican woodrat |
| | *Microtus longicaudus* | long-tailed vole |
| | *M. montanus* | montane vole |
| | *Peromyscus boylei* | brush mouse |
| | *P. difficilis* | rock mouse |
| | *P. leucopus* | white-footed mouse |
| | *P. maniculatus* | deer mouse |
| | *P. truei* | pinon mouse |
| | *Reithrodontomys megalotis* | western harvest mouse |
| ERETHIZONTIDAE | *Erethizon dorsatum* | porcupine |
| FELIDAE | *Felis concolor* | mountain lion |
| | *Lynx rufus* | bobcat |
| GEOMYIDAE | *Thomomys bottae* | Bottae's pocket gopher |
| HETEROMYIDAE | *Perognathus flavus* | silky pocket mouse |
| LEPORIDAE | *Sylvilagus* sp. | cottontail |
| MUSTELIDAE | *Mustela frenata* | long-tailed weasel |
| | *Mephitis mephitis* | striped shunk |
| | *Taxidea taxus* | badger |
| PROCYONIDAE | *Procyon lotor* | raccoon |
| SCIURIDAE | *Eutamias minimus* | least chipmunk |
| | *E. quadrivittatus* | Colorado chipmunk |
| | *Sciurus aberti* | Abert's squirrel |
| | *Spermophilis lateralis* | golden-mantled ground squirrel |
| | *Tamiasciurus hudsonicus* | red squirrel |
| SORICIDAE | *Sorex vagrans* | vagrant shrew |
| URSIDAE | *Ursus americanus* | black bear |

**Table B-5.5-10**
**Mammal Species Actually and Potentially Occurring within OU 1082 (continued)**

| Family | Scientific Name | Common Name |
|---|---|---|
| VERSPERTILIONIDAE | *Eptesicus fuscus* | big brown bat |
| | *Lasionycteris noctivagans* | silver-haired bat |
| | *Lasiurus cinereus* | hoary bat |
| | *Myotis californicus* | California myotis |
| | *M. evotis* | long-eared myotis |
| VERSPERTILIONIDAE | *M. leibii* | small-footed myotis |
| | *M. thysanodes* | fringed myotis |
| | *M. volans* | long-legged myotis |
| | *M. yumanensis* | Yuma myotis |
| MOLOSSIDAE | *Tadarida brasiliensis* | Brazilian free-tailed bat |

### B-5.5.3 Threatened, Endangered, and Sensitive Species

As of this writing (May 1999), the USFWS lists seven federally T&E animals and no T&E plants as occurring, or potentially occurring, in Los Alamos county (USFWS 1988, 58699). The potential occurrences are based on preferred habitats of the species and the presence of those habitats within or near Los Alamos county. Table B-5.4-1 lists all T&E wildlife species occurring or potentially occurring in TA-16, their listing status, and their preferred habitat; Table B-5.5-11 (provided by David Keller of ESH-20 Division of LANL) presents the population trends of the these species. A few of these species, as well as some additional sensitive species (the spotted bat, northern goshawk, broad-billed hummingbird, pine marten, meadow jumping mouse, wood lily, and checker lily), are discussed below in more detail. Due to previous disturbance, TA-16 does not contain potential habitat for many T&E species that may occur in the general vicinity. Again, USFWS concurrence with this opinion will be sought based on the biological assessment.

#### Spotted Bat

The spotted bat is found in pinon-juniper, ponderosa, mixed conifer, and riparian habitats. The two critical requirements for the spotted bat are a source of open surface water and roost sites (caves in cliffs or rock crevices). Suitable roost sites were present in portions of Water Canyon and Cañon de Valle. Open water sources are limited and include small cattail areas and several small outfalls. No surveys were conducted for this species in TA-16. However, surveys for spotted bats did take place in lower Pajarito Canyon (July 1992), in TAs-8 and -36, and in Bandelier National Monument, but none were successful in capturing spotted bats. This does not necessarily suggest spotted bats do not occur in TA-16. Whether present or not, no adverse impact is expected to occur to the spotted bat so long as potential habitat (rock faces, cliffs) and water sources within TA-16 are not disturbed or altered.

**Table B-5.5-11**
**Population Trends of Federally Listed Threatened and Endangered Specie**

| Species | Current Legal Status | Regional Trends | State Trends | Local Trends |
|---|---|---|---|---|
| Southwestern willow Flycatcher<br>Empidonax traillii extimus | Federally Endangered | 300-500 breeding pairs remain. | 1993-95 surveys found 100 breeding pairs and 75% occurred in a local area. Surveys and data gathered in 1987, 1991, and 1994 suggest the population is declining. | Willow flycatcher surveys have been conducted at LANL and Bandelier National Monument since 1995. Willow flycatchers have been detected, but no nesting flycatchers have been found. Willow flycatchers have been found nesting along the Rio Grande in Española (Keller et al. 1996, 52027). |
| Whooping crane<br>Grus americana | Federally Endangered | Historically, entire populations numbered 1,300 to 1,400 individuals. In 1941, only 21 birds were known. In 1987-1988 wintering wild populations stood at 153 birds. | The experimental Rocky Mountains flock that winters in New Mexico peaked at 33 birds but, because pairing and reproduction never occurred, surveys in 1989 concluded flock has since dwindled to four birds. | Whooping cranes and sandhill cranes follow the Rio Grande during migration. However, there are no reports of actual Laboratory use by cranes. |
| Bald eagle<br>Haliaeetus leucocephalus | Federally Threatened | South of Canada bald eagles declined drastically in numbers and range. Some U.S. populations have recovered in recent years. | Number of wintering bald eagles have increased in recent years averaging about 430 birds per year during 1990-1994 (early 1980s 220 birds). Only two known nesting pairs in the state. | Since 1979, average winter counts near Cochiti area have doubled. As total counts have increased, the number of bald eagles using areas farther upstream has increased. Surveys in March 1992 were conducted for roost tree use on LANL lands. This survey found bald eagles occasionaly using trees near the mouths of Water and Chaquehui canyons (Keller et al. 1996, 52027). |
| Mexican spotted owl<br>Strix occidentalis lucida | Federally Threatened | In 1993, 2160 owls existed and now 20 % of owl habitat has been rendered unsuitable. | In 1994, 250–300 territories occupied. | Surveys for Mexican spotted owls have been conducted on LANL since 1994. In 1995 a pair of Mexican spotted owls was located as well as a nest. Each year the nest has been occupied and resulted in two young fledged per year (Keller et al. 1996, 52027). |

**Table B-5.5-11**
**Population Trends of Federally Listed Threatened and Endangered Specie (continued)**

| Species | Current Legal Status | Regional Trends | State Trends | Local Trends |
|---|---|---|---|---|
| American peregrine falcon<br>Falco peregrinus anatum | Federally Endangered | Populations drastically declined, beginning in the 1940s. This coincided with the spread of DDT as an insecticide. Decline bottomed out by late 1970. At present, small breeding population seems to be stable with population increases reported in Arizona. | In 1995, production in the state was 1.49 young per adult pair. This is judged marginally sufficient to maintain the population. Reproduction has shown a steadily declining trend in recent years, down from 2.05 young per adult pair in 1990. Increase in occupancy of breeding sites is up to 80%. However, since 1988 there has been a 34% decrease in production. | Several suitable nesting areas for the falcon are within Los Alamos County or immediately adjacent to the County. Occupancy and reproduction in the local area is similar to what has been seen on the regional level. |
| Arctic peregrine falcon<br>Falco peregrinus tundrius | Federally Endangered by Similarity of Appearance | Species population has expanded three-fold since late 1970. In 1994 species was delisted; however, it is still protected via similarity of appearance. | In New Mexico the abundance is rare and is seen as a transient species. | No recorded sightings of the Arctic peregrine falcon within Los Alamos County. However, the Arctic peregrine falcon is not easily distinguishable from the American peregrine falcon in the field. |
| Black-footed ferret<br>Mustela nigripes | Federally Endangered | In 1992, the black-footed ferret was listed as the rarest mammal in North America. In 1981, a remnant population in northwest Wyoming was removed for captive breeding and reintroduction. Reintroduction has begun in Wyoming, Montana, and South Dakota. | Last reported in New Mexico in 1934. Although Bergofer stated that ferrets were once common in New Mexico, there is no evidence to support this statement. We know of no records in recent years. If any animals survive, the northwestern part of the state is the most likely area (Findley et al. 1975, 52004). | No reported sightings of black-footed ferrets in Los Alamos County for at least the last 50 years. In addition, no large prairie dog towns have been observed on LANL lands. |

### Peregrine Falcon

Currently in draft form, a habitat management plan (developed by Johnson 1992, 58701) discusses the past and present status of the peregrine falcon in habitat north of this operable unit. According to modeling efforts by Johnson, the peregrine falcon has a low potential of occurrence in TA-16. It is not expected to nest in TA-16 but may traverse the area. Sampling is not expected to impact this species.

### Northern Goshawk

The northern goshawk occurs in mature ponderosa pine forests. Goshawks have been found hunting on Laboratory property within TA-16. Nest sites are known to exist just outside operable unit borders and most likely occur within the boundaries as well (Kennedy 1986, 58700). The following measures will be taken to

avoid adverse impact to goshawks:

- The Biological resource evaluation team (BRET) must be contacted 60 days prior to sampling to evaluate possible nest sites in and around the specific sampling area. Any machine sampling occurring between May and October must be cleared through BRET.
- If any area over one-tenth acre will be disturbed, contact BRET for a pre-sampling site-specific survey.
- Any tree removal (live or snag) must be approved by BRET.

**Mexican Spotted Owl**

Habitat requirements for the Mexican spotted owl include uneven-aged, multistory, mixed conifer forests with closed canopies. Surveys for Mexican spotted owls have been conducted on LANL since 1994. In 1995 a pair of Mexican spotted owls was located nesting within Cañon de Valle. Each year the nest has been occupied and has fledged two young. The following measures will be taken to avoid adverse effects on the Mexican Spotted Owl: (1) BRET will be contacted 60 days prior to sampling within Water Canyon for evaluation of specific sampling locations, and (2) if these raptors are found to be nesting within 0.46 km (0.25 mi) of the site, heavy equipment use will be restricted during the nesting period (March 1 to September 1 in New Mexico).

**Broad-Billed Hummingbirds**

Broad-billed hummingbirds have been reported in Bandelier National Monument, but only as migrants. These hummingbirds require riparian habitat. Although riparian habitat does exist within TA-16, it is very limited in size and extent. This limited riparian habitat most likely would not support breeding broad-billed hummingbirds. In addition, there have been no reports of this hummingbird occurring on Laboratory land (Travis 1992, 12015). No adverse impacts will occur to the broad-billed hummingbird.

**Pine Marten**

Pine marten occur in mature old-growth spruce-fir communities with greater than 30% canopy cover and a large per cent of fallen logs. TA-16 does not characteristically fit this description. However, there have been unsubstantiated reports of pine martens within the general upper areas of TA-16. These sightings are thought to be mis-identifications (probably long-tailed weasels). However, there has not been a systematic survey for pine marten within Los Alamos County. An effective survey technique involves snow tracking. A survey for the pine marten was conducted in the upper portions of TA-16 during the winter of 1992–93. Contact BRET prior to sampling for results of survey.

**Meadow Jumping Mouse**

Meadow jumping mouse has a high potential of occurring in TA-16. It lives in riparian or wetlands zones along permanent water sources. If any sampling will occur along stream-side areas, contact BRET 60 days prior to sampling to evaluate the need for a site-specific survey. A meadow jumping mouse survey must be performed during the rainy season, the optimal month being July. This is the only time the survey can be performed (Morrison 1990, 58698). If a survey is required, sampling cannot proceed until the survey is complete. (Note: some surveys for small mammals occurred within TA-16 during the summer of 1992, no meadow jumping mice were found).

**Wood Lily**

The wood lily is protected by the New Mexico Endangered Plant Species Act. The plant occurs in upland riparian areas; therefore, upper Cañon de Valle may provide suitable habitat. Surveys are conducted each July, when the plant is in flower and is easiest to identify. As of August 5, 1997, no wood lilies have been found along the Cañon de Valle streamside, although rare occurrences have been seen elsewhere in Los Alamos County. If any wood lilies are located in the area, suitable protective measures will be developed to ensure that project operations do not threaten the plant or its habitat. Also, if extensive sampling will occur within riparian areas, contact ESH-20 to conduct a site-specific survey prior to sampling.

**Checker Lily**

The checker lily is protected by the New Mexico Sensitive Plant Species Act. It may occur in TA-16, but only in moist, shaded, mixed conifer areas. Vegetation surveys show that there are very few mixed conifer species, such as Douglas fir and white fir, within the project area. If extensive sampling will occur within riparian areas, contact ESH-20 to conduct a site-specific survey prior to sampling. This species has also been found in Los Alamos County but is very rare.

### B-5.5.4 Wetlands/Floodplains

Four areas within TA-16 have been classified on the USFWS National Wetlands Inventory Maps as possible palustrine wetlands. There were also 29 National Pollutant Discharge Elimination Systems (NPDESs) permitted outfalls within TA-16 and at least 14 have wetlands vegetation associated with them. These areas may be classified as jurisdictional wetlands. None of the possible jurisdictional wetlands exceeds one acre; therefore, RFI activities within any of these possible jurisdictional wetlands would be permitted under the nationwide permit for such small areas. In addition, flood maps (Mclin 1992, 12014) indicate that floodplains exist in Water Canyon and Cañon de Valle. RFI activities are not anticipated to adversely affect the floodplains and wetlands within TA-16 as long as best management practices outlined in Section B-5.6.0 are followed.

## B-5.6 Best Management Practices

Impacts on non-sensitive species should be avoided when possible. Off-road driving is especially harmful to plants and soil crust. Vehicular travel should be restricted to existing roads whenever possible. Revegetation may be required at some sites A list of native plants suitable for revegetation for TA-16 is included in the final report "Biological and Floodplain/Wetland Assessment for Environmental Restoration Program, Operable Unit 1082" (Raymer 1996, 59095). In addition, BRET may be consulted to determine suitable species for seeding.

Additional mitigation measures include the following:

- Avoid unnecessary disturbance (i.e., parking areas, equipment storage areas, off-road travel) to surrounding vegetation during the actual sampling and when traveling into the sampling sites.
- Avoid removal of vegetation along water sources, drainage systems, and stream channels.
- Avoid disturbance to vegetation along canyon slopes and especially to drainages.
- Avoid tree removal. If tree removal is required, contact BRET for evaluation.

In addition to the previously-mentioned mitigation measure, BRET requests notification of additional disturbances prior to their being conducted. Likewise, the USFWS, in compliance with the Endangered Species Act (USFWS 1988, 58699), may have additional mitigation measures that are required but are not represented in this summary. However, the TA-16 project leader will be notified of any additional required measures.

## B-6.0 Cultural Resources

OU 1082 was surveyed in 1992 by archaeologists from the Ecology Group (ESH-20) of the ES&H (Binzen et al., n.d.). Thirty-three archaeological sites were located during this survey. This area includes the areas where PRSs 16-034(p), 16-005(d), 16-006(g), 16-029(g2), and C-16-074 are located. Historic building surveys were conducted in 1994 and 1995 for the ER D&D project at TA-16. One hundred fourteen buildings, including the six V-Site buildings, have been declared eligible for the National Register of Historic Places (McGehee 1995, 63520). The V-Site buildings were built in 1944 and 1945, during the Manhattan Project years at Los Alamos. This small complex of buildings is of national importance. These buildings are where HE components of the Trinity device were assembled. PRSs 16-006(g), 16-029(g2), and C-16-074 are located in the vicinity of the historical V-Site buildings and PRS 16-005(d) is in the vicinity of the former Manhattan Project castings building, TA-16-27. There are no archaeological sites located in the vicinity of any of the PRSs.

The past ER Project sampling and cleanup work that has been conducted at these PRSs (including the removal of drain lines near the V-Site buildings) has not affected the attributes that make these buildings eligible for the National Register of Historic Places.

# APPENDIX C. RESULTS OF QUALITY ASSURANCE/QUALITY CONTROL ACTIVITIES

## C-1.0 SUMMARY

Thirty-nine analytical samples in 47 request numbers were sent to off-site laboratories for analysis in order to assess potential contaminants at PRSs 16-006(g), 16-029(g2), C-16-074, 16-005(d), and 16-034(p).

In addition, two field QC samples were analyzed in association with the fixed-laboratory samples. The types of field QC samples used included co-located samples and field duplicates. The types of laboratory QC samples associated with these analytical samples included laboratory control samples (LCS), blanks, duplicates, matrix spikes, and matrix spike duplicate QC samples. (Definitions for the various types of QC samples can be found in Appendix A of this document.) All samples discussed in this document were collected and analyzed during the time period of March 1997 to April 1999; therefore, these QA/QC activities were covered by the statement of work for that period.

**Table C-1.0-1**
**Analytical Methods and Descriptions**

| Analytical Suite | Method | Method description |
|---|---|---|
| VOCs | SW-846 Method 8260 | Gas chromatography with mass spectroscopy |
| SVOCs | SW-846 Method 8270 | Gas chromatography with mass spectroscopy |
| HEs (HMX, RDX, 1,3,5-TNB, 1,3-DNB, Tetryl, NB, 2,4,6-TNT, 4-ADNT, 2-ADNT, 2,6-NT, 2,4-NT, 2-NT, 3-NT, 4-NT) | SW-846 Method 8330 | High pressure liquid chromatography |
| Target Analyte List (TAL) Metals | SW-846 Method 6010A/3050A/3051 | Inductively coupled plasma emission spectroscopy |
| Boron | SW-846 Method 6010A/3050A | Inductively coupled plasma emission spectroscopy |
| Antimony | SW-846 Method 6010B | Inductively coupled plasma emission spectroscopy |
| Antimony | SW-846 Method 7041 | Graphite furnace atomic absorption spectroscopy |
| Lead | SW-846 Method 7421 | Graphite furnace atomic absorption spectroscopy |
| Mercury | SW-846 Method 7470/7471 | Cold vaporization atomic absorption |
| Cyanide | SW-846 Method 9010A | Manual Colorimetric Determination |
| Selenium | SW-846 Method 7740 | Graphite furnace atomic absorption spectroscopy |
| Thallium | SW-846 Method 7841 | Graphite furnace atomic absorption spectroscopy |
| Radionuclides | Method 901.1 | Gamma spectroscopy |
| Uranium | SW-846 Method 6010/3050B | Inductively coupled plasma emission spectroscopy |
| Uranium | SW-846 Method 6020/3050B | Inductively coupled plasma mass spectroscopy |

All data discussed in this report have been routinely validated. The boron data were the exception, as they received only focused validation when possible. Where applicable, qualifiers have been applied to the data. Some data were rejected during routine and focused data validation and these data were not used for decision-making purposes in this report. The most common cause for rejected data was problems associated with matrix spike samples. Most commonly, this happened to volatile or otherwise chemically unstable inorganic elements. This is discussed in detail in the inorganic section of this appendix (C-2.0). Despite qualifiers applied to non-rejected data, the qualified and unqualified data are all usable for decision-making purposes. The most commonly applied routine validation qualifier is "J", which indicates that the data has uncertainty associated with it. Sometimes this indicates that a problem arose during analysis. The data are still considered usable as these types of problems are not significant enough to cause data rejection. That the value has uncertainty associated with it should be taken into account when a full data set is used to assess a PRS. The "J" qualifier may also be applied by the laboratory and accepted during routine validation. Most commonly, this occurs when compounds are detected very near the detection limit, making it difficult to quantify the data accurately. The full data set, with a detailed description of the qualifications applied to the data and the impact of qualifications on the data, are described on a per PRS basis in Sections X.3.4.3 of each chapter "Data Review." Section C-5.0 tabulates and describes all samples with qualified data. Definitions of the qualifiers used during routine data validation can be found in Appendix A.

Table C-1.0-2 lists the field QA/QC samples collected during the investigation of this site and the RFI sample associated with the QA/QC sample.

**Table C-1.0-2**
**Field QA/QC Samples Collected at V-Site**

| QA/QC Sample | RFI Sample | PRS | Location ID | Sample Type |
|---|---|---|---|---|
| RE16-98-0042 | RE16-98-0045 | Drum Storage Aggregate | 16-5820 | Field duplicate |
| 0316-97-1036 | 0316-97-0099 | 16-006(g) | 16-3036/16-3357 (12 in. apart) | Co-located sample |
| RE16-98-0003 | 0316-98-0096 | 16-005(d) | 16-3341 | Replacement sample |
| RE16-98-0004 | 0316-98-0097 | 16-005(d) | 16-3343 | Replacement sample |

Field duplicate samples enable ER Project personnel to check for consistency and precision in the analytical methods. Co-located samples help monitor the precision of these methods and also give an indication of the homogeneity of contaminants at the site.

Results of analysis of the field duplicate samples indicate that there is little variation between samples RE16-98-0042 and RE16-98-0045. Acetone was the only organic compound detected in the samples. It was detected in sample 0045 at 0.025 ppm and was undetected in sample RE16-98-0042 at 0.021 ppm, confirming that very low levels of acetone are present at this PRS. Results of analyses showed that, generally, the variation of inorganic contamination between the two samples was less than 35%. This is recognized as a typical soil homogeneity value (EPA 1994, 48639, p. 25). Soil elements that did vary between the two samples by more than 35% included chromium, which varied by approximately 65%, copper, which varied by approximately 50%, and nickel, which varied by approximately 55%. In general, the field duplicate results are adequate and fall within the expectations for this site.

The co-located sample results also appear to be within the normal range of variation for soils (up to 35%) (EPA 1994, 48639, p. 25). Copper, boron, cadmium, chromium, and zinc varied up to 50% between the two co-located samples. Mercury was detected in one co-located sample but not in the other. With up to 50% variation, the level of heterogeneity in the samples may indicate low concentrations of chemicals in the soil.

All other detected compounds varied by less than 35%. In general, the results of co-located sample analysis are within expectations, given the low concentrations of contaminants both expected and found in these samples.

Two replacement samples associated with PRS 16-005(d) are listed in the table above, although they are not actually field QA/QC samples. They were collected to replace earlier samples because the original samples exceeded the holding times for organic chemicals. The holding times for inorganics, however, were not exceeded in the original samples; therefore, their inorganic data were retained. This resulted in two sets of inorganic data for each of two samples collected from PRS 16-005(d). Looking at these data sets provides more information about heterogeneity of samples in this PRS. Most inorganic results did not vary above 35%, a typical soil homogeneity value (EPA 1994, 48639, p. 25). In both pairs of samples, cobalt, lead, manganese, and vanadium varied by up to 60%. In the pair of samples from location 16-3341, copper, nickel, and thallium also varied by up to 60%, and in the pair of samples from location 16-3343, barium and calcium varied by up to 50%. It seems that these samples have more variation between pairs than in the other two QA/QC samples collected. This is probably because they were collected at two different times and their depths differed by up to 6 in. possibly affecting the elemental composition of the samples.

The results of analysis of the field duplicate samples, co-located samples, and the two inorganic replacement samples do not indicate a trend in the elemental distribution that could influence the data and subsequent decisions. Variation between QA/QC sample pairs is generally within an acceptable numerical range.

## C-2.0 Inorganic Analyses

### C-2.1 Field Analyses

XRF spectroscopy was the only field screening used for inorganic compounds in these PRSs. Seventy samples were screened by this process. XRF is sensitive to a wide range of elements but in this case it was mostly used to screen for barium, a component of some explosives. The XRF equipment was operated in accordance with LANL-ER-SOP-10.08,R0, "Operation of the Spectrace 9000 X-Ray Fluorescence Instrument."

Detection limits for the XRF are not low enough to determine if an element is present at levels near BVs. XRF screening results are instead used to determine concentrations of inorganic elements at levels near the PRG. It is adequate for detecting most elements of interest. Silver, however, has an interference with the fluorescence from the iodine in the detector and therefore has a higher than normal detection limit. Table C-2.1-1 lists the elements that are detected by XRF and their detection limits in soil.

### C-2.2 Laboratory Analyses

Inorganic analysis for TAL metals was conducted on 35 samples. Inorganic analyses for boron was conducted on eight samples. The methods used on these samples included inductively coupled plasma mass spectroscopy (ICPMS), inductively coupled plasma atomic emission spectroscopy (ICPAES), cold vapor atomic absorption (CVAA) spectroscopy0, and graphite furnace atomic absorption (GFAA) spectroscopy. The samples were prepared for analysis with acid digestion with and without microwave heating (see Table C-1.0-1). Several inorganic analytes (antimony, cadmium, mercury, selenium, silver, and thallium) had estimated detection limits (EDLs) greater than the BVs for soil and/or tuff. The EDLs for the inorganics did not exceed the contract required detection limits (see Appendix D-1.0).

Uranium was analyzed for in 17 samples. These analyses were done in a manner similar to that done for the inorganic analyses; involving ICPAES and ICPMS. The ICPAES analysis had an overly elevated detection limit (30–50 mg/kg), rendering the data essentially useless for showing uranium concentrations. Regardless, none were detected. The analyses conducted with ICPMS, however, had detection limits low enough to evaluate uranium concentration with respect to BVs.

**Table C-2.2-1**
**Elements Detected by XRF**

| Element | Detection Limit (mg/kg) |
|---|---|
| Potassium | 161 |
| Calcium | 70 |
| Titanium | 55 |
| Chromium | 90–263[a] |
| Manganese | 203 |
| Iron | 111 |
| Cobalt | 101 |
| Nickel | 63 |
| Copper | 44 |
| Zinc | 35 |
| Mercury | 29 |
| Arsenic | 25 |
| Selenium | 17 |
| Lead | 14 |
| Rubidium | 5 |
| Strontium | 4 |
| Zirconium | 3 |
| Molybdenum | 4 |
| Element | Detection Limit (mg/kg) |
| Cadmium | 86 |
| Tin | 47 |
| Antimony | 32 |
| Barium | 9 |
| Silver | 50 |

[a] Detection limit depends upon what type of XRF source is used.

The only QA/QC issue concerning uranium results was the use of QA/QC data from a sample not associated with the request number. This did not affect data quality because all QA/QC samples were from a nearby area in TA-16. The QA/QC results for TA-16 do not appear to be location sensitive.

## C-3.0 Radiochemical Analyses

### C-3.1 Field Analyses

Field screening for radiochemicals was conducted for health and safety purposes only. If radiochemical findings had been above background values, this information may have been incorporated into decisions about sample collection that were based on a previously established biasing scheme (described in the body of this document). However, there were no elevated readings so the screening information was never used to bias sample locations.

### C-3.2 Laboratory Analyses

One sample in one request number was analyzed for a broad suite of radionuclides using gamma spectroscopy. This sample was collected from material obtained to refill the excavation at PRS 16-034(p). The analytical method used and analytes reported are tabulated in Appendix D. The results were compared to BVs using three times the standard deviation to determine the detect status of the result. Once a radiochemical analyte was determined to be present, it was then evaluated to determine if its presence presented any problems at the site.

A draft SOP for assessment of gamma spectroscopy data indicates that several analytes in the gamma spectroscopy suite should not be carried forward into screening assessment even when they are detected. Several analytes fall into this category and there are numerous reasons to exclude them. Several analytes have half-lives that are shorter than one year. These analytes are not carried forward because they will decay away before significantly impacting a site. Several analytes are poorly analyzed by gamma spectroscopy. If these analytes truly are present at a site, another technique besides gamma spectroscopy must be used to accurately determine the magnitude of contamination. The gamma spectroscopy data for these analytes are superfluous and should not be used for decision making purposes.

Several analytes are used for quality control purposes by the laboratories and are reported to show the laboratory is in control of its processes. Several analytes occur naturally in the environment and are therefore expected to be present in the samples. These analytes can also serve as an indication of the quality of the analysis. These analytes are checked to insure that they fall within a range expected for natural conditions. If these analytes are not within the expected range, either the quality of the data is suspect or a different type of analysis must be conducted to determine if a radiochemical release has occurred. In either case, there is no need to report these analytes as detected since they are not related to site activities.

In the single sample analyzed for radionuclides, there were no radionuclides detected in the sample that needed to be carried forward into screening assessment. The only quality issue associated with the single radionuclide analysis was due to insufficient amount of sample collected. Because there wasn't enough sample to run a duplicate analysis on a second aliquot, the same sample was analyzed twice. This type of analysis can indicate how well the analytical results are replicated by the analytical laboratory but it does not indicate the heterogeneity of the sample collected. Given that the sample was collected from fill that had surely been mixed, moved, and handled prior to sampling, it is likely that the sample was homogeneous.

## C-4.0 Organic Analyses

### C-4.1 Field Analyses

A PID was used for health and safety purposes at the site. The VCA plan called for use of the PID to bias sample locations. However, samples were always biased by other field screening methods and therefore the PID was never used for field screening analysis at this site.

Field screening kits for polyaromatic hydrocarbons (PAHs) were used at PRS 16-034(p) and their results were reported in this document, although these kits were not required by the VCM plan. However, these results were not used to bias sample selection. The results were used solely to evaluate future use of the kits.

Eighty-one samples were field screened for HE. The field screening of these samples for HE contamination used the HE spot test kit for all samples and/or an RDX and TNT sensitive immunoassay test kit for 53 of the 81 samples. D-Tech RDX and TNT explosive test kits were used to perform the immunoassay screen-

ing. The minimum detection limit of the D-Tech explosive test kits for RDX and TNT in soil is 0.5 ppm and 5.0 ppb in water, which is below the screening action level for HE. Daily QA/QC procedures were performed on the D-Tech explosive test kits with RDX and TNT-spiked performance evaluation (PE) samples. Environmental Resources, Inc. prepared the PE samples. The two aliquots were identified as Lot # 0811-97-05 and # 420-95-04 at 4.8 ppm RDX and TNT. Additional laboratory samples were submitted from ten-ft intervals when D-Tech field screening indicted the presence of TNT or RDX. The reported minimum detection limit of the HE spot test is 100 ppm, well above some screening action levels (SALs) for HE.

HE field screening conformed to LANL ER-SOP 10.06, R0, "High Explosives Spot Test" and to the manufacturer's published instruction guide for the D-Tech explosive test kits which correlates to EPA SW-8476 Method 4050 for TNT and to EPA SW-8476 Method 4051 for RDX. No LANL ER-SOP is currently established for RDX and TNT sensitive immunoassay screening, although they are in progress.

### C-4.2 Laboratory Analyses

#### High Explosives

Twenty-seven samples were analyzed for HE using SW-846 Method 8330. Detection limits for analyses were low enough to determine the presence of contamination. All detection limits were at or below the EQL. The quantitation limit is generally five to ten times the method detection limit. EQLs are listed in Appendix D of this document.

All QA/QC samples were in control for HE analyses. The only QA/QC issue affecting HE analysis was the issue of holding times. One request number for three samples associated with the drum storage aggregate missed holding times by two days (the maximum holding time is 14 days). Because the samples were well preserved and the holding time infraction was small, these data were accepted without qualification. No analytes were expected and none were detected. All HE data are usable for decision making purposes.

#### SVOCs

Twenty-four samples were analyzed for SVOCs using SW-846 Method 8270. Very few SVOC compounds were detected in these samples. All detection limits were within a factor of two of the EQL. The quantitation limit is generally five to ten times the method detection limit. EQLs are listed in Appendix D of this document.

The only QA/QC issue affecting SVOC results was the presence of phthalates in the laboratory blank associated with one analysis. Phthalates are common laboratory contaminants (Smith 1997, 58478 p. 157). The phthalates were also present in the sample, presumably due to laboratory contamination, and therefore they were U-qualified.

#### VOCs

Fifteen samples were analyzed for VOCs using SW-846 Method 8260. Very few VOC compounds were detected in these samples. All detection limits were within a factor of two of the EQL. The quantitation limit is generally five times to ten times the method detection limit. EQLs are listed in Appendix D of this document.

Laboratory contamination was a common problem in the VOC analysis although this had little impact on the data. Methylene chloride, acetone, and 4-methyl-2-pentanone were detected in samples and their associated blanks. Therefore these analytes were qualified as undetected in the associated sample. In one group of samples two internal standards had recoveries of 47% and 38%, outside the acceptable limit of 50%. The detected compounds associated with these standards were qualified as estimated, although

very few compounds were detected and therefore the data was minimally affected. Finally, one group of samples missed holding times by one day. The acceptable holding time is 14 days. Because the deviation was so minor, results were not qualified on this basis. In this group of samples, one internal standard was not recovered when the blank sample was analyzed. However, there were no internal standard problems with the sample itself. As a result, the data was not qualified on the basis of this issue.

**Table C-4.2-1**
**Data Quality Assessment for PRS 16-005(d)**

| Sample ID | Analytical Suite | Request Number[a] | Data Quality Assessment[b] |
|---|---|---|---|
| 0316-98-0098 | VOCs | 4185R | Results were Program Manager (PM) –qualified because the samples exceeded holding times for 1 day. There was also 0% recovery for one internal standard during the blank analysis. Neither problem is significant enough to require qualification of the data. All data are usable without qualification. |
| 0316-98-0096 through –0098 | TAL metals | 4187R | The QA/QC analysis was conducted on a sample not associated with this request but also from TA-16. This did not affect the analytical results. The spike recovery for antimony was 51%, outside of the acceptable limit of 75% so antimony results were UJ-qualified. All results are usable with qualification. |
| 0316-98-0096 through –0098 | Uranium | 4188R | The QA/QC sample used in this analysis may not have been a LANL sample. All QA/QC results were within the acceptable range. All data are usable without qualification. |
| RE16-98-0001 through –0004 | TAL metals | 4215R | Antimony is UJ-qualified because the spike recovery was 36%, outside of the acceptable limit of 75%. Manganese was qualified as J- because the spike recovery was 34%, outside of the acceptable limit of 75%. A matrix spike duplicate was analyzed instead of a duplicate. This did not affect the analytical results. All data are acceptable as qualified. |
| RE16-98-0005 | VOCs | 4234R | Acetone and 4-methyl-2-pentanone were present in the blank and in the sample. The sample results for these compounds were U-qualified. All data are usable with qualification. |
| RE16-98-0005 | TAL metals | 4235R | The QA/QC analysis was conducted on a sample not associated with this request but also from TA-16. This did not affect the analytical results. The matrix spike recovery for aluminum was 72%, outside the acceptable limit of 75%. Aluminum results were qualified as J-. The duplicate results for lead varied by 62%, outside of the acceptable level of 35%. Lead results were qualified as estimated. All results are usable with qualification. |
| RE16-98-0005 | Uranium | 4237R | These results have elevated detection limits because of the method used (ICPAES). The results are usable without qualification. |
| RE16-99-0001 through –0002 | Antimony | 5198R | The initial spike recovery result for antimony was unacceptably low. The spike analysis was rerun several times with results ranging from 25.8% to 80%. Antimony was undetected and should be UJ-qualified. All results are usable with qualification. |
| RE16-99-0002 | Uranium | 5200R | The sample result and duplicate result were not within an acceptable range of agreement. The sample result was qualified as J-. The result is usable with qualification. |

[a] Request number is defined in the Glossary, Appendix A.

[b] Data qualifiers are defined in the Glossary, Appendix A.

**Table C-4.2-2**
**Data Quality Assessment for PRS 16-006(g)**

| Sample ID | Analytical Suite | Request Number[a] | Data Quality Assessment[b] |
|---|---|---|---|
| 0316-97-0099, 0316-97-1036 | SVOCs | 3888R | Bis (2-ethylhexyl) phthalate was present in the blank and in two samples. The results for this compound were U-qualified. All data are usable with qualification. |
| 0316-97-0099, 0316-97-1036 | Boron | 3890R | Boron results were not validated during routine validation. Focused validation indicated that boron results were usable without qualification, although the spike analysis was not conducted for this analyte. |
| 0316-97-0099, 0316-97-1036 | TAL metals | 3890R | The QA/QC analysis was conducted on a sample not associated with this request but also from TA-16. This did not affect the analytical results. Antimony results were UJ-qualified because the spike recovery was 74%, outside of the acceptable limit of 75%. Mercury results were qualified as UJ or J- because the spike recovery results were 41%. Silver results were rejected because the spike recovery was 20%. Aluminum, chromium, copper, iron, and zinc results were qualified as J due to duplicate results in the 42-51% range, outside the acceptable limit of 35%. All results are usable with qualification. |
| 0316-97-0099, 0316-97-1036 | Uranium | 3891R | The QA/QC analysis was conducted on a sample not associated with this request but also from TA-16. All data are usable without qualification. |
| 0316-98-0100 | VOCs | 4098R | Methylene chloride was present in the blank and in the sample. It is qualified as U. Two internal standards had recoveries of 47% and 38%, outside of the acceptable limit of 50%. Compounds associated with these standards were JPM qualified. These compounds, with the exception of methylene chloride discussed above, should be J-qualified. All data are usable with qualification. |
| 0316-98-0100 | Boron | 4100R | Boron results were not validated during the routine validation of other elements. Focused validation indicated that boron results are usable without qualification. |
| 0316-98-0100 | TAL metals | 4100R | The QA/QC analysis was conducted on a sample not associated with this request but also from TA-16. This did not affect the analytical results. Mercury and silver were qualified as UJ because the spike recoveries were 39% and 72% respectively, outside of the acceptable limit of 75%. Manganese and zinc results were J-qualified because the duplicate results for manganese and zinc were 49% and 97% respectively, outside of the acceptable limit of 35%. All data are usable with qualification. |
| 0316-98-0100 | Uranium | 4101R | The QA/QC analysis was conducted on a sample not associated with this request but also from TA-16. All results are usable without qualification. |

**Table C-4.2-2**
**Data Quality Assessment for PRS 16-006(g) (continued)**

| Sample ID | Analytical Suite | Request Number[a] | Data Quality Assessment[b] |
|---|---|---|---|
| RE16-99-0005 | VOCs | 5197R | Several VOCs were present in the blank at low levels. The only effect on the data was that methylene chloride in the sample was qualified as U as a result of blank contamination. All data are usable with qualification. |
| RE16-99-0021 | VOCs | 5334R | Acetone was present in the blank and in the sample. Acetone results are U-qualified. All results are usable with qualification. |
| RE16-99-0021 | Boron | 5335R | The duplicate recovery was 200%. Boron results were qualified as P and should be considered estimated. All data are usable. |

[a] Request number is defined in the Glossary, Appendix A.

[b] Data qualifiers are defined in the Glossary, Appendix A.

**Table C-4.2-3**
**Data Quality Assessment for the Drum Storage Aggregate**

| Sample ID | Analytical Suite | Request Number[a] | Data Quality Assessment[b] |
|---|---|---|---|
| RE16-98-0041, -0042, -0045 | HE | 4379R | All results are PM qualified because holding times were exceeded by 2 days. All data are usable without qualification. |
| RE16-98-0041, -0042, -0045 | Uranium | 4380R | These results have elevated detection limits because of the method used (ICPAES). The results are usable without qualification. |
| RE16-98-0041, -0042, -0045 | Boron | 4378R | Boron results are not validated. |
| RE16-98-0041, -0042, -0045 | TAL metals | 4378R | Antimony results were rejected because of very low matrix spike recovery (24%). Silver, cobalt, nickel, and selenium were qualified as UJ due to poor matrix spike results of 67%, 74%, 74%, and 34% respectively. Zinc, manganese, chromium, and arsenic were qualified as J- due to poor spike recoveries of 68%, 32%, 71%, and 71% respectively. The lower acceptable limit is 75%. All data are usable with qualification. |
| RE16-99-0006 | TAL metals | 5210R | All results were rejected due to very poor duplicate recoveries in almost every element. |
| RE16-99-0012 | TAL metals | 5461R | Chromium was detected in the blank. Therefore, chromium was qualified as undetected in the sample. All data are usable with qualification. |

[a] Request number is defined in the Glossary, Appendix A.

[b] Data qualifiers are defined in the Glossary, Appendix A.

**Table C-4.2-4**
**Data Quality Assessment for PRS 16-034(p)**

| Sample ID | Analytical Suite | Request Number[a] | Data Quality Assessment[b] |
|---|---|---|---|
| RE16-98-0065 through 0068 | TAL metals and cyanide | 4721R | All results were rejected due to very poor QA/QC results. |
| RE16-98-0069 | TAL metals | 4923R | The spike results for antimony were 39% and antimony results were qualified as UJ. The duplicate result for selenium was 200%, well above the acceptable limit of 125%. Selenium results were qualified as P and should be considered estimated. All results are usable with qualification. |
| RE16-98-0069 | Radionuclides | 4925R | There was insufficient sample for a duplicate analysis so the sample was analyzed twice. The data were not qualified on this basis. All results are usable without qualification. |
| RE16-98-0071 through -0076 | TAL metals and cyanide | 5045R | Antimony results were rejected because of extremely poor spike recovery (3%). The QA/QC sample for cyanide analysis was not a LANL sample. The duplicate results were unacceptable although the matrix spike and matrix spike duplicate results were within acceptable limits. This had no impact of the analytical results. Cyanide results for sample RA16-98-0071 were rejected because there appeared to be carryover contamination from the laboratory control standard used by the laboratory. All results except antimony and one cyanide result are usable without qualification. |
| RE16-98-0077, -0083, -0084, -0085 | TAL metals and cyanide | 5088R | The QA/QC analysis was conducted on a sample not associated with this request but also from TA-16. This did not affect the analytical results. Antimony and mercury results were qualified as UJ because the spike recoveries were 66% and 64% respectively, outside of the acceptable limit of 75%. However, mercury along with beryllium and selenium were qualified as U because they were detected in the blank. Silver results were rejected because of extremely poor silver spike recovery (1%). All data except silver are usable with qualification. |
| RE16-99-0018, -0020 | TAL metals | 5229R | Antimony results were qualified as UJ because the spike recovery results were 62%, below the acceptable limit of 75%. Manganese and lead results were qualified as P due to poor duplicate recovery results. Antimony results are usable with qualification. All remaining results are usable without qualification. |

[a] Request number is defined in the Glossary, Appendix A.

[b] Data qualifiers are defined in the Glossary, Appendix A.

# APPENDIX D. ANALYTICAL SUITES AND RESULTS

This appendix presents the environmental data collected during the V-Site VCM. There are two sections:(1) analytical laboratory/field-screening target analytes and DLs, and (2) the actual analytical laboratory results in hard copy table form. (Some copies of this report also contain electronic versions of these tables.)

## D-1.0 Target Analytes and DLs

This section presents tables of target analytes and the DLs for all analyses conducted during this investigation. Analyses are divided into routine analytical suites (as provided by commercial laboratories) and field-screening analytical suites.

### D-1.1 Routine Analytical Suites

#### D-1.1.1 Inorganic Analytes

Estimated detection limits (EDLs) for inorganic target analytes are presented in Table D-1.1-1.

**Table D-1.1-1**
**Inorganic Target Analytes and EDLs**

| Target Analyte | ICPAES[a] for Soils, mg/kg[b] | GFAA or ICPMS for Soils, mg/kg[b] |
|---|---|---|
| Aluminum | 40 | — |
| Antimony | 12 | — |
| Arsenic | NR[c] | 2 |
| Barium | 40 | — |
| Beryllium | 1 | — |
| Cadmium[d] | 1 | — |
| Calcium | 1000 | — |
| Chromium[d] | 2 | — |
| Cobalt | 10 | — |
| Copper | 5 | — |
| Cyanide[e] | NR | NR |
| Iron | 20 | — |
| Lead[d] | 0.6 | 0.2 |
| Magnesium | 1000 | — |
| Manganese | 3 | — |
| Mercury[f] | NR | NR |
| Nickel | 8 | — |
| Potassium | 1000 | — |
| Selenium | NR | 1 |

**Table D-1.1-1**
**Inorganic Target Analytes and EDLs (continued)**

| Target Analyte | ICPAES[a] for Soils, mg/kg[b] | GFAA or ICPMS for Soils, mg/kg[b] |
|---|---|---|
| Silver[d] | 2 | — |
| Sodium | 1000 | — |
| Thallium | NR | 2 |
| Vanadium | 10 | — |
| Zinc | 4 | — |

[a] Recommended method for inductively coupled plasma atomic emission spectroscopy (ICPAES) analysis is SW-846 Method 6010A.

[b] Soil EDLs for ICPAES, graphite furnace atomic absorption (GFAA) spectroscopy, and inductively coupled plasma mass spectroscopy (ICPMS) analytes are based upon a 1 g sample taken to a final volume of 200 ml.

[c] NR = Not recommended; analyte should not be determined using this method.

[d] Atomic absorption (AA) methods or ICPMS may also be used for these analytes.

[e] Cyanide may be determined using SW-846 Methods 9010, 9010A, and 9012, or EPA 335.2; the EDLs for cyanide are 10 µg/l (water) and 0.05 mg/kg (soils).

[f] Mercury should be determined by the cold vapor technique using an EDL for water of 0.2 µg/l and an EDL for soils of 0.1 mg/kg.

In cases where the EDL for a metal cannot be met using ICPAES, or where false positives are known to be a problem historically within a laboratory, the subcontractor must use the GFAA technique (e.g., SW-846 Method 7841 for thallium and SW-846 Method 7421 for lead) or the ICPMS technique (e.g., SW-846 Method 6020).

### D-1.1.2 Organic Analytes

Table D-1.1-2 identifies the volatile organic target analytes and their associated EQLs. The following EPA methods are available for use: SW-846 Method 8260 (dated 11/90 or later) or the CLP method for volatiles (OLM02.0 or later, using capillary column). These methods are based on purge-and-trap sample extraction/concentration followed by gas chromatography/mass spectrometry analysis. Tentatively identified compounds (TICs) may be requested. If they are requested, they should be identified and quantitated per the CLP method for volatiles (OLM02.0 or later).

**Table D-1.1-2**
**Volatile Organic Target Analytes and Associated EQLs**

| Target Analyte | Soils/Solids, mg/kg |
|---|---|
| Acetone | 20 |
| Benzene | 5 |
| Bromobenzene | 5 |
| Bromochloromethane | 5 |
| Bromodichloromethane | 5 |
| Bromoform | 5 |
| Bromomethane | 10 |
| 2-Butanone | 20 |
| n-Butylbenzene | 5 |
| sec-Butylbenzene | 5 |

**Table D-1.1-2**
**Volatile Organic Target Analytes and Associated EQLs (continued)**

| Target Analyte | Soils/Solids, mg/kg |
|---|---|
| tert-Butylbenzene | 5 |
| Carbon disulfide | 5 |
| Carbon tetrachloride | 5 |
| Chlorobenzene | 5 |
| Chlorodibromomethane | 5 |
| Chloroethane | 10 |
| Chloroform | 5 |
| Chloromethane | 10 |
| 2-Chlorotoluene | 5 |
| 4-Chlorotoluene | 5 |
| 1,2-Dibromo-3-chloropropane | 10 |
| 1,2-Dibromoethane | 5 |
| Dibromomethane | 5 |
| 1,2-Dichlorobenzene | 5 |
| 1,3-Dichlorobenzene | 5 |
| 1,4-Dichlorobenzene | 5 |
| Dichlorodifluoromethane | 10 |
| 1,1-Dichloroethane | 5 |
| 1,2-Dichloroethane | 5 |
| 1,1-Dichloroethene | 5 |
| 1,2-Dichloroethene (total) | 10 |
| 1,2-Dichloropropane | 5 |
| 1,3-Dichloropropane | 5 |
| 2,2-Dichloropropane | 5 |
| 1,1-Dichloropropene | 5 |
| c-1,3-Dichloropropene | 5 |
| t-1,3-Dichloropropene | 5 |
| 2-Hexanone | 20 |
| Iodomethane | 5 |
| Isopropylbenzene | 5 |
| p-Isopropyltoluene | 5 |
| Methylene chloride | 5 |
| 4-Methyl-2-pentanone | 20 |
| n-Propylbenzene | 5 |
| Styrene | 5 |
| 1,1,1,2-Tetrachloroethane | 5 |
| 1,1,2,2-Tetrachloroethane | 5 |
| Tetrachloroethene | 5 |

**Table D-1.1-2**
**Volatile Organic Target Analytes and Associated EQLs (continued)**

| Target Analyte | Soils/Solids, mg/kg |
|---|---|
| Toluene | 5 |
| 1,1,1-Trichloroethane | 5 |
| 1,1,2-Trichloroethane | 5 |
| Trichloroethene | 5 |
| Trichlorofluoromethane | 5 |
| 1,2,3-Trichloropropane | 5 |
| Trichlorotrifluoroethane | 5 |
| 1,2,4-Trimethylbenzene | 5 |
| 1,3,5-Trimethylbenzene | 5 |
| Vinyl chloride | 10 |
| o,m,p-Xylene (mixed) | 5 |

Table D-1.1-3 identifies the semivolatile organic target analytes and their associated EQLs. The EPA methods that can be used are SW-846 Method 8270 (dated 11/90 or later) or the CLP method for semivolatiles (OLM02.0 or later). These methods are based on solvent extraction, concentration, and gas chromatography and mass spectrometry (GC/MS) detection and quantitation. TICs may be requested. If they are requested, they should be identified and quantitated per the CLP method for semivolatiles (OLM02.0 or later).

**Table D-1.1-3**
**Semivolatile Organic Target Analytes and Associated EQLs**

| Target Analyte | Soils/Solids, mg/kg[a] |
|---|---|
| Acenaphthene | 330 |
| Acenaphthylene | 330 |
| Aniline | 660 |
| Anthracene | 330 |
| Azobenzene | 660 |
| Benz(a)anthracene | 330 |
| Benzoic acid | 3300 |
| Benzo(a)pyrene | 330 |
| Benzo(b)fluoranthene | 330 |
| Benzo(g,h,i)perylene | 330 |
| Benzo(k)fluoranthene | 330 |
| Benzyl alcohol | 1300 |
| Bis(2-chloroethoxy)methane | 330 |
| Bis(2-chloroethyl)ether | 330 |
| Bis(2-ethylhexyl)phthalate | 330 |
| 4-Bromophenyl phenylether | 330 |
| Butylbenzylphthalate | 330 |
| 4-Chloroaniline | 1300 |
| 4-Chloro-3-methylphenol | 660 |

**Table D-1.1-3**
**Semivolatile Organic Target Analytes and Associated EQLs (continued)**

| Target Analyte | Soils/Solids, mg/kg[a] |
|---|---|
| 2-Chloronaphthalene | 330 |
| 2-Chlorophenol | 330 |
| 4-Chlorophenyl phenylether | 330 |
| Chrysene | 330 |
| Dibenz(a,h)anthracene | 330 |
| Dibenzofuran | 330 |
| 1,2-Dichlorobenzene | 330 |
| 1,3-Dichlorobenzene | 330 |
| 1,4-Dichlorobenzene | 330 |
| 3,3'-Dichlorobenzidine | 660 |
| 2,4-Dichlorophenol | 330 |
| Diethylphthalate | 330 |
| Dimethyl phthalate | 330 |
| 2,4-Dimethylphenol | 330 |
| 2,4-Dinitrophenol | 1600 |
| Di-n-butylphthalate | 330 |
| 4,6-Dinitro-2-methylphenol | 1600 |
| 2,4-Dinitrotoluene | 330 |
| 2,6-Dinitrotoluene | 330 |
| Di-n-octyl phthalate | 330 |
| Fluoranthene | 330 |
| Fluorene | 330 |
| Hexachlorobenzene | 330 |
| Hexachlorobutadiene | 330 |
| Hexachlorocyclopentadiene | 330 |
| Hexachloroethane | 330 |
| Indeno(1,2,3-cd)pyrene | 330 |
| Isophorone | 330 |
| 2-Methylnaphthalene | 330 |
| 2-Methylphenol | 330 |
| 4-Methylphenol | 330 |
| Naphthalene | 330 |
| 2-Nitroaniline | 1600 |
| 3-Nitroaniline | 1600 |
| 4-Nitroaniline | 660 |
| Nitrobenzene | 330 |
| 2-Nitrophenol | 330 |
| 4-Nitrophenol | 1600 |

**Table D-1.1-3**
**Semivolatile Organic Target Analytes and Associated EQLs (continued)**

| Target Analyte | Soils/Solids, mg/kg[a] |
|---|---|
| N-Nitrosodimethylamine | 330 |
| N-Nitrosodiphenylamine | 330 |
| N-Nitroso-di-n-propylamine | 330 |
| 2,2'-Oxybis(1-chloropropane) | 330 |
| Pentachlorophenol | 1600 |
| Phenanthrene | 330 |
| Phenol | 330 |
| Pyrene | 330 |
| 1,2,4-Trichlorobenzene | 330 |
| 2,4,5-Trichlorophenol | 1600 |
| 2,4,6-Trichlorophenol | 330 |

[a] EQLs for soil are based on gel permeation chromatography (GPC) cleanup not being performed. The laboratories' GPC equipment will determine what the EQL is, based on the volume of extract the GPC equipment uses. However, if possible, the laboratories should concentrate the GPC extract to a volume that makes the EQL for a sample that underwent GPC cleanup no more than twice the listed EQL.

### D-1.1.3 High Explosive Analytes

Table D-1.1-4 presents the HE target analytes for SW-846 Method 8330 and their associated EQLs.

**Table D-1.1-4**
**Nitroaromatic and Nitramine HE Target Analytes and Associated EQLs**

| Target Analyte | Abbreviation | EQL[a] Soils, mg/kg |
|---|---|---|
| Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine | HMX | 2.2 |
| Hexahydro-1,3,5-trinitro-1,3,5-triazine | RDX | 1.0 |
| 1,3,5-Trinitrobenzene | 1,3,5-TNB | 0.25 |
| 1,3-Dinitrobenzene | 1,3-DNB | 0.25 |
| Methyl-2,4,6-trinitrophenylnitramine | Tetryl | 0.65 |
| Nitrobenzene | NB | 0.26 |
| 2,4,6-Trinitrotoluene | 2,4,6-TNT | 0.25 |
| 4-Amino-2,6-dinitrotoluene | 4-ADNT | ND |
| 2-Amino-4,6-dinitrotoluene | 2-ADNT | 0.26 |
| 2,4-Dinitrotoluene | 2,4-DNT | 0.25 |
| 2,6-Dinitrotoluene | 2,6-DNT | 0.26 |
| 2-Nitrotoluene | 2-NT | 0.25 |
| 3-Nitrotoluene | 3-NT | 0.25 |
| 4-Nitrotoluene | 4-NT | 0.25 |

[a] If ND appears in a cell, the EQL has not been determined.

### D-1.1.4 Radiochemical Analytes

Table D-1.1-5 presents EQLs for commonly determined individual radiochemical target analytes as well as analyte suites. The gamma spectroscopy analyte suite (see "Multiple isotopes" in Table D-1.1-5) is defined in Table D-1.1-6.

**Table D-1.1-5**
**Radiochemical Target Analytes and Associated EQLs by Matrix[a]**

| Target Analyte | Soil | Water | Technique |
|---|---|---|---|
| Multiple isotopes (Table D-1.1-6) | Am-241:1<br>Cs-137:1 | Am-241: 20<br>Cs-137: 20 | Gamma spectroscopy |
| Uranium | 0.5 mg/g | 1 µ/l | ICPMS (commonly requested non-routine analysis) |

[a] pCi/g or pCi/l unless otherwise indicated.

**Table D-1.1-6**
**Gamma Spectroscopy Analyte Suite Requirements**

| Nuclide Symbol | Nuclide Name |
|---|---|
| Ac-228 | Actinium-228 |
| Am-241 | Americium-241 |
| Ann Rad | Annihilation radiation |
| Ba-140 | Barium-140 |
| Bi-211 | Bismuth-211 |
| Bi-212 | Bismuth-212 |
| Bi-214 | Bismuth-214 |
| Cd-109 | Cadmium-109 |
| Ce-139 | Cerium-139 |
| Ce-144 | Cerium-144 |
| Co-57 | Cobalt-57 |
| Co-60 | Cobalt-60 |
| Cs-134 | Cesium-134 |
| Cs-137 | Cesium-137 |
| Eu-152 | Europium-152 |
| Hg-203 | Mercury-203 |
| K-40 | Potassium-40 |
| La-140 | Lanthanum-140 |
| Mn-54 | Manganese-54 |
| Na-22 | Sodium-22 |
| Np-237 | Neptunium-237 |
| Pa-231 | Protactinium-231 |
| Pa-233 | Protactinium-233 |
| Pa-234m | Protactinium-234m |
| Pb-211 | Lead-211 |
| Pb-212 | Lead-212 |

**Table D-1.1-6**
**Gamma Spectroscopy Analyte Suite Requirements (continued)**

| Nuclide Symbol | Nuclide Name |
|---|---|
| Pb-214 | Lead-214 |
| Ra-223 | Radium-223 |
| Ra-224 | Radium-224 |
| Ra-226 | Radium-226 |
| Ru-106 | Ruthenium-106 |
| Rn-219 | Radon-219 |
| Se-75 | Selenium-75 |
| Sn-113 | Tin-113 |
| Sr-85 | Strontium-85 |
| Th-227 | Thorium-227 |
| Th-234 | Thorium-234 |
| Tl-208 | Thallium-208 |
| U-235 | Uranium-235 |
| Y-88 | Yttrium-88 |
| Zn-65 | Zinc-65 |

## D-1.2 Field-Screening Analytes

Field screening was conducted for HE using the HE spot test kit, the D-Tech immunoassay test kit, or the Ensys colorimetric test kit. The HE spot test kit has a DL of approximately 100 ppm for any combination of HE listed in Table D-1.1-4. The DLs for the D-Tech immunoassay test kit for RDX and TNT and the Ensys colorimetric test kit for RDX and TNT are listed in Table D-1.2-1.

**Table D-1.2-1**
**DLs for Field-Screening Target Analytes**

| Test Kit | HE | Minimum DL in Soil (ppm) | Minimum DL in Water (ppb) |
|---|---|---|---|
| D-Tech RDX | RDX | 0.5 | 5 |
| D-Tech RDX | HMX | 15 | 150 |
| D-Tech TNT | TNT | 0.5 | 5 |
| D-Tech TNT | Tetryl | 1.5 | 15 |
| D-Tech TNT | TNB | 2 | 20 |
| D-Tech TNT | 2-Amino-4,6-DNT | 3 | 30 |
| D-Tech TNT | 2,4-DNT | 12 | 120 |
| Ensys RDX | RDX | 1 | NA[a] |
| Ensys RDX | HMX | 1.25 | NA |
| Ensys RDX | PETN | 1 | NA |
| Ensys RDX | Nitroglycerine | 3.3 | NA |
| Ensys RDX | Nitroguanadine | 14.3 | NA |
| Ensys RDX | Nitrocellulose | 50 | NA |

**Table D-1.2-1**
**DLs for Field-Screening Target Analytes**

| Test Kit | HE | Minimum DL in Soil (ppm) | Minimum DL in Water (ppb) |
|---|---|---|---|
| Ensys TNT | TNT | 1 | NA |
| Ensys TNT | 2,4-DNT | 1.1 | NA |
| Ensys TNT | 2,6-DNT | 0.6 | NA |
| Ensys TNT | TNB | 1 | NA |

[a] NA = Not applicable.

## D-2.0 Analytical Laboratory Results

This section presents all analytical results associated with the V-Site VCM.

Analytical results are provided in hard copy on the following pages and electronically (with more detail) in Excel 4.0 spreadsheet format on 3.5-in. diskettes (in clear plastic binder sleeves). These diskettes are included with those copies of the report that state "Data disks included with this copy" on the front cover.

Electronic copies of analytical results are also available from the ER Project's Facility for Information Management, Analysis, and Display (FIMAD). FIMAD personnel have verified all FIMAD data for accuracy before the data was submitted.

Below is a guide to which tables are on which data disks:

| | |
|---|---|
| Data Disk #1 | Table D-2.0-1, PRS 16-005(d); Table D-2.0-2, PRS 16-006(g) |
| Data Disk #2 | Table D-2.0-3, PRS 16-029(g2)/C-16-074; Table D-2.0-4, PRS 16-034(p) |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Acenaphthene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Acenaphthene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Acenaphthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Acenaphthene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Acenaphthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Acenaphthene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Acenaphthylene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Acenaphthylene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Acenaphthylene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Acenaphthylene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Acenaphthylene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Acenaphthylene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Acetone | 25 | UG/KG | 25 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Acetone | 22 | UG/KG | 22 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Acetone | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Acetone | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Acetone | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Acetone | 0.024 | MG/KG | 24 | UG/KG | JB | U | V4 | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Aluminum | 9900 | MG/KG | 9900 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Aluminum | 11000 | MG/KG | 11000 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Aluminum | 23000 | MG/KG | 23000 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Aluminum | 8900 | MG/KG | 8900 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Aluminum | 11000 | MG/KG | 11000 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Aluminum | 11000 | MG/KG | 11000 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Aluminum | 10000 | MG/KG | 10000 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Aluminum | 6780 | MG/KG | 6780 | MG/KG | None | J- A | I3a | J- | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.088 | MG/KG | 0.088 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.086 | MG/KG | 0.086 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.365 | MG/KG | 0.365 | UG/G | None | None | None | None | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.087 | MG/KG | 0.087 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.089 | MG/KG | 0.089 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.09 | MG/KG | 0.09 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.433 | MG/KG | 0.433 | UG/G | None | None | None | None | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.086 | MG/KG | 0.086 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.084 | MG/KG | 0.084 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.302 | MG/KG | 0.302 | UG/G | None | None | None | None | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.085 | MG/KG | 0.085 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.087 | MG/KG | 0.087 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.088 | MG/KG | 0.088 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.299 | MG/KG | 0.299 | UG/G | None | None | None | None | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Aniline | 810 | UG/KG | 810 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Aniline | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Aniline | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Aniline | 840 | UG/KG | 840 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Aniline | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Aniline | 900 | UG/KG | 900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Anthracene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Anthracene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Anthracene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Anthracene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Antimony | 13 | MG/KG | 13 | MG/KG | U | UJ | I3e | UJ | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Antimony | 12 | MG/KG | 12 | MG/KG | U | UJ | I3e | UJ | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Antimony | 13 | MG/KG | 13 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Antimony | 11 | MG/KG | 11 | MG/KG | U | A UJ | I3e | UJ | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Antimony | 11 | MG/KG | 11 | MG/KG | U | A UJ | I3e | UJ | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Antimony | 13 | MG/KG | 13 | MG/KG | U | A UJ | I3e | UJ | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Antimony | 12 | MG/KG | 12 | MG/KG | U | A UJ | I3e | UJ | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Antimony | 1.2 | MG/KG | 1.2 | MG/KG | UN | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | RE16-99-0001 | 66 | 78 | IN | S2 | QBT4 | Antimony | 0.1 | MG/KG | 0.14 | MG/KG | BN | UJ | I3E | UJ | INORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Antimony | 0.14 | MG/KG | 0.1 | MG/KG | BN | UJ | I3E | UJ | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Arsenic | 6.9 | MG/KG | 6.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Arsenic | 3.2 | MG/KG | 3.2 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Arsenic | 4.6 | MG/KG | 4.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Arsenic | 3.7 | MG/KG | 3.7 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Arsenic | 4 | MG/KG | 4 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Arsenic | 6.7 | MG/KG | 6.7 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Arsenic | 4 | MG/KG | 4 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Arsenic | 3.9 | MG/KG | 3.9 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Azobenzene | 810 | UG/KG | 810 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Azobenzene | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Azobenzene | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Azobenzene | 840 | UG/KG | 840 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Azobenzene | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Azobenzene | 900 | UG/KG | 900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Barium | 150 | MG/KG | 150 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Barium | 2000 | MG/KG | 2000 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Barium | 190 | MG/KG | 190 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Barium | 250 | MG/KG | 250 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Barium | 250 | MG/KG | 250 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Barium | 180 | MG/KG | 180 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Barium | 1200 | MG/KG | 1200 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Barium | 111 | MG/KG | 111 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Benzene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Benzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Benzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Benzene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Benzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzidine | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Benzo(a)anthracene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Benzo(a)anthracene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Benzo(a)anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Benzo(a)anthracene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Benzo(a)anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzo(a)anthracene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Benzo(a)pyrene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Benzo(a)pyrene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Benzo(a)pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Benzo(a)pyrene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Benzo(a)pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzo(a)pyrene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Benzo(b)fluoranthene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Benzo(b)fluoranthene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Benzo(b)fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Benzo(b)fluoranthene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Benzo(b)fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzo(b)fluoranthene | 99 | UG/KG | 99 | UG/KG | J | None | None | J | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzo(g,h,i)perylene | 150 | UG/KG | 150 | UG/KG | J | None | None | J | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Benzo(k)fluoranthene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Benzo(k)fluoranthene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Benzo(k)fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Benzo(k)fluoranthene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Benzo(k)fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzo(k)fluoranthene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Benzoic Acid | 4100 | UG/KG | 4100 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Benzoic Acid | 3500 | UG/KG | 3500 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Benzoic Acid | 3900 | UG/KG | 3900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Benzoic Acid | 4200 | UG/KG | 4200 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Benzoic Acid | 3900 | UG/KG | 3900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzoic Acid | 2300 | UG/KG | 2300 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Benzyl Alcohol | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Benzyl Alcohol | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Benzyl Alcohol | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Benzyl Alcohol | 900 | UG/KG | 900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Beryllium | 0.94 | MG/KG | 0.94 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Beryllium | 0.98 | MG/KG | 0.98 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Beryllium | 1.1 | MG/KG | 1.1 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Beryllium | 0.57 | MG/KG | 0.57 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Beryllium | 0.79 | MG/KG | 0.79 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Beryllium | 1 | MG/KG | 1 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Beryllium | 0.74 | MG/KG | 0.74 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Beryllium | 0.61 | MG/KG | 0.61 | MG/KG | B | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bis(2-chloroethoxy)methane | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bis(2-chloroethyl)ether | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bis(2-ethylhexyl)phthalate | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bromobenzene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bromobenzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bromobenzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bromobenzene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bromobenzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bromobenzene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bromochloromethane | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bromochloromethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bromochloromethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bromochloromethane | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bromochloromethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bromochloromethane | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bromodichloromethane | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bromodichloromethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bromodichloromethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bromodichloromethane | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bromodichloromethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bromodichloromethane | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bromoform | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bromoform | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bromoform | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bromoform | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bromoform | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bromoform | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bromomethane | 12 | UG/KG | 12 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bromomethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bromomethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bromomethane | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bromomethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bromomethane | 0.014 | MG/KG | 14 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Bromophenyl-phenylether[4-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Butanone[2-] | 25 | UG/KG | 25 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Butanone[2-] | 22 | UG/KG | 22 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Butanone[2-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Butanone[2-] | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Butanone[2-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Butanone[2-] | 0.027 | MG/KG | 27 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Butylbenzene[n-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Butylbenzene[n-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Butylbenzene[n-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Butylbenzene[n-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Butylbenzene[n-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Butylbenzene[n-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Butylbenzene[sec-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Butylbenzene[sec-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Butylbenzene[sec-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Butylbenzene[sec-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Butylbenzene[sec-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Butylbenzene[sec-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Butylbenzene[tert-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Butylbenzene[tert-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Butylbenzene[tert-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Butylbenzene[tert-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Butylbenzene[tert-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Butylbenzene[tert-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Butylbenzylphthalate | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Butylbenzylphthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Butylbenzylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Butylbenzylphthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Butylbenzylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Butylbenzylphthalate | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Cadmium | 0.63 | MG/KG | 0.63 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Cadmium | 0.62 | MG/KG | 0.62 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Cadmium | 0.63 | MG/KG | 0.63 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Cadmium | 0.57 | MG/KG | 0.57 | MG/KG | None | A | None | U | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Cadmium | 0.57 | MG/KG | 0.57 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Cadmium | 0.64 | MG/KG | 0.64 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Cadmium | 0.6 | MG/KG | 0.6 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Cadmium | 0.19 | MG/KG | 0.19 | MG/KG | B | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Calcium | 2100 | MG/KG | 2100 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Calcium | 1200 | MG/KG | 1200 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Calcium | 2900 | MG/KG | 2900 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Calcium | 1400 | MG/KG | 1400 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Calcium | 1600 | MG/KG | 1600 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Calcium | 2100 | MG/KG | 2100 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Calcium | 2300 | MG/KG | 2300 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Calcium | 12000 | MG/KG | 12000 | MG/KG | * | P A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Carbazole | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Carbon Disulfide | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Carbon Disulfide | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Carbon Disulfide | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Carbon Disulfide | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Carbon Disulfide | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Carbon Disulfide | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Carbon Tetrachloride | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Carbon Tetrachloride | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Carbon Tetrachloride | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Carbon Tetrachloride | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Carbon Tetrachloride | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Carbon Tetrachloride | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 810 | UG/KG | 810 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 840 | UG/KG | 840 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chloro-3-methylphenol[4-] | 900 | UG/KG | 900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chloroaniline[4-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chloroaniline[4-] | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chloroaniline[4-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chloroaniline[4-] | 900 | UG/KG | 900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chlorobenzene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chlorobenzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chlorobenzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chlorobenzene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chlorobenzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chlorobenzene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chlorodibromomethane | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chlorodibromomethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chlorodibromomethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chlorodibromomethane | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chlorodibromomethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chlorodibromomethane | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chloroethane | 12 | UG/KG | 12 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chloroethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chloroethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chloroethane | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chloroethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chloroethane | 0.014 | MG/KG | 14 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chloroform | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chloroform | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chloroform | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chloroform | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chloroform | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chloroform | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chloromethane | 12 | UG/KG | 12 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chloromethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chloromethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chloromethane | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chloromethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chloromethane | 0.014 | MG/KG | 14 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chloronaphthalene[2-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chloronaphthalene[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chloronaphthalene[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chloronaphthalene[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chloronaphthalene[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chloronaphthalene[2-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chlorophenol[2-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chlorophenol[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chlorophenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chlorophenol[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chlorophenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chlorophenol[2-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chlorophenyl-phenyl[4-] Ether | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chlorotoluene[2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chlorotoluene[2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chlorotoluene[2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chlorotoluene[2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chlorotoluene[2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chlorotoluene[2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chlorotoluene[4-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chlorotoluene[4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chlorotoluene[4-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chlorotoluene[4-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chlorotoluene[4-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chlorotoluene[4-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Chromium, Total | 5.9 | MG/KG | 5.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Chromium, Total | 6.5 | MG/KG | 6.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chromium, Total | 9.9 | MG/KG | 9.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chromium, Total | 7.6 | MG/KG | 7.6 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chromium, Total | 7.5 | MG/KG | 7.5 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chromium, Total | 5 | MG/KG | 5 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chromium, Total | 7.6 | MG/KG | 7.6 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chromium, Total | 5.8 | MG/KG | 5.8 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Chrysene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Chrysene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Chrysene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Chrysene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Chrysene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Chrysene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Cobalt | 3.9 | MG/KG | 3.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Cobalt | 2.3 | MG/KG | 2.3 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Cobalt | 6.3 | MG/KG | 6.3 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Cobalt | 5.9 | MG/KG | 5.9 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Cobalt | 5.6 | MG/KG | 5.6 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Cobalt | 1.7 | MG/KG | 1.7 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Cobalt | 6 | MG/KG | 6 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Cobalt | 4.1 | MG/KG | 4.1 | MG/KG | B | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Copper | 6 | MG/KG | 6 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Copper | 7.9 | MG/KG | 7.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Copper | 8.9 | MG/KG | 8.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Copper | 7.6 | MG/KG | 7.6 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Copper | 7.5 | MG/KG | 7.5 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Copper | 3.8 | MG/KG | 3.8 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Copper | 6.8 | MG/KG | 6.8 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Copper | 6.8 | MG/KG | 6.8 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Di-n-butylphthalate | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Di-n-butylphthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Di-n-butylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Di-n-butylphthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Di-n-butylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Di-n-butylphthalate | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Di-n-octylphthalate | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Di-n-octylphthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Di-n-octylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Di-n-octylphthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Di-n-octylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Di-n-octylphthalate | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dibenz(a,h)anthracene | 150 | UG/KG | 150 | UG/KG | J | None | None | J | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dibenzofuran | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dibenzofuran | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dibenzofuran | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dibenzofuran | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dibenzofuran | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dibenzofuran | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 12 | UG/KG | 12 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dibromo-3-chloropropane[1,2-] | 0.014 | MG/KG | 14 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dibromoethane[1,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dibromoethane[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dibromoethane[1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dibromoethane[1,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dibromoethane[1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dibromoethane[1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dibromomethane | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dibromomethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dibromomethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dibromomethane | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dibromomethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dibromomethane | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorobenzene[1,2-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorobenzene[1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorobenzene[1,3-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorobenzene[1,3-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorobenzene[1,4-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorobenzene[1,4-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 810 | UG/KG | 810 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 840 | UG/KG | 840 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorobenzidine[3,3'-] | 900 | UG/KG | 900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorodifluoromethane | 12 | UG/KG | 12 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorodifluoromethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorodifluoromethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorodifluoromethane | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorodifluoromethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorodifluoromethane | 0.014 | MG/KG | 14 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloroethane[1,1-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloroethane[1,1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloroethane[1,1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloroethane[1,1-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloroethane[1,1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloroethane[1,1-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloroethane[1,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloroethane[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloroethane[1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloroethane[1,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloroethane[1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloroethane[1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloroethene[1,1-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloroethene[1,1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloroethene[1,1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloroethene[1,1-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloroethene[1,1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloroethene[1,1-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 12 | UG/KG | 12 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloroethene[cis-1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 12 | UG/KG | 12 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloroethene[trans-1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichlorophenol[2,4-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloropropane[1,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloropropane[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloropropane[1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloropropane[1,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloropropane[1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloropropane[1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloropropane[1,3-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloropropane[1,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloropropane[1,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloropropane[1,3-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloropropane[1,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloropropane[1,3-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloropropane[2,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloropropane[2,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloropropane[2,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloropropane[2,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloropropane[2,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloropropane[2,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloropropene[1,1-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloropropene[1,1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloropropene[1,1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloropropene[1,1-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloropropene[1,1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloropropene[1,1-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloropropene[cis-1,3-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dichloropropene[trans-1,3-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Diethylphthalate | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Diethylphthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Diethylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Diethylphthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Diethylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Diethylphthalate | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dimethyl Phthalate | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dimethyl Phthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dimethyl Phthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dimethyl Phthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dimethyl Phthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dimethyl Phthalate | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dimethylphenol[2,4-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dinitro-2-methylphenol[4,6-] | 2300 | UG/KG | 2300 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.083 | MG/KG | 0.083 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.081 | MG/KG | 0.081 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.083 | MG/KG | 0.083 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.082 | MG/KG | 0.082 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.084 | MG/KG | 0.084 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.085 | MG/KG | 0.085 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.083 | MG/KG | 0.083 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dinitrophenol[2,4-] | 2300 | UG/KG | 2300 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.059 | MG/KG | 0.059 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.057 | MG/KG | 0.057 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.058 | MG/KG | 0.058 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.058 | MG/KG | 0.058 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.059 | MG/KG | 0.059 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.06 | MG/KG | 0.06 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.059 | MG/KG | 0.059 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dinitrotoluene[2,4-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.073 | MG/KG | 0.073 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.071 | MG/KG | 0.071 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.073 | MG/KG | 0.073 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.072 | MG/KG | 0.072 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.074 | MG/KG | 0.074 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.075 | MG/KG | 0.075 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.073 | MG/KG | 0.073 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dinitrotoluene[2,6-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Ethylbenzene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Ethylbenzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Ethylbenzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Ethylbenzene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Ethylbenzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Ethylbenzene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Fluoranthene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Fluoranthene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Fluoranthene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Fluoranthene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Fluorene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Fluorene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Fluorene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Fluorene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Fluorene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Fluorene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Hexachlorobenzene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Hexachlorobenzene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Hexachlorobenzene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Hexachlorobenzene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Hexachlorobenzene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Hexachlorobenzene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Hexachlorobutadiene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Hexachlorobutadiene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Hexachlorobutadiene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Hexachlorobutadiene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Hexachlorobutadiene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Hexachlorobutadiene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Hexachlorobutadiene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Hexachlorocyclopentadiene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Hexachloroethane | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Hexachloroethane | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Hexachloroethane | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Hexachloroethane | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Hexachloroethane | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Hexachloroethane | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Hexanone[2-] | 25 | UG/KG | 25 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Hexanone[2-] | 22 | UG/KG | 22 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Hexanone[2-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Hexanone[2-] | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Hexanone[2-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Hexanone[2-] | 0.027 | MG/KG | 27 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | HMX | 0.168 | MG/KG | 0.168 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | HMX | 0.165 | MG/KG | 0.165 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | HMX | 0.584 | MG/KG | 0.584 | UG/G | None | None | None | None | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | HMX | 0.167 | MG/KG | 0.167 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | HMX | 0.17 | MG/KG | 0.17 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | HMX | 0.173 | MG/KG | 0.173 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | HMX | 0.164 | MG/KG | 0.164 | UG/G | J | None | None | J | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Indeno(1,2,3-cd)pyrene | 140 | UG/KG | 140 | UG/KG | J | None | None | J | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Iodomethane | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Iodomethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Iodomethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Iodomethane | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Iodomethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Iodomethane | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Iron | 7800 | MG/KG | 7800 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Iron | 7900 | MG/KG | 7900 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Iron | 12000 | MG/KG | 12000 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Iron | 9900 | MG/KG | 9900 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Iron | 8700 | MG/KG | 8700 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Iron | 6500 | MG/KG | 6500 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Iron | 9300 | MG/KG | 9300 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Iron | 7180 | MG/KG | 7180 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Isophorone | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Isophorone | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Isophorone | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Isophorone | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Isophorone | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Isophorone | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Isopropylbenzene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Isopropylbenzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Isopropylbenzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Isopropylbenzene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Isopropylbenzene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Isopropylbenzene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Isopropyltoluene[4-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Isopropyltoluene[4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Isopropyltoluene[4-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Isopropyltoluene[4-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Isopropyltoluene[4-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Isopropyltoluene[4-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Lead | 19 | MG/KG | 19 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Lead | 9.6 | MG/KG | 9.6 | MG/KG | None | None | None | None | INORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Lead | 20 | MG/KG | 20 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Lead | 21 | MG/KG | 21 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Lead | 11 | MG/KG | 11 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Lead | 8.3 | MG/KG | 8.3 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Lead | 15 | MG/KG | 15 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Lead | 8.9 | MG/KG | 8.9 | MG/KG | None | P A | None | J | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Magnesium | 1600 | MG/KG | 1600 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Magnesium | 1400 | MG/KG | 1400 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Magnesium | 2000 | MG/KG | 2000 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Magnesium | 1700 | MG/KG | 1700 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Magnesium | 1600 | MG/KG | 1600 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Magnesium | 1400 | MG/KG | 1400 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Magnesium | 1500 | MG/KG | 1500 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Magnesium | 1010 | MG/KG | 1010 | MG/KG | B | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Manganese | 300 | MG/KG | 300 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Manganese | 120 | MG/KG | 120 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Manganese | 380 | MG/KG | 380 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Manganese | 250 | MG/KG | 250 | MG/KG | None | A J- | I3a | J- | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Manganese | 220 | MG/KG | 220 | MG/KG | None | A J- | I3a | J- | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Manganese | 96 | MG/KG | 96 | MG/KG | None | A J- | I3a | J- | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Manganese | 400 | MG/KG | 400 | MG/KG | None | A J- | I3a | J- | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Manganese | 220 | MG/KG | 220 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Mercury | 0.13 | MG/KG | 0.13 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Mercury | 0.12 | MG/KG | 0.12 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Mercury | 0.13 | MG/KG | 0.13 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Mercury | 0.11 | MG/KG | 0.11 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Mercury | 0.11 | MG/KG | 0.11 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Mercury | 0.13 | MG/KG | 0.13 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Mercury | 0.12 | MG/KG | 0.12 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Mercury | 0.04 | MG/KG | 0.04 | MG/KG | B | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 25 | UG/KG | 25 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 22 | UG/KG | 22 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Methyl-2-pentanone[4-] | 0.007 | MG/KG | 7 | UG/KG | JB | U | V5 | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Methylene Chloride | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Methylene Chloride | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Methylene Chloride | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Methylene Chloride | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Methylene Chloride | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Methylene Chloride | 0.0048 | MG/KG | 4.8 | UG/KG | J | None | None | J | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Methylnaphthalene[2-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Methylnaphthalene[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Methylnaphthalene[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Methylnaphthalene[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Methylnaphthalene[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Methylnaphthalene[2-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Methylphenol[2-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Methylphenol[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Methylphenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Methylphenol[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Methylphenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Methylphenol[2-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Methylphenol[4-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Methylphenol[4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Methylphenol[4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Methylphenol[4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Methylphenol[4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Methylphenol[4-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Naphthalene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Naphthalene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Naphthalene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Naphthalene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Naphthalene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Naphthalene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Naphthalene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Nickel | 9.4 | MG/KG | 9.4 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Nickel | 5.7 | MG/KG | 5.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nickel | 8.8 | MG/KG | 8.8 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nickel | 5.3 | MG/KG | 5.3 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nickel | 5.9 | MG/KG | 5.9 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nickel | 5 | MG/KG | 5 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nickel | 6.3 | MG/KG | 6.3 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nickel | 6.3 | MG/KG | 6.3 | MG/KG | B | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitroaniline[2-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitroaniline[2-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitroaniline[2-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitroaniline[2-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitroaniline[2-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitroaniline[2-] | 2300 | UG/KG | 2300 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitroaniline[3-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitroaniline[3-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitroaniline[3-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitroaniline[3-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitroaniline[3-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitroaniline[3-] | 2300 | UG/KG | 2300 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitroaniline[4-] | 810 | UG/KG | 810 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitroaniline[4-] | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitroaniline[4-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitroaniline[4-] | 840 | UG/KG | 840 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitroaniline[4-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitroaniline[4-] | 900 | UG/KG | 900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Nitrobenzene | 0.091 | MG/KG | 0.091 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Nitrobenzene | 0.088 | MG/KG | 0.088 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrobenzene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrobenzene | 0.09 | MG/KG | 0.09 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrobenzene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrobenzene | 0.09 | MG/KG | 0.09 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrobenzene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrobenzene | 0.091 | MG/KG | 0.091 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrobenzene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrobenzene | 0.093 | MG/KG | 0.093 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrobenzene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrobenzene | 0.091 | MG/KG | 0.091 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrobenzene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrophenol[2-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrophenol[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrophenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrophenol[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrophenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrophenol[2-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrophenol[4-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrophenol[4-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrophenol[4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrophenol[4-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrophenol[4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrophenol[4-] | 2300 | UG/KG | 2300 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitroso-di-n-propylamine[N-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrosodimethylamine[N-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrosodiphenylamine[N-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.168 | MG/KG | 0.168 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.164 | MG/KG | 0.164 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.167 | MG/KG | 0.167 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.166 | MG/KG | 0.166 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.169 | MG/KG | 0.169 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.172 | MG/KG | 0.172 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.168 | MG/KG | 0.168 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.168 | MG/KG | 0.168 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.164 | MG/KG | 0.164 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.167 | MG/KG | 0.167 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.166 | MG/KG | 0.166 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.169 | MG/KG | 0.169 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.172 | MG/KG | 0.172 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.168 | MG/KG | 0.168 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.168 | MG/KG | 0.168 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.164 | MG/KG | 0.164 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.167 | MG/KG | 0.167 | UG/G | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.166 | MG/KG | 0.166 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.169 | MG/KG | 0.169 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.172 | MG/KG | 0.172 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.168 | MG/KG | 0.168 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Oxybis(1-chloropropane)[2,2'-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Pentachlorophenol | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Pentachlorophenol | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Pentachlorophenol | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Pentachlorophenol | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Pentachlorophenol | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Pentachlorophenol | 2300 | UG/KG | 2300 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Phenanthrene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Phenanthrene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Phenanthrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Phenanthrene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Phenanthrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Phenanthrene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Phenol | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Phenol | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Phenol | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Phenol | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Phenol | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Phenol | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Potassium | 1500 | MG/KG | 1500 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Potassium | 1400 | MG/KG | 1400 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Potassium | 1500 | MG/KG | 1500 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Potassium | 1300 | MG/KG | 1300 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Potassium | 1300 | MG/KG | 1300 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Potassium | 1300 | MG/KG | 1300 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Potassium | 1300 | MG/KG | 1300 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Potassium | 956 | MG/KG | 956 | MG/KG | B | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Propylbenzene[1-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Propylbenzene[1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Propylbenzene[1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Propylbenzene[1-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Propylbenzene[1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Propylbenzene[1-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Pyrene | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Pyrene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Pyrene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Pyrene | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Pyridine | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | RDX | 0.168 | MG/KG | 0.168 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | RDX | 0.164 | MG/KG | 0.164 | UG/G | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | RDX | 0.167 | MG/KG | 0.167 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | RDX | 0.166 | MG/KG | 0.166 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | RDX | 0.169 | MG/KG | 0.169 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | RDX | 0.172 | MG/KG | 0.172 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | RDX | 0.373 | MG/KG | 0.373 | UG/G | None | None | None | None | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Selenium | 1.3 | MG/KG | 1.3 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Selenium | 0.62 | MG/KG | 0.62 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Selenium | 0.63 | MG/KG | 0.63 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Selenium | 0.57 | MG/KG | 0.57 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Selenium | 0.57 | MG/KG | 0.57 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Selenium | 0.64 | MG/KG | 0.64 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Selenium | 0.6 | MG/KG | 0.6 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Selenium | 0.71 | MG/KG | 0.71 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Silver | 2.5 | MG/KG | 2.5 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Silver | 2.5 | MG/KG | 2.5 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Silver | 2.5 | MG/KG | 2.5 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Silver | 2.3 | MG/KG | 2.3 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Silver | 2.3 | MG/KG | 2.3 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Silver | 2.6 | MG/KG | 2.6 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Silver | 2.4 | MG/KG | 2.4 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Silver | 0.28 | MG/KG | 0.28 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Sodium | 120 | MG/KG | 120 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Sodium | 140 | MG/KG | 140 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Sodium | 110 | MG/KG | 110 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Sodium | 98 | MG/KG | 98 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Sodium | 80 | MG/KG | 80 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Sodium | 130 | MG/KG | 130 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Sodium | 98 | MG/KG | 98 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Sodium | 100 | MG/KG | 100 | MG/KG | B | U A | I4 | U | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Styrene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Styrene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Styrene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Styrene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Styrene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Styrene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Tetrachloroethane[1,1,1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Tetrachloroethane[1,1,2,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Tetrachloroethene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Tetrachloroethene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Tetrachloroethene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Tetrachloroethene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Tetrachloroethene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Tetrachloroethene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Tetryl | 0.109 | MG/KG | 0.109 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Tetryl | 0.107 | MG/KG | 0.107 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Tetryl | 0.109 | MG/KG | 0.109 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Tetryl | 0.108 | MG/KG | 0.108 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Tetryl | 0.11 | MG/KG | 0.11 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Tetryl | 0.112 | MG/KG | 0.112 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Tetryl | 0.109 | MG/KG | 0.109 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Thallium | 1.6 | MG/KG | 1.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Thallium | 0.35 | MG/KG | 0.35 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Thallium | 0.31 | MG/KG | 0.31 | MG/KG | U | None | None | U | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Thallium | 0.38 | MG/KG | 0.38 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Thallium | 0.56 | MG/KG | 0.56 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Thallium | 0.67 | MG/KG | 0.67 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Thallium | 0.52 | MG/KG | 0.52 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Thallium | 1.2 | MG/KG | 1.2 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | RE16-99-0001 | 66 | 78 | IN | S2 | QBT4 | Thallium | 0.14 | MG/KG | 0.14 | MG/KG | B | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Toluene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Toluene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Toluene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Toluene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Toluene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Toluene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Total Uranium bu ICPMS | 0.72 | MG/KG | 0.72 | MG/KG | None | A J | R7 | J | OTHER |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichlorobenzene[1,2,3-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichlorobenzene[1,2,4-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichlorobenzene[1,2,4-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichloroethane[1,1,1-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichloroethane[1,1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichloroethene | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichloroethene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichloroethene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichloroethene | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichloroethene | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichloroethene | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichlorofluoromethane | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichlorofluoromethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichlorofluoromethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichlorofluoromethane | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichlorofluoromethane | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichlorofluoromethane | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichlorophenol[2,4,5-] | 2300 | UG/KG | 2300 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 410 | UG/KG | 410 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichlorophenol[2,4,6-] | 450 | UG/KG | 450 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trichloropropane[1,2,3-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trimethylbenzene[1,2,4-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trimethylbenzene[1,3,5-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.088 | MG/KG | 0.088 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.086 | MG/KG | 0.086 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.088 | MG/KG | 0.088 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.087 | MG/KG | 0.087 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.089 | MG/KG | 0.089 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.09 | MG/KG | 0.09 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.088 | MG/KG | 0.088 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.084 | MG/KG | 0.084 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.087 | MG/KG | 0.087 | UG/G | None | None | None | None | ORGANIC |

TABLE D-2.0-1
PRS 16-005(d)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.254 | MG/KG | 0.254 | UG/G | None | None | None | None | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.083 | MG/KG | 0.083 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.085 | MG/KG | 0.085 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.086 | MG/KG | 0.086 | UG/G | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 5.18 | MG/KG | 5.18 | UG/G | None | None | None | None | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | RE16-99-0002 | 60 | 66 | IN | S2 | QBT4 | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Uranium | 2.46 | MG/KG | 2.46 | UG/G | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Uranium | 3.5 | MG/KG | 3.5 | UG/G | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Uranium | 3.98 | MG/KG | 3.98 | UG/G | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Uranium | 1.85 | UG/G | 1.85 | UG/G | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Uranium | 1.89 | UG/G | 1.89 | UG/G | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Uranium | 1.98 | UG/G | 1.98 | UG/G | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Uranium | 2.65 | UG/G | 2.65 | UG/G | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Uranium | 28.5 | MG/KG | 28.5 | MG/KG | U | A | None | U | INORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Vanadium | 11 | MG/KG | 11 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Vanadium | 10 | MG/KG | 10 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Vanadium | 19 | MG/KG | 19 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Vanadium | 18 | MG/KG | 18 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Vanadium | 16 | MG/KG | 16 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Vanadium | 7.9 | MG/KG | 7.9 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Vanadium | 19 | MG/KG | 19 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Vanadium | 19.4 | MG/KG | 19.4 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Vinyl Chloride | 12 | UG/KG | 12 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Vinyl Chloride | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Vinyl Chloride | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Vinyl Chloride | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Vinyl Chloride | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Vinyl Chloride | 0.014 | MG/KG | 14 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Xylene (Total) | 6.2 | UG/KG | 6.2 | UG/KG | U | PM | None | U | ORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Xylene (Total) | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Xylene (Total) | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Xylene (Total) | 6.3 | UG/KG | 6.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Xylene (Total) | 5.9 | UG/KG | 5.9 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Xylene (Total) | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Xylene[1,2-] | 0.0068 | MG/KG | 6.8 | UG/KG | U | None | None | U | ORGANIC |
| 16-005(d) | 16-3341 | 0316-98-0096 | 36 | 48 | IN | S2 | ALLH | Zinc | 19 | MG/KG | 19 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3343 | 0316-98-0097 | 38 | 50 | IN | S2 | ALLH | Zinc | 27 | MG/KG | 27 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-3345 | 0316-98-0098 | 29 | 41 | IN | S2 | ALLH | Zinc | 30 | MG/KG | 30 | MG/KG | None | None | None | None | INORGANIC |
| 16-005(d) | 16-5791 | RE16-98-0001 | 24 | 36 | IN | S2 | ALLH | Zinc | 28 | MG/KG | 28 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5792 | RE16-98-0002 | 24 | 36 | IN | S2 | ALLH | Zinc | 23 | MG/KG | 23 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3341 | RE16-98-0003 | 43.2 | 55.2 | IN | S2 | ALLH | Zinc | 17 | MG/KG | 17 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-3343 | RE16-98-0004 | 36 | 48 | IN | S2 | ALLH | Zinc | 30 | MG/KG | 30 | MG/KG | None | A | None | None | INORGANIC |
| 16-005(d) | 16-5793 | RE16-98-0005 | 108 | 114 | IN | SS | ALLH | Zinc | 26.2 | MG/KG | 26.2 | MG/KG | None | A | None | None | INORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Acenaphthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Acenaphthene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Acenaphthene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Acenaphthylene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Acenaphthylene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Acenaphthylene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Acetone | 23 | UG/KG | 23 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Acetone | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Acetone | 0.004 | MG/KG | 4 | UG/KG | J | JPM | V1 | J | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Acetone | 46 | UG/KG | 46 | UG/KG | None | None | None | None | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Acetone | 32 | UG/KG | 32 | UG/KG | B | U | V4 | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Acetonitrile | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Acetonitrile | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Acetonitrile | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Acrolein | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Acrolein | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Acrolein | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Acrylonitrile | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Acrylonitrile | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Acrylonitrile | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Aluminum | 3270 | MG/KG | 3270 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Aluminum | 3810 | MG/KG | 3810 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Aluminum | 2730 | MG/KG | 2730 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.085 | MG/KG | 0.085 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.086 | MG/KG | 0.086 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.085 | MG/KG | 0.085 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.083 | MG/KG | 0.083 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.084 | MG/KG | 0.084 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.083 | MG/KG | 0.083 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Aniline | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Aniline | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Aniline | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Anthracene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Anthracene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Antimony | 0.46 | MG/KG | 0.46 | MG/KG | UN | UJ | I3e | UJ | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Antimony | 0.32 | MG/KG | 0.32 | MG/KG | UN | UJ | I3e | UJ | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Antimony | 0.38 | MG/KG | 0.38 | MG/KG | U | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Arsenic | 3.5 | MG/KG | 3.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Arsenic | 3.6 | MG/KG | 3.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Arsenic | 3 | MG/KG | 3 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Azobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Azobenzene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Azobenzene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Barium | 96 | MG/KG | 96 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Barium | 101 | MG/KG | 101 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Barium | 70.2 | MG/KG | 70.2 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Benzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Benzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Benzene | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Benzene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Benzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Benzo(a)anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Benzo(a)anthracene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Benzo(a)anthracene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Benzo(a)pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Benzo(a)pyrene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Benzo(a)pyrene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Benzo(b)fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Benzo(b)fluoranthene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Benzo(b)fluoranthene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Benzo(k)fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Benzo(k)fluoranthene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Benzo(k)fluoranthene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Benzoic Acid | 3800 | UG/KG | 3800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Benzoic Acid | 4200 | UG/KG | 4200 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Benzoic Acid | 3.7 | MG/KG | 3700 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Benzyl Alcohol | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Benzyl Alcohol | 1.4 | MG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Beryllium | 0.49 | MG/KG | 0.49 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Beryllium | 0.51 | MG/KG | 0.51 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Beryllium | 0.42 | MG/KG | 0.42 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 230 | UG/KG | 230 | UG/KG | B | U | SV5 | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 270 | UG/KG | 270 | UG/KG | B | U | SV5 | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Boron | 4.69 | MG/KG | 4.69 | MG/KG | None | None | None | nv | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Boron | 3.39 | MG/KG | 3.39 | MG/KG | None | None | None | nv | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Boron | 6.4 | MG/KG | 6.4 | MG/KG | None | None | None | nv | INORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Boron | 28 | MG/KG | 28 | MG/KG | U | None | None | U | INORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Boron | 1.8 | MG/KG | 1.8 | MG/KG | U | P | None | J | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bromobenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bromobenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bromobenzene | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Bromobenzene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Bromobenzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bromochloromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bromochloromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bromochloromethane | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Bromochloromethane | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Bromochloromethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bromodichloromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bromodichloromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bromodichloromethane | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Bromodichloromethane | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Bromodichloromethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bromoform | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bromoform | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bromoform | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Bromoform | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Bromoform | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bromomethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bromomethane | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bromomethane | 0.011 | MG/KG | 11 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Bromomethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Bromomethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Butanone[2-] | 23 | UG/KG | 23 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Butanone[2-] | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Butanone[2-] | 0.023 | MG/KG | 23 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Butanone[2-] | 22 | UG/KG | 22 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Butanone[2-] | 21 | UG/KG | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Butylbenzene[n-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Butylbenzene[n-] | 4 | UG/KG | 4 | UG/KG | J | None | None | R | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Butylbenzene[n-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Butylbenzene[n-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Butylbenzene[n-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Butylbenzene[sec-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Butylbenzene[sec-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Butylbenzene[sec-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Butylbenzene[sec-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Butylbenzene[sec-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Butylbenzene[tert-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Butylbenzene[tert-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Butylbenzene[tert-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Butylbenzene[tert-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Butylbenzene[tert-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Butylbenzylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Butylbenzylphthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Butylbenzylphthalate | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Cadmium | 0.16 | MG/KG | 0.16 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Cadmium | 0.23 | MG/KG | 0.23 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Cadmium | 0.13 | MG/KG | 0.13 | MG/KG | B* | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Calcium | 1960 | MG/KG | 1960 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Calcium | 1950 | MG/KG | 1950 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Calcium | 1280 | MG/KG | 1280 | MG/KG | * | P | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Carbazole | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Carbazole | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Carbazole | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Carbon Disulfide | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Carbon Disulfide | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Carbon Disulfide | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Carbon Disulfide | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Carbon Disulfide | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Carbon Tetrachloride | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Carbon Tetrachloride | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Carbon Tetrachloride | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Carbon Tetrachloride | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Carbon Tetrachloride | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloro-1,3-butadiene[2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloro-1,3-butadiene[2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloro-1-propene[3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloro-1-propene[3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 750 | UG/KG | 750 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 840 | UG/KG | 840 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 0.74 | MG/KG | 740 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloroaniline[4-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chloroaniline[4-] | 1.4 | MG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chlorobenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chlorobenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chlorobenzene | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Chlorobenzene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Chlorobenzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chlorodibromomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chlorodibromomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chlorodibromomethane | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Chlorodibromomethane | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Chlorodibromomethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloroethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloroethane | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chloroethane | 0.011 | MG/KG | 11 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Chloroethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Chloroethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloroethylvinyl[2-] Ether | 23 | UG/KG | 23 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloroethylvinyl[2-] Ether | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chloroethylvinyl[2-] Ether | 0.023 | MG/KG | 23 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloroform | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloroform | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chloroform | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Chloroform | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Chloroform | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloromethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloromethane | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chloromethane | 0.011 | MG/KG | 11 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Chloromethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Chloromethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chloronaphthalene[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chloronaphthalene[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chloronaphthalene[2-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chlorophenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chlorophenol[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chlorophenol[2-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chlorotoluene[2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chlorotoluene[2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chlorotoluene[2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Chlorotoluene[2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Chlorotoluene[2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chlorotoluene[4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chlorotoluene[4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chlorotoluene[4-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Chlorotoluene[4-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Chlorotoluene[4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chromium, Total | 3.8 | MG/KG | 3.8 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chromium, Total | 4.34 | MG/KG | 4.34 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chromium, Total | 3 | MG/KG | 3 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Chrysene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Chrysene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Chrysene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Cobalt | 4.4 | MG/KG | 4.4 | MG/KG | B | None | None | None | INORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Cobalt | 5.5 | MG/KG | 5.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Cobalt | 3.6 | MG/KG | 3.6 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Copper | 4.9 | MG/KG | 4.9 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Copper | 7.2 | MG/KG | 7.2 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Copper | 4.8 | MG/KG | 4.8 | MG/KG | N* | P | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Di-n-butylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Di-n-butylphthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Di-n-butylphthalate | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Di-n-octylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Di-n-octylphthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Di-n-octylphthalate | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dibenzofuran | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dibenzofuran | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dibenzofuran | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 0.011 | MG/KG | 11 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dibromo-3-chloropropane[1,2-] | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dibromoethane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dibromoethane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dibromoethane[1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dibromoethane[1,2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dibromoethane[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dibromomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dibromomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dibromomethane | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dibromomethane | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dibromomethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloro-2-butene[trans-1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloro-2-butene[trans-1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 750 | UG/KG | 750 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 840 | UG/KG | 840 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 0.74 | MG/KG | 740 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorodifluoromethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorodifluoromethane | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorodifluoromethane | 0.011 | MG/KG | 11 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichlorodifluoromethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichlorodifluoromethane | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloroethane[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloroethane[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloroethane[1,1-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloroethane[1,1-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloroethane[1,1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloroethane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloroethane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloroethane[1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloroethane[1,2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloroethane[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloroethene[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloroethene[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloroethene[1,1-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloroethene[1,1-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloroethene[1,1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloroethene[cis-1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloroethene[trans-1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloropropane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloropropane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloropropane[1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloropropane[1,2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloropropane[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloropropane[1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloropropane[1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloropropane[1,3-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloropropane[1,3-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloropropane[1,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloropropane[2,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloropropane[2,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloropropane[2,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloropropane[2,2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloropropane[2,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloropropene[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloropropene[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloropropene[1,1-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloropropene[1,1-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloropropene[1,1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloropropene[cis-1,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Dichloropropene[trans-1,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Diethylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Diethylphthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Diethylphthalate | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dimethyl Phthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dimethyl Phthalate | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dimethyl Phthalate | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 1.8 | MG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.08 | MG/KG | 0.08 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.081 | MG/KG | 0.081 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dinitrobenzene[1,3-] | 0.08 | MG/KG | 0.08 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 1.8 | MG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.061 | MG/KG | 0.061 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.061 | MG/KG | 0.061 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 0.059 | MG/KG | 0.059 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.081 | MG/KG | 0.081 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.081 | MG/KG | 0.081 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 0.071 | MG/KG | 0.071 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Dioxane[1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Dioxane[1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Ethyl Methacrylate | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Ethyl Methacrylate | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Ethylbenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Ethylbenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Ethylbenzene | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Ethylbenzene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Ethylbenzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Fluoranthene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Fluoranthene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Fluorene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Fluorene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Fluorene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Hexachlorobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Hexachlorobenzene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Hexachlorobenzene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Hexachlorobutadiene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Hexachlorobutadiene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Hexachlorobutadiene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Hexachlorobutadiene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Hexachloroethane | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Hexachloroethane | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Hexachloroethane | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Hexanone[2-] | 23 | UG/KG | 23 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Hexanone[2-] | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Hexanone[2-] | 0.023 | MG/KG | 23 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Hexanone[2-] | 22 | UG/KG | 22 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Hexanone[2-] | 21 | UG/KG | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | HMX | 0.163 | MG/KG | 0.163 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | HMX | 0.164 | MG/KG | 0.164 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | HMX | 0.18 | MG/KG | 0.18 | UG/G | None | None | None | None | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Iodomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Iodomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Iodomethane | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Iodomethane | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Iodomethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Iron | 6950 | MG/KG | 6950 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Iron | 7180 | MG/KG | 7180 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Iron | 11700 | MG/KG | 11700 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Isophorone | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Isophorone | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Isophorone | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Isopropylbenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Isopropylbenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Isopropylbenzene | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Isopropylbenzene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Isopropylbenzene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Isopropyltoluene[4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Isopropyltoluene[4-] | 51 | UG/KG | 51 | UG/KG | None | None | None | None | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Isopropyltoluene[4-] | 0.002 | MG/KG | 2 | UG/KG | J | JPM | V1 | J | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Isopropyltoluene[4-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Isopropyltoluene[4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Lead | 12.1 | MG/KG | 12.1 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Lead | 12.5 | MG/KG | 12.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Lead | 7.1 | MG/KG | 7.1 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Magnesium | 822 | MG/KG | 822 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Magnesium | 902 | MG/KG | 902 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Magnesium | 473 | MG/KG | 473 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Manganese | 391 | MG/KG | 391 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Manganese | 397 | MG/KG | 397 | MG/KG | None | None | None | None | INORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Manganese | 514 | MG/KG | 514 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Mercury | 0.11 | MG/KG | 0.11 | MG/KG | N | J- | I3a | J- | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Mercury | 0.059 | MG/KG | 0.059 | MG/KG | N | UJ | I3e | UJ | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Mercury | 0.024 | MG/KG | 0.024 | MG/KG | N | UJ | I3e | UJ | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methacrylonitrile | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methacrylonitrile | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methyl Methacrylate | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methyl Methacrylate | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methyl tert-Butyl Ether | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methyl tert-Butyl Ether | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Methyl tert-Butyl Ether | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methyl-1-propanol[2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methyl-1-propanol[2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 23 | UG/KG | 23 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 25 | UG/KG | 25 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 0.023 | MG/KG | 23 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 22 | UG/KG | 22 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Methyl-2-pentanone[4-] | 21 | UG/KG | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methylene Chloride | 6 | UG/KG | 6 | UG/KG | None | None | None | None | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methylene Chloride | 8 | UG/KG | 8 | UG/KG | None | None | None | None | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Methylene Chloride | 0.003 | MG/KG | 3 | UG/KG | JB | U JPM | V5 V1 | U | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Methylene Chloride | 2.6 | UG/KG | 2.6 | UG/KG | J | U | V5 | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Methylene Chloride | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methylnaphthalene[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methylnaphthalene[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Methylnaphthalene[2-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methylphenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methylphenol[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Methylphenol[2-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Methylphenol[4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Methylphenol[4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Methylphenol[4-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Naphthalene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Naphthalene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Naphthalene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Naphthalene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nickel | 3.2 | MG/KG | 3.2 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nickel | 3.6 | MG/KG | 3.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nickel | 5 | MG/KG | 5 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitroaniline[2-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitroaniline[2-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitroaniline[2-] | 1.8 | MG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitroaniline[3-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitroaniline[3-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitroaniline[3-] | 1.8 | MG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitroaniline[4-] | 680 | UG/KG | 680 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitroaniline[4-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitroaniline[4-] | 0.67 | MG/KG | 670 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrobenzene | 0.091 | MG/KG | 0.091 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrobenzene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrobenzene | 0.092 | MG/KG | 0.092 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrobenzene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrobenzene | 0.087 | MG/KG | 0.087 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrophenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrophenol[2-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrophenol[2-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrophenol[4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrophenol[4-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrophenol[4-] | 1.8 | MG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.162 | MG/KG | 0.162 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.164 | MG/KG | 0.164 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrotoluene[2-] | 0.162 | MG/KG | 0.162 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.16 | MG/KG | 0.16 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.161 | MG/KG | 0.161 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrotoluene[3-] | 0.162 | MG/KG | 0.162 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.162 | MG/KG | 0.162 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.163 | MG/KG | 0.163 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Nitrotoluene[4-] | 0.162 | MG/KG | 0.162 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Pentachloroethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Pentachloroethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Pentachlorophenol | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Pentachlorophenol | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Pentachlorophenol | 1.8 | MG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Phenanthrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Phenanthrene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Phenanthrene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Phenol | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Phenol | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Phenol | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Potassium | 510 | MG/KG | 510 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Potassium | 519 | MG/KG | 519 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Potassium | 480 | MG/KG | 480 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Propionitrile | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Propionitrile | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Propylbenzene[1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Propylbenzene[1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Propylbenzene[1-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Propylbenzene[1-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Propylbenzene[1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Pyrene | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Pyrene | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | RDX | 0.163 | MG/KG | 0.163 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | RDX | 0.164 | MG/KG | 0.164 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | RDX | 0.191 | MG/KG | 0.191 | UG/G | None | None | None | None | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Selenium | 0.28 | MG/KG | 0.28 | MG/KG | U | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Selenium | 0.25 | MG/KG | 0.25 | MG/KG | B | None | None | None | INORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Selenium | 0.38 | MG/KG | 0.38 | MG/KG | U | None | None | U | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Silver | 0.093 | MG/KG | 0.093 | MG/KG | UN* | RPM P | I3d | R | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Silver | 0.064 | MG/KG | 0.064 | MG/KG | UN* | RPM P | I3d | R | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Silver | 0.82 | MG/KG | 0.82 | MG/KG | BN | UJ | I3e | UJ | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Sodium | 360 | MG/KG | 360 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Sodium | 263 | MG/KG | 263 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Sodium | 380 | MG/KG | 380 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Styrene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Styrene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Styrene | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Styrene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Styrene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Tetrachloroethane[1,1,1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Tetrachloroethane[1,1,2,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Tetrachloroethene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Tetrachloroethene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Tetrachloroethene | 0.013 | MG/KG | 13 | UG/KG | None | JPM | V1 | J | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Tetrachloroethene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Tetrachloroethene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Tetryl | 0.105 | MG/KG | 0.105 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Tetryl | 0.106 | MG/KG | 0.106 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Tetryl | 0.105 | MG/KG | 0.105 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Thallium | 0.28 | MG/KG | 0.28 | MG/KG | U | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Thallium | 0.19 | MG/KG | 0.19 | MG/KG | B | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Thallium | 0.38 | MG/KG | 0.38 | MG/KG | U | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Toluene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Toluene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Toluene | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Toluene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Toluene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trichlorobenzene[1,2,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trichloroethane[1,1,1-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trichloroethane[1,1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichloroethene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichloroethene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichloroethene | 0.007 | MG/KG | 7 | UG/KG | None | JPM | V1 | J | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Trichloroethene | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trichloroethene | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichlorofluoromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichlorofluoromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichlorofluoromethane | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Trichlorofluoromethane | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trichlorofluoromethane | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 2000 | UG/KG | 2000 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 1.8 | MG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 420 | UG/KG | 420 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 0.37 | MG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trichloropropane[1,2,3-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Trichlorotrifluoroethane | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trimethylbenzene[1,2,4-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Trimethylbenzene[1,3,5-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.081 | MG/KG | 0.081 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.082 | MG/KG | 0.082 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trinitrobenzene[1,3,5-] | 0.085 | MG/KG | 0.085 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.085 | MG/KG | 0.085 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.086 | MG/KG | 0.086 | MG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Trinitrotoluene[2,4,6-] | 0.081 | MG/KG | 0.081 | UG/G | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Uranium | 2.01 | MG/KG | 2.01 | UG/G | None | A | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Uranium | 2.1 | MG/KG | 2.1 | UG/G | None | A | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Uranium | 2.24 | MG/KG | 2.24 | UG/G | B | A | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Vanadium | 15.9 | MG/KG | 15.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Vanadium | 16.5 | MG/KG | 16.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Vanadium | 8.2 | MG/KG | 8.2 | MG/KG | None | None | None | None | INORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Vinyl Acetate | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Vinyl Acetate | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Vinyl Acetate | 0.011 | MG/KG | 11 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Vinyl Chloride | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Vinyl Chloride | 13 | UG/KG | 13 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Vinyl Chloride | 0.011 | MG/KG | 11 | UG/KG | U | UJ | V1a | UJ | ORGANIC |
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Vinyl Chloride | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Vinyl Chloride | 11 | UG/KG | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Xylene (Total) | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Xylene (Total) | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Xylene (Total) | 0.006 | MG/KG | 6 | UG/KG | U | UJ | V1a | UJ | ORGANIC |

TABLE D-2.0-2
PRS 16-006(g)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-006(g) | 16-5987 | RE16-99-0005 | 51.6 | 66 | IN | S2 | ALLH | Xylene (Total) | 5.5 | UG/KG | 5.5 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Xylene (Total) | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Xylene[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Xylene[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-05987 | RE16-99-0021 | 90 | 102 | IN | S2 | ALLH | Xylene[1,2-] | 5.4 | UG/KG | 5.4 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Xylene[1,3-]+Xylene[1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Xylene[1,3-]+Xylene[1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-006(g) | 16-3357 | 0316-97-0099 | 36 | 42 | IN | S2 | ALLH | Zinc | 18.6 | MG/KG | 18.6 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3036 | 0316-97-1036 | 36 | 42 | IN | S2 | ALLH | Zinc | 28.6 | MG/KG | 28.6 | MG/KG | * | P | None | J | INORGANIC |
| 16-006(g) | 16-3364 | 0316-98-0100 | 72 | 78 | IN | S2 | ALLH | Zinc | 17.2 | MG/KG | 17.2 | MG/KG | * | P | None | J | INORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Acenaphthene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Acenaphthene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Acenaphthylene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Acenaphthylene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Acetone | 21 | UG/KG | SAMPLE | ANALYTE | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Acetone | 25 | UG/KG | SAMPLE | ANALYTE | 25 | UG/KG | None | None | None | None | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Aluminum | 2700 | MG/KG | SAMPLE | ANALYTE | 2700 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Aluminum | 1900 | MG/KG | SAMPLE | ANALYTE | 1900 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Aluminum | 7900 | MG/KG | SAMPLE | ANALYTE | 7900 | MG/KG | None | P | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Aniline | 700 | UG/KG | SAMPLE | ANALYTE | 700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Aniline | 690 | UG/KG | SAMPLE | ANALYTE | 690 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Anthracene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Anthracene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Antimony | 11 | MG/KG | SAMPLE | ANALYTE | 11 | MG/KG | U | RPM | I3d | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Antimony | 11 | MG/KG | SAMPLE | ANALYTE | 11 | MG/KG | U | RPM | I3d | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Antimony | 0.17 | MG/KG | SAMPLE | ANALYTE | 0.17 | MG/KG | B | UJ | I3E | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Arsenic | 2.4 | MG/KG | SAMPLE | ANALYTE | 2.4 | MG/KG | None | J- | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Arsenic | 2.2 | MG/KG | SAMPLE | ANALYTE | 2.2 | MG/KG | None | J- | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Arsenic | 2.9 | MG/KG | SAMPLE | ANALYTE | 2.9 | MG/KG | None | P | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Azobenzene | 700 | UG/KG | SAMPLE | ANALYTE | 700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Azobenzene | 690 | UG/KG | SAMPLE | ANALYTE | 690 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Barium | 22 | MG/KG | SAMPLE | ANALYTE | 22 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Barium | 16 | MG/KG | SAMPLE | ANALYTE | 16 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Barium | 70 | MG/KG | SAMPLE | ANALYTE | 70 | MG/KG | None | P | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0022 | 120 | 132 | IN | S2 | QBT4 | Barium | 7 | MG/KG | SAMPLE | ANALYTE | 7 | MG/KG | B | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Benzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Benzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Benzo(a)anthracene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Benzo(a)anthracene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Benzo(a)pyrene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Benzo(a)pyrene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Benzo(b)fluoranthene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Benzo(b)fluoranthene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Benzo(g,h,i)perylene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Benzo(g,h,i)perylene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Benzo(k)fluoranthene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Benzo(k)fluoranthene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Benzoic Acid | 3500 | UG/KG | SAMPLE | ANALYTE | 3500 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Benzoic Acid | 3500 | UG/KG | SAMPLE | ANALYTE | 3500 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Benzyl Alcohol | 1400 | UG/KG | SAMPLE | ANALYTE | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Benzyl Alcohol | 1400 | UG/KG | SAMPLE | ANALYTE | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Beryllium | 0.53 | MG/KG | SAMPLE | ANALYTE | 0.53 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Beryllium | 0.53 | MG/KG | SAMPLE | ANALYTE | 0.53 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Beryllium | 0.57 | MG/KG | SAMPLE | ANALYTE | 0.57 | MG/KG | U | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bis(2-chloroethoxy)methane | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bis(2-chloroethoxy)methane | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bis(2-chloroethyl)ether | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bis(2-chloroethyl)ether | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bis(2-ethylhexyl)phthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bis(2-ethylhexyl)phthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Boron | 27 | MG/KG | SAMPLE | ANALYTE | 27 | MG/KG | U | None | None | nv | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Boron | 26 | MG/KG | SAMPLE | ANALYTE | 26 | MG/KG | U | None | None | nv | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bromobenzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bromobenzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bromochloromethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bromochloromethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bromodichloromethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bromodichloromethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bromoform | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bromoform | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bromomethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bromomethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Bromophenyl-phenylether[4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Bromophenyl-phenylether[4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Butanone[2-] | 21 | UG/KG | SAMPLE | ANALYTE | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Butanone[2-] | 21 | UG/KG | SAMPLE | ANALYTE | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Butylbenzene[n-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Butylbenzene[n-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Butylbenzene[sec-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Butylbenzene[sec-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Butylbenzene[tert-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Butylbenzene[tert-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Butylbenzylphthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Butylbenzylphthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Cadmium | 0.53 | MG/KG | SAMPLE | ANALYTE | 0.53 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Cadmium | 0.53 | MG/KG | SAMPLE | ANALYTE | 0.53 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Cadmium | 0.1 | MG/KG | SAMPLE | ANALYTE | 0.1 | MG/KG | B | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Calcium | 790 | MG/KG | SAMPLE | ANALYTE | 790 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Calcium | 780 | MG/KG | SAMPLE | ANALYTE | 780 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Calcium | 1500 | MG/KG | SAMPLE | ANALYTE | 1500 | MG/KG | None | P | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Carbon Disulfide | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Carbon Disulfide | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Carbon Tetrachloride | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Carbon Tetrachloride | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chloro-3-methylphenol[4-] | 700 | UG/KG | SAMPLE | ANALYTE | 700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chloro-3-methylphenol[4-] | 690 | UG/KG | SAMPLE | ANALYTE | 690 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chloroaniline[4-] | 1400 | UG/KG | SAMPLE | ANALYTE | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chloroaniline[4-] | 1400 | UG/KG | SAMPLE | ANALYTE | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chlorobenzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chlorobenzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chlorodibromomethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chlorodibromomethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chloroethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chloroethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chloroform | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chloroform | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chloromethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chloromethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chloronaphthalene[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chloronaphthalene[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chlorophenol[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chlorophenol[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chlorophenyl-phenyl[4-] Ether | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chlorophenyl-phenyl[4-] Ether | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chlorotoluene[2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chlorotoluene[2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chlorotoluene[4-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chlorotoluene[4-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chromium, Total | 91 | MG/KG | SAMPLE | ANALYTE | 91 | MG/KG | None | J- P | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chromium, Total | 36 | MG/KG | SAMPLE | ANALYTE | 36 | MG/KG | None | J- P | I3a | J- | INORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Chromium, Total | 6.6 | MG/KG | SAMPLE | ANALYTE | 6.6 | MG/KG | None | P | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0022 | 120 | 132 | IN | S2 | QBT4 | Chromium, Total | 0.48 | MG/KG | SAMPLE | ANALYTE | 0.48 | MG/KG | BE | U | I4 | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Chrysene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Chrysene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Cobalt | 1.9 | MG/KG | SAMPLE | ANALYTE | 1.9 | MG/KG | None | UJ | I3e | UJ | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Cobalt | 1.3 | MG/KG | SAMPLE | ANALYTE | 1.3 | MG/KG | None | UJ | I3e | UJ | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Cobalt | 3.4 | MG/KG | SAMPLE | ANALYTE | 3.4 | MG/KG | None | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Copper | 25 | MG/KG | SAMPLE | ANALYTE | 25 | MG/KG | None | J- P | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Copper | 12 | MG/KG | SAMPLE | ANALYTE | 12 | MG/KG | None | J- P | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Copper | 13 | MG/KG | SAMPLE | ANALYTE | 13 | MG/KG | None | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0022 | 120 | 132 | IN | S2 | QBT4 | Copper | 0.36 | MG/KG | SAMPLE | ANALYTE | 0.36 | MG/KG | B | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Di-n-butylphthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Di-n-butylphthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Di-n-octylphthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Di-n-octylphthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dibenz(a,h)anthracene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dibenz(a,h)anthracene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dibenzofuran | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dibenzofuran | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dibromo-3-chloropropane[1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dibromo-3-chloropropane[1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dibromoethane[1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dibromoethane[1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dibromomethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dibromomethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,3-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,3-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,4-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzene[1,4-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzidine[3,3'-] | 700 | UG/KG | SAMPLE | ANALYTE | 700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorobenzidine[3,3'-] | 690 | UG/KG | SAMPLE | ANALYTE | 690 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorodifluoromethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorodifluoromethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloroethane[1,1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloroethane[1,1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloroethane[1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloroethane[1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloroethene[1,1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloroethene[1,1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloroethene[cis-1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloroethene[cis-1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloroethene[trans-1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloroethene[trans-1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichlorophenol[2,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichlorophenol[2,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloropropane[1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloropropane[1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloropropane[1,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloropropane[1,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloropropane[2,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloropropane[2,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloropropene[1,1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloropropene[1,1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloropropene[cis-1,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloropropene[cis-1,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dichloropropene[trans-1,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dichloropropene[trans-1,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Diethylphthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Diethylphthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dimethyl Phthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dimethyl Phthalate | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dimethylphenol[2,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dimethylphenol[2,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dinitro-2-methylphenol[4,6-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dinitro-2-methylphenol[4,6-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dinitrobenzene[1,3-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dinitrobenzene[1,3-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dinitrophenol[2,4-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dinitrophenol[2,4-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dinitrotoluene[2,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dinitrotoluene[2,4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dinitrotoluene[2,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dinitrotoluene[2,4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dinitrotoluene[2,6-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Dinitrotoluene[2,6-] | 0.26 | MG/KG | SAMPLE | ANALYTE | 0.26 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dinitrotoluene[2,6-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Dinitrotoluene[2,6-] | 0.26 | MG/KG | SAMPLE | ANALYTE | 0.26 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Ethylbenzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Ethylbenzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Fluoranthene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Fluoranthene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Fluorene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Fluorene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Hexachlorobenzene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Hexachlorobenzene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Hexachlorobutadiene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Hexachlorobutadiene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Hexachlorocyclopentadiene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Hexachlorocyclopentadiene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Hexachloroethane | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Hexachloroethane | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Hexanone[2-] | 21 | UG/KG | SAMPLE | ANALYTE | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Hexanone[2-] | 21 | UG/KG | SAMPLE | ANALYTE | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | HMX | 2.2 | MG/KG | SAMPLE | ANALYTE | 2.2 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | HMX | 2.2 | MG/KG | SAMPLE | ANALYTE | 2.2 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Indeno(1,2,3-cd)pyrene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Indeno(1,2,3-cd)pyrene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Iodomethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Iodomethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Iron | 5500 | MG/KG | SAMPLE | ANALYTE | 5500 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Iron | 5800 | MG/KG | SAMPLE | ANALYTE | 5800 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Iron | 9900 | MG/KG | SAMPLE | ANALYTE | 9900 | MG/KG | None | P | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Isophorone | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Isophorone | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Isopropylbenzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Isopropylbenzene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Isopropyltoluene[4-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Isopropyltoluene[4-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Lead | 2.5 | MG/KG | SAMPLE | ANALYTE | 2.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Lead | 2.1 | MG/KG | SAMPLE | ANALYTE | 2.1 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Lead | 21 | MG/KG | SAMPLE | ANALYTE | 21 | MG/KG | None | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Magnesium | 250 | MG/KG | SAMPLE | ANALYTE | 250 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Magnesium | 210 | MG/KG | SAMPLE | ANALYTE | 210 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Magnesium | 1100 | MG/KG | SAMPLE | ANALYTE | 1100 | MG/KG | None | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Manganese | 240 | MG/KG | SAMPLE | ANALYTE | 240 | MG/KG | None | J- | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Manganese | 250 | MG/KG | SAMPLE | ANALYTE | 250 | MG/KG | None | J- | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Manganese | 280 | MG/KG | SAMPLE | ANALYTE | 280 | MG/KG | None | P | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Mercury | 0.11 | MG/KG | SAMPLE | ANALYTE | 0.11 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Mercury | 0.11 | MG/KG | SAMPLE | ANALYTE | 0.11 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Mercury | 0.11 | MG/KG | SAMPLE | ANALYTE | 0.11 | MG/KG | U | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Methyl-2-pentanone[4-] | 21 | UG/KG | SAMPLE | ANALYTE | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Methyl-2-pentanone[4-] | 21 | UG/KG | SAMPLE | ANALYTE | 21 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Methylene Chloride | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Methylene Chloride | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Methylnaphthalene[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Methylnaphthalene[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Methylphenol[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Methylphenol[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Methylphenol[4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Methylphenol[4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Naphthalene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Naphthalene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nickel | 22 | MG/KG | SAMPLE | ANALYTE | 22 | MG/KG | None | J- | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nickel | 9.1 | MG/KG | SAMPLE | ANALYTE | 9.1 | MG/KG | None | J- | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Nickel | 5.1 | MG/KG | SAMPLE | ANALYTE | 5.1 | MG/KG | None | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0022 | 120 | 132 | IN | S2 | QBT4 | Nickel | 1.2 | MG/KG | SAMPLE | ANALYTE | 1.2 | MG/KG | B | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitroaniline[2-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitroaniline[2-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitroaniline[3-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitroaniline[3-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitroaniline[4-] | 700 | UG/KG | SAMPLE | ANALYTE | 700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitroaniline[4-] | 690 | UG/KG | SAMPLE | ANALYTE | 690 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrobenzene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrobenzene | 0.26 | MG/KG | SAMPLE | ANALYTE | 0.26 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrobenzene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrobenzene | 0.26 | MG/KG | SAMPLE | ANALYTE | 0.26 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrophenol[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrophenol[2-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrophenol[4-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrophenol[4-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitroso-di-n-propylamine[N-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitroso-di-n-propylamine[N-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrosodimethylamine[N-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrosodimethylamine[N-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrosodiphenylamine[N-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrosodiphenylamine[N-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrotoluene[2-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrotoluene[2-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrotoluene[3-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrotoluene[3-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Nitrotoluene[4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Nitrotoluene[4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Oxybis(1-chloropropane)[2,2'-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Oxybis(1-chloropropane)[2,2'-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Pentachlorophenol | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Pentachlorophenol | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Phenanthrene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Phenanthrene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Phenol | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Phenol | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Potassium | 960 | MG/KG | SAMPLE | ANALYTE | 960 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Potassium | 600 | MG/KG | SAMPLE | ANALYTE | 600 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Potassium | 1000 | MG/KG | SAMPLE | ANALYTE | 1000 | MG/KG | None | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Propylbenzene[1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Propylbenzene[1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Pyrene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Pyrene | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | RDX | 1 | MG/KG | SAMPLE | ANALYTE | 1 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | RDX | 1 | MG/KG | SAMPLE | ANALYTE | 1 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Selenium | 1.1 | MG/KG | SAMPLE | ANALYTE | 1.1 | MG/KG | U | UJ | I3e | UJ | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Selenium | 1.1 | MG/KG | SAMPLE | ANALYTE | 1.1 | MG/KG | U | UJ | I3e | UJ | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Selenium | 1.1 | MG/KG | SAMPLE | ANALYTE | 1.1 | MG/KG | U | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Silver | 2.1 | MG/KG | SAMPLE | ANALYTE | 2.1 | MG/KG | U | UJ | I3e | UJ | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Silver | 2.1 | MG/KG | SAMPLE | ANALYTE | 2.1 | MG/KG | U | UJ | I3e | UJ | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Silver | 0.14 | MG/KG | SAMPLE | ANALYTE | 0.14 | MG/KG | B | U | I4 | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Sodium | 670 | MG/KG | SAMPLE | ANALYTE | 670 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Sodium | 410 | MG/KG | SAMPLE | ANALYTE | 410 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Sodium | 170 | MG/KG | SAMPLE | ANALYTE | 170 | MG/KG | None | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Styrene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Styrene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Tetrachloroethane[1,1,1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Tetrachloroethane[1,1,1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Tetrachloroethane[1,1,2,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Tetrachloroethane[1,1,2,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Tetrachloroethene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Tetrachloroethene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Tetryl | 0.65 | MG/KG | SAMPLE | ANALYTE | 0.65 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Tetryl | 0.65 | MG/KG | SAMPLE | ANALYTE | 0.65 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Thallium | 0.27 | MG/KG | SAMPLE | ANALYTE | 0.27 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Thallium | 0.26 | MG/KG | SAMPLE | ANALYTE | 0.26 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Thallium | 0.06 | MG/KG | SAMPLE | ANALYTE | 0.06 | MG/KG | B | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Toluene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Toluene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0013 | 0 | 6 | IN | S1 | ALLH | Total Uranium by ICPES | 0.96 | MG/KG | SAMPLE | ANALYTE | 0.96 | MG/KG | | None | None | None | OTHER |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichlorobenzene[1,2,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichlorobenzene[1,2,4-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichloroethane[1,1,1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichloroethane[1,1,1-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichloroethane[1,1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichloroethane[1,1,2-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichloroethene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichloroethene | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichlorofluoromethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichlorofluoromethane | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichlorophenol[2,4,5-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichlorophenol[2,4,5-] | 1700 | UG/KG | SAMPLE | ANALYTE | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichlorophenol[2,4,6-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichlorophenol[2,4,6-] | 350 | UG/KG | SAMPLE | ANALYTE | 350 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trichloropropane[1,2,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trichloropropane[1,2,3-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trimethylbenzene[1,2,4-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trimethylbenzene[1,2,4-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trimethylbenzene[1,3,5-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trimethylbenzene[1,3,5-] | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Uranium | 16.7 | MG/KG | SAMPLE | ANALYTE | 16.7 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Uranium | 19.5 | MG/KG | SAMPLE | ANALYTE | 19.5 | MG/KG | U | None | None | U | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Vanadium | 2.9 | MG/KG | SAMPLE | ANALYTE | 2.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Vanadium | 2.6 | MG/KG | SAMPLE | ANALYTE | 2.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Vanadium | 11 | MG/KG | SAMPLE | ANALYTE | 11 | MG/KG | None | None | None | R | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Vinyl Chloride | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Vinyl Chloride | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Xylene (Total) | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Xylene (Total) | 5.3 | UG/KG | SAMPLE | ANALYTE | 5.3 | UG/KG | U | None | None | U | ORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0042 | 48 | 72 | IN | SS | QBT4 | Zinc | 36 | MG/KG | SAMPLE | ANALYTE | 36 | MG/KG | None | J- | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-98-0045 | 48 | 72 | IN | SS | QBT4 | Zinc | 29 | MG/KG | SAMPLE | ANALYTE | 29 | MG/KG | None | J- | I3a | J- | INORGANIC |
| 16-029(g2) | 16-5820 | RE16-99-0006 | 91.2 | 96 | IN | S2 | ALLH | Zinc | 50 | MG/KG | SAMPLE | ANALYTE | 50 | MG/KG | None | P | None | R | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Acenaphthene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Acenaphthylene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Acetone | 65 | UG/KG | SAMPLE | ANALYTE | 65 | UG/KG | None | None | None | None | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Aluminum | 4600 | MG/KG | SAMPLE | ANALYTE | 4600 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Aniline | 730 | UG/KG | SAMPLE | ANALYTE | 730 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Anthracene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Antimony | 11 | MG/KG | SAMPLE | ANALYTE | 11 | MG/KG | U | RPM | I3d | R | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Arsenic | 2.5 | MG/KG | SAMPLE | ANALYTE | 2.5 | MG/KG | None | J- | I3a | J- | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Azobenzene | 730 | UG/KG | SAMPLE | ANALYTE | 730 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Barium | 48 | MG/KG | SAMPLE | ANALYTE | 48 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Benzene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Benzo(a)anthracene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Benzo(a)pyrene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Benzo(b)fluoranthene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Benzo(g,h,i)perylene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Benzo(k)fluoranthene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Benzoic Acid | 3700 | UG/KG | SAMPLE | ANALYTE | 3700 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Benzyl Alcohol | 1400 | UG/KG | SAMPLE | ANALYTE | 1400 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Beryllium | 0.56 | MG/KG | SAMPLE | ANALYTE | 0.56 | MG/KG | U | None | None | U | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bis(2-chloroethoxy)methane | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bis(2-chloroethyl)ether | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bis(2-ethylhexyl)phthalate | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bromobenzene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bromochloromethane | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bromodichloromethane | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bromoform | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bromomethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Bromophenyl-phenylether[4-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Butanone[2-] | 22 | UG/KG | SAMPLE | ANALYTE | 22 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Butylbenzene[n-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Butylbenzene[sec-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Butylbenzene[tert-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Butylbenzylphthalate | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Cadmium | 0.56 | MG/KG | SAMPLE | ANALYTE | 0.56 | MG/KG | U | None | None | U | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Calcium | 1100 | MG/KG | SAMPLE | ANALYTE | 1100 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Carbon Disulfide | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Carbon Tetrachloride | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chloro-3-methylphenol[4-] | 730 | UG/KG | SAMPLE | ANALYTE | 730 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chloroaniline[4-] | 1400 | UG/KG | SAMPLE | ANALYTE | 1400 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chlorobenzene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chlorodibromomethane | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chloroethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chloroform | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chloromethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chloronaphthalene[2-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chlorophenol[2-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chlorophenyl-phenyl[4-] Ether | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chlorotoluene[2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chlorotoluene[4-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chromium, Total | 14 | MG/KG | SAMPLE | ANALYTE | 14 | MG/KG | None | P J- | I3a | J- | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Chrysene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Cobalt | 2 | MG/KG | SAMPLE | ANALYTE | 2 | MG/KG | None | UJ | I3e | UJ | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Copper | 20 | MG/KG | SAMPLE | ANALYTE | 20 | MG/KG | None | J- P | I3e | J- | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Cyanide, Total | 0.56 | MG/KG | SAMPLE | ANALYTE | 0.56 | MG/KG | U | None | None | U | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Di-n-butylphthalate | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Di-n-octylphthalate | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dibenz(a,h)anthracene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dibenzofuran | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dibromo-3-chloropropane[1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dibromoethane[1,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dibromomethane | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorobenzene[1,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorobenzene[1,2-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorobenzene[1,3-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorobenzene[1,3-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorobenzene[1,4-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorobenzene[1,4-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorobenzidine[3,3'-] | 730 | UG/KG | SAMPLE | ANALYTE | 730 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorodifluoromethane | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloroethane[1,1-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloroethane[1,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloroethene[1,1-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloroethene[cis-1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloroethene[trans-1,2-] | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichlorophenol[2,4-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloropropane[1,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloropropane[1,3-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloropropane[2,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloropropene[1,1-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloropropene[cis-1,3-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dichloropropene[trans-1,3-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Diethylphthalate | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dimethyl Phthalate | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dimethylphenol[2,4-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | SAMPLE | ANALYTE | 1800 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dinitrobenzene[1,3-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dinitrophenol[2,4-] | 1800 | UG/KG | SAMPLE | ANALYTE | 1800 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dinitrotoluene[2,4-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dinitrotoluene[2,4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dinitrotoluene[2,6-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Dinitrotoluene[2,6-] | 0.26 | MG/KG | SAMPLE | ANALYTE | 0.26 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Ethylbenzene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Fluoranthene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Fluorene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Hexachlorobenzene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Hexachlorobutadiene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Hexachlorocyclopentadiene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Hexachloroethane | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Hexanone[2-] | 22 | UG/KG | SAMPLE | ANALYTE | 22 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | HMX | 2.2 | MG/KG | SAMPLE | ANALYTE | 2.2 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Indeno(1,2,3-cd)pyrene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Iodomethane | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Iron | 7100 | MG/KG | SAMPLE | ANALYTE | 7100 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Isophorone | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Isopropylbenzene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Isopropyltoluene[4-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Lead | 4.1 | MG/KG | SAMPLE | ANALYTE | 4.1 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Magnesium | 560 | MG/KG | SAMPLE | ANALYTE | 560 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Manganese | 180 | MG/KG | SAMPLE | ANALYTE | 180 | MG/KG | None | J- | I3a | J- | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Mercury | 0.11 | MG/KG | SAMPLE | ANALYTE | 0.11 | MG/KG | U | None | None | U | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Methyl-2-pentanone[4-] | 22 | UG/KG | SAMPLE | ANALYTE | 22 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Methylene Chloride | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Methylnaphthalene[2-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Methylphenol[2-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Methylphenol[4-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Naphthalene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nickel | 6.5 | MG/KG | SAMPLE | ANALYTE | 6.5 | MG/KG | None | UJ | I3e | UJ | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitroaniline[2-] | 1800 | UG/KG | SAMPLE | ANALYTE | 1800 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitroaniline[3-] | 1800 | UG/KG | SAMPLE | ANALYTE | 1800 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitroaniline[4-] | 730 | UG/KG | SAMPLE | ANALYTE | 730 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrobenzene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrobenzene | 0.26 | MG/KG | SAMPLE | ANALYTE | 0.26 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrophenol[2-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrophenol[4-] | 1800 | UG/KG | SAMPLE | ANALYTE | 1800 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitroso-di-n-propylamine[N-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrosodimethylamine[N-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrosodiphenylamine[N-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrotoluene[2-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrotoluene[3-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Nitrotoluene[4-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Oxybis(1-chloropropane)[2,2'-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Pentachlorophenol | 1800 | UG/KG | SAMPLE | ANALYTE | 1800 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Phenanthrene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Phenol | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Potassium | 650 | MG/KG | SAMPLE | ANALYTE | 650 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Propylbenzene[1-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Pyrene | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | RDX | 1 | MG/KG | SAMPLE | ANALYTE | 1 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Selenium | 1.1 | MG/KG | SAMPLE | ANALYTE | 1.1 | MG/KG | U | UJ | I3e | UJ | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Silver | 2.2 | MG/KG | SAMPLE | ANALYTE | 2.2 | MG/KG | U | UJ | I3e | UJ | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Sodium | 230 | MG/KG | SAMPLE | ANALYTE | 230 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Styrene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Tetrachloroethane[1,1,1,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Tetrachloroethane[1,1,2,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Tetrachloroethene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Tetryl | 0.65 | MG/KG | SAMPLE | ANALYTE | 0.65 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Thallium | 0.28 | MG/KG | SAMPLE | ANALYTE | 0.28 | MG/KG | U | None | None | U | INORGANIC |

TABLE D-2.0-3
PRS 16-029(g2)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE TYPE CODE | ANALYTE TYPE | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Toluene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichlorobenzene[1,2,4-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichloroethane[1,1,1-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichloroethane[1,1,2-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichloroethene | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichlorofluoromethane | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichlorophenol[2,4,5-] | 1800 | UG/KG | SAMPLE | ANALYTE | 1800 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichlorophenol[2,4,6-] | 370 | UG/KG | SAMPLE | ANALYTE | 370 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trichloropropane[1,2,3-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trimethylbenzene[1,2,4-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trimethylbenzene[1,3,5-] | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | SAMPLE | ANALYTE | 0.25 | MG/KG | U | PM | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Uranium | 17.7 | MG/KG | SAMPLE | ANALYTE | 17.7 | MG/KG | U | None | None | U | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Vanadium | 6.1 | MG/KG | SAMPLE | ANALYTE | 6.1 | MG/KG | None | None | None | None | INORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Vinyl Chloride | 11 | UG/KG | SAMPLE | ANALYTE | 11 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Xylene (Total) | 5.6 | UG/KG | SAMPLE | ANALYTE | 5.6 | UG/KG | U | None | None | U | ORGANIC |
| C-16-074 | 16-5820 | RE16-98-0041 | 24 | 48 | IN | SS | ALLH | Zinc | 38 | MG/KG | SAMPLE | ANALYTE | 38 | MG/KG | None | J- | I3a | J- | INORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Acenaphthene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Acenaphthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Acenaphthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Acenaphthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Acenaphthene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Acenaphthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Acenaphthene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Acenaphthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Acenaphthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Acenaphthene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Acenaphthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Acenaphthene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Acenaphthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Acenaphthylene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Acenaphthylene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Acenaphthylene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Acenaphthylene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Acenaphthylene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Acenaphthylene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Acenaphthylene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Acenaphthylene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Acenaphthylene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Acenaphthylene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Acenaphthylene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Acenaphthylene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Acenaphthylene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Acetone | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Acetone | 20 | UG/KG | 20 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Actinium-228 | 1.78 | PCI/G | 1.78 | PCI/G | TI | None | None | TI | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Aluminum | 10000 | MG/KG | 10000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Aluminum | 10000 | MG/KG | 10000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Aluminum | 8800 | MG/KG | 8800 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Aluminum | 15000 | MG/KG | 15000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Aluminum | 4200 | MG/KG | 4200 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Aluminum | 12600 | MG/KG | 12600 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Aluminum | 1020 | MG/KG | 1020 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Aluminum | 11000 | MG/KG | 11000 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Aluminum | 15000 | MG/KG | 15000 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Aluminum | 15700 | MG/KG | 15700 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Aluminum | 12300 | MG/KG | 12300 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Aluminum | 950 | MG/KG | 950 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Aluminum | 803 | MG/KG | 803 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Aluminum | 588 | MG/KG | 588 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Aluminum | 1270 | MG/KG | 1270 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Aluminum | 690 | MG/KG | 690 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Aluminum | 1200 | MG/KG | 1200 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Americium-241 | -0.3 | PCI/G | -0.3 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Amino-2,6-dinitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Amino-4,6-dinitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Aniline | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Aniline | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Aniline | 720 | UG/KG | 720 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Aniline | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Aniline | 800 | UG/KG | 800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Aniline | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Aniline | 740 | UG/KG | 740 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Aniline | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Aniline | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Aniline | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Aniline | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Aniline | 670 | UG/KG | 670 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Aniline | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Annihilation Radiation | -0.01 | PCI/G | -0.01 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Anthracene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Anthracene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Anthracene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Anthracene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Anthracene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Antimony | 11 | MG/KG | 11 | MG/KG | U | RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Antimony | 11 | MG/KG | 11 | MG/KG | U | RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Antimony | 11 | MG/KG | 11 | MG/KG | U | RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Antimony | 11 | MG/KG | 11 | MG/KG | U | RPM | I3d | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Antimony | 12 | MG/KG | 12 | MG/KG | U | RPM | I3D | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Antimony | 0.13 | MG/KG | 0.13 | MG/KG | N | RPM | I3D | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Antimony | 0.16 | MG/KG | 0.16 | MG/KG | N | RPM | I3D | R | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Antimony | 0.4 | MG/KG | 0.4 | MG/KG | N | RPM | I3D | R | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Antimony | 0.11 | MG/KG | 0.11 | MG/KG | N | RPM | I3D | R | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Antimony | 0.11 | MG/KG | 0.11 | MG/KG | N | RPM | I3D | R | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Antimony | 0.39 | MG/KG | 0.39 | MG/KG | N | RPM | I3D | R | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Antimony | 0.57 | MG/KG | 0.57 | MG/KG | BN | A UJ | I3E | UJ | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Antimony | 0.6 | MG/KG | 0.6 | MG/KG | UN | A UJ | I3E | UJ | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Antimony | 0.61 | MG/KG | 0.61 | MG/KG | UN | UJ A | I3E | UJ | INORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Antimony | 0.75 | MG/KG | 0.75 | MG/KG | BN | UJ A | I3E | UJ | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Antimony | 0.09 | MG/KG | 0.09 | MG/KG | B | UJ | I3E | UJ | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Antimony | 0.86 | MG/KG | 0.86 | MG/KG | U | UJ | I3E | UJ | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Arsenic | 6.4 | MG/KG | 6.4 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Arsenic | 8.6 | MG/KG | 8.6 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Arsenic | 5.2 | MG/KG | 5.2 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Arsenic | 5.1 | MG/KG | 5.1 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Arsenic | 1.8 | MG/KG | 1.8 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Arsenic | 4.6 | MG/KG | 4.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Arsenic | 2.8 | MG/KG | 2.8 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Arsenic | 13.2 | MG/KG | 13.2 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Arsenic | 4.5 | MG/KG | 4.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Arsenic | 4.2 | MG/KG | 4.2 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Arsenic | 7.9 | MG/KG | 7.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Arsenic | 1.5 | MG/KG | 1.5 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Arsenic | 1.6 | MG/KG | 1.6 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Arsenic | 1.2 | MG/KG | 1.2 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Arsenic | 1.5 | MG/KG | 1.5 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Arsenic | 1 | MG/L | 1 | MG/L | U | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Arsenic | 1.8 | MG/KG | 1.8 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Arsenic | 2.5 | MG/KG | 2.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Azobenzene | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Azobenzene | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Azobenzene | 720 | UG/KG | 720 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Azobenzene | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Azobenzene | 800 | UG/KG | 800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Azobenzene | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Azobenzene | 740 | UG/KG | 740 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Azobenzene | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Azobenzene | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Azobenzene | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Azobenzene | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Azobenzene | 670 | UG/KG | 670 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Azobenzene | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Barium | 140 | MG/KG | 140 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Barium | 150 | MG/KG | 150 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Barium | 190 | MG/KG | 190 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Barium | 320 | MG/KG | 320 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Barium | 27 | MG/KG | 27 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Barium | 213 | MG/KG | 213 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Barium | 11.7 | MG/KG | 11.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Barium | 93.7 | MG/KG | 93.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Barium | 152 | MG/KG | 152 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Barium | 140 | MG/KG | 140 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Barium | 312 | MG/KG | 312 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Barium | 7.7 | MG/KG | 7.7 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Barium | 16.8 | MG/KG | 16.8 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Barium | 11.9 | MG/KG | 11.9 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Barium | 28.5 | MG/KG | 28.5 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Barium | 0.95 | MG/L | 0.95 | MG/L | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Barium | 12 | MG/KG | 12 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Barium | 8.4 | MG/KG | 8.4 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Barium-140 | 0.19 | PCI/G | 0.19 | PCI/G | U | None | None | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Benzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Benzene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Benzo(a)anthracene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Benzo(a)anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Benzo(a)anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Benzo(a)anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Benzo(a)anthracene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Benzo(a)anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Benzo(a)anthracene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Benzo(a)anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Benzo(a)anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Benzo(a)anthracene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Benzo(a)anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Benzo(a)anthracene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Benzo(a)anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Benzo(a)pyrene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Benzo(a)pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Benzo(a)pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Benzo(a)pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Benzo(a)pyrene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Benzo(a)pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Benzo(a)pyrene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Benzo(a)pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Benzo(a)pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Benzo(a)pyrene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Benzo(a)pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Benzo(a)pyrene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Benzo(a)pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Benzo(b)fluoranthene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Benzo(b)fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Benzo(b)fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Benzo(b)fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Benzo(b)fluoranthene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Benzo(b)fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Benzo(b)fluoranthene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Benzo(b)fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Benzo(b)fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Benzo(b)fluoranthene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Benzo(b)fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Benzo(b)fluoranthene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Benzo(b)fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Benzo(g,h,i)perylene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Benzo(g,h,i)perylene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Benzo(g,h,i)perylene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Benzo(g,h,i)perylene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Benzo(g,h,i)perylene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Benzo(g,h,i)perylene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Benzo(g,h,i)perylene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Benzo(g,h,i)perylene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Benzo(g,h,i)perylene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Benzo(g,h,i)perylene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Benzo(g,h,i)perylene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Benzo(g,h,i)perylene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Benzo(g,h,i)perylene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Benzo(k)fluoranthene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Benzo(k)fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Benzo(k)fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Benzo(k)fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Benzo(k)fluoranthene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Benzo(k)fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Benzo(k)fluoranthene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Benzo(k)fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Benzo(k)fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Benzo(k)fluoranthene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Benzo(k)fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Benzo(k)fluoranthene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Benzo(k)fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Benzoic Acid | 3700 | UG/KG | 3700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Benzoic Acid | 3600 | UG/KG | 3600 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Benzoic Acid | 3600 | UG/KG | 3600 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Benzoic Acid | 3800 | UG/KG | 3800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Benzoic Acid | 4000 | UG/KG | 4000 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Benzoic Acid | 3900 | UG/KG | 3900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Benzoic Acid | 3700 | UG/KG | 3700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Benzoic Acid | 3800 | UG/KG | 3800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Benzoic Acid | 3800 | UG/KG | 3800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Benzoic Acid | 3500 | UG/KG | 3500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Benzoic Acid | 3900 | UG/KG | 3900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Benzoic Acid | 3400 | UG/KG | 3400 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Benzoic Acid | 3600 | UG/KG | 3600 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Benzyl Alcohol | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Benzyl Alcohol | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Benzyl Alcohol | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Benzyl Alcohol | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Benzyl Alcohol | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Benzyl Alcohol | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Benzyl Alcohol | 1300 | UG/KG | 1300 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Benzyl Alcohol | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Beryllium | 0.57 | MG/KG | 0.57 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Beryllium | 0.55 | MG/KG | 0.55 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Beryllium | 0.54 | MG/KG | 0.54 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Beryllium | 0.76 | MG/KG | 0.76 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Beryllium | 0.6 | MG/KG | 0.6 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Beryllium | 0.9 | MG/KG | 0.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Beryllium | 0.33 | MG/KG | 0.33 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Beryllium | 0.58 | MG/KG | 0.58 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Beryllium | 0.78 | MG/KG | 0.78 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Beryllium | 0.79 | MG/KG | 0.79 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Beryllium | 0.76 | MG/KG | 0.76 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Beryllium | 0.25 | MG/KG | 0.25 | MG/KG | B | A U | I4 | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Beryllium | 0.34 | MG/KG | 0.34 | MG/KG | B | A U | I4 | U | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Beryllium | 0.43 | MG/KG | 0.43 | MG/KG | B | U A | I4 | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Beryllium | 0.44 | MG/KG | 0.44 | MG/KG | B | U A | I4 | U | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Beryllium | 0.55 | MG/KG | 0.55 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Beryllium | 0.25 | MG/KG | 0.25 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Bis(2-chloroethoxy)methane | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Bis(2-chloroethoxy)methane | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Bis(2-chloroethoxy)methane | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Bis(2-chloroethoxy)methane | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bis(2-chloroethoxy)methane | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethoxy)methane | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Bis(2-chloroethoxy)methane | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethoxy)methane | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethoxy)methane | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethoxy)methane | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethoxy)methane | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bis(2-chloroethoxy)methane | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Bis(2-chloroethoxy)methane | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Bis(2-chloroethyl)ether | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Bis(2-chloroethyl)ether | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Bis(2-chloroethyl)ether | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Bis(2-chloroethyl)ether | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bis(2-chloroethyl)ether | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethyl)ether | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Bis(2-chloroethyl)ether | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethyl)ether | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethyl)ether | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethyl)ether | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Bis(2-chloroethyl)ether | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bis(2-chloroethyl)ether | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Bis(2-chloroethyl)ether | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Bis(2-ethylhexyl)phthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Bis(2-ethylhexyl)phthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Bis(2-ethylhexyl)phthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Bis(2-ethylhexyl)phthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bis(2-ethylhexyl)phthalate | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Bis(2-ethylhexyl)phthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Bis(2-ethylhexyl)phthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Bis(2-ethylhexyl)phthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Bis(2-ethylhexyl)phthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Bis(2-ethylhexyl)phthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Bis(2-ethylhexyl)phthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bis(2-ethylhexyl)phthalate | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Bis(2-ethylhexyl)phthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bismuth-211 | 1.21 | PCI/G | 1.21 | PCI/G | SI | None | None | SI | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bismuth-212 | 2.4 | PCI/G | 2.4 | PCI/G | U | None | None | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bismuth-214 | 1.2 | PCI/G | 1.2 | PCI/G | None | None | None | None | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bromobenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bromobenzene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bromochloromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bromochloromethane | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bromodichloromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bromodichloromethane | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bromoform | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bromoform | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bromomethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bromomethane | 10 | UG/KG | 10 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Bromophenyl-phenylether[4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Bromophenyl-phenylether[4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Bromophenyl-phenylether[4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Bromophenyl-phenylether[4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Bromophenyl-phenylether[4-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Bromophenyl-phenylether[4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Bromophenyl-phenylether[4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Bromophenyl-phenylether[4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Bromophenyl-phenylether[4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Bromophenyl-phenylether[4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Bromophenyl-phenylether[4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Bromophenyl-phenylether[4-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Bromophenyl-phenylether[4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Butanone[2-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Butanone[2-] | 20 | UG/KG | 20 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Butylbenzene[n-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Butylbenzene[n-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Butylbenzene[sec-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Butylbenzene[sec-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Butylbenzene[tert-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Butylbenzene[tert-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Butylbenzylphthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Butylbenzylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Butylbenzylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Butylbenzylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Butylbenzylphthalate | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Butylbenzylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Butylbenzylphthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Butylbenzylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Butylbenzylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Butylbenzylphthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Butylbenzylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Butylbenzylphthalate | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Butylbenzylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Cadmium | 0.56 | MG/KG | 0.56 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Cadmium | 0.55 | MG/KG | 0.55 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Cadmium | 1.9 | MG/KG | 1.9 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Cadmium | 3.5 | MG/KG | 3.5 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cadmium | 0.6 | MG/KG | 0.6 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Cadmium | 1.3 | MG/KG | 1.3 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Cadmium | 0.13 | MG/KG | 0.13 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Cadmium | 0.35 | MG/KG | 0.35 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Cadmium | 0.17 | MG/KG | 0.17 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Cadmium | 0.15 | MG/KG | 0.15 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Cadmium | 0.48 | MG/KG | 0.48 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Cadmium | 0.04 | MG/KG | 0.04 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Cadmium | 0.04 | MG/KG | 0.04 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Cadmium | 0.05 | MG/KG | 0.05 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Cadmium | 0.05 | MG/KG | 0.05 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Cadmium | 0.1 | MG/L | 0.1 | MG/L | U | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Cadmium | 0.11 | MG/KG | 0.11 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Cadmium | 0.11 | MG/KG | 0.11 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cadmium-109 | 1.9 | PCI/G | 1.9 | PCI/G | U | None | None | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Calcium | 15000 | MG/KG | 15000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Calcium | 24000 | MG/KG | 24000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Calcium | 20000 | MG/KG | 20000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Calcium | 17000 | MG/KG | 17000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Calcium | 680 | MG/KG | 680 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Calcium | 1520 | MG/KG | 1520 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Calcium | 734 | MG/KG | 734 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Calcium | 4400 | MG/KG | 4400 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Calcium | 2340 | MG/KG | 2340 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Calcium | 2890 | MG/KG | 2890 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Calcium | 7900 | MG/KG | 7900 | MG/KG | None | None | None | None | INORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Calcium | 703 | MG/KG | 703 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Calcium | 1350 | MG/KG | 1350 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Calcium | 630 | MG/KG | 630 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Calcium | 1210 | MG/KG | 1210 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Calcium | 700 | MG/KG | 700 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Calcium | 520 | MG/KG | 520 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Carbon Disulfide | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Carbon Disulfide | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Carbon Tetrachloride | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Carbon Tetrachloride | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cerium-139 | -0.049 | PCI/G | -0.049 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cerium-144 | 0.46 | PCI/G | 0.46 | PCI/G | TI | None | None | TI | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cesium-134 | -0.013 | PCI/G | -0.013 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cesium-137 | -0.026 | PCI/G | -0.026 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Chloro-3-methylphenol[4-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Chloro-3-methylphenol[4-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Chloro-3-methylphenol[4-] | 720 | UG/KG | 720 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Chloro-3-methylphenol[4-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chloro-3-methylphenol[4-] | 800 | UG/KG | 800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Chloro-3-methylphenol[4-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Chloro-3-methylphenol[4-] | 740 | UG/KG | 740 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Chloro-3-methylphenol[4-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Chloro-3-methylphenol[4-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Chloro-3-methylphenol[4-] | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Chloro-3-methylphenol[4-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chloro-3-methylphenol[4-] | 670 | UG/KG | 670 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Chloro-3-methylphenol[4-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Chloroaniline[4-] | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Chloroaniline[4-] | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Chloroaniline[4-] | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chloroaniline[4-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Chloroaniline[4-] | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Chloroaniline[4-] | 1500 | UG/KG | 1500 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chloroaniline[4-] | 1300 | UG/KG | 1300 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Chloroaniline[4-] | 1400 | UG/KG | 1400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chlorobenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chlorobenzene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chlorodibromomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chlorodibromomethane | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chloroethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chloroethane | 10 | UG/KG | 10 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chloroform | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chloroform | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chloromethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chloromethane | 10 | UG/KG | 10 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Chloronaphthalene[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Chloronaphthalene[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Chloronaphthalene[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Chloronaphthalene[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chloronaphthalene[2-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Chloronaphthalene[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Chloronaphthalene[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Chloronaphthalene[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Chloronaphthalene[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Chloronaphthalene[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Chloronaphthalene[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chloronaphthalene[2-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Chloronaphthalene[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Chlorophenol[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Chlorophenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Chlorophenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Chlorophenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chlorophenol[2-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Chlorophenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Chlorophenol[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Chlorophenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Chlorophenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Chlorophenol[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Chlorophenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chlorophenol[2-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Chlorophenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Chlorophenyl-phenyl[4-] Ether | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Chlorophenyl-phenyl[4-] Ether | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Chlorophenyl-phenyl[4-] Ether | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Chlorophenyl-phenyl[4-] Ether | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chlorophenyl-phenyl[4-] Ether | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Chlorophenyl-phenyl[4-] Ether | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Chlorophenyl-phenyl[4-] Ether | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Chlorophenyl-phenyl[4-] Ether | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Chlorophenyl-phenyl[4-] Ether | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Chlorophenyl-phenyl[4-] Ether | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Chlorophenyl-phenyl[4-] Ether | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chlorophenyl-phenyl[4-] Ether | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Chlorophenyl-phenyl[4-] Ether | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chlorotoluene[2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chlorotoluene[2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chlorotoluene[4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chlorotoluene[4-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Chromium, Total | 7.8 | MG/KG | 7.8 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Chromium, Total | 9.2 | MG/KG | 9.2 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Chromium, Total | 15 | MG/KG | 15 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Chromium, Total | 9.1 | MG/KG | 9.1 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chromium, Total | 2.5 | MG/KG | 2.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Chromium, Total | 9.7 | MG/KG | 9.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Chromium, Total | 0.046 | MG/KG | 0.046 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Chromium, Total | 6.9 | MG/KG | 6.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Chromium, Total | 9.5 | MG/KG | 9.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Chromium, Total | 10.9 | MG/KG | 10.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Chromium, Total | 12.2 | MG/KG | 12.2 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Chromium, Total | 1.1 | MG/KG | 1.1 | MG/KG | BE | A | None | J- | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Chromium, Total | 1.5 | MG/KG | 1.5 | MG/KG | BE | A | None | J- | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Chromium, Total | 0.61 | MG/KG | 0.61 | MG/KG | BE | A | None | J- | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Chromium, Total | 1.2 | MG/KG | 1.2 | MG/KG | BE | A | None | J- | INORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chromium, Total | 0.2 | MG/L | 0.2 | MG/L | U | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Chromium, Total | 0.41 | MG/KG | 0.41 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Chromium, Total | 1.1 | MG/KG | 1.1 | MG/KG | U | None | None | U | INORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Chrysene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Chrysene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Chrysene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Chrysene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Chrysene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Chrysene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Chrysene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Chrysene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Chrysene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Chrysene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Chrysene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Chrysene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Chrysene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Cobalt | 5.2 | MG/KG | 5.2 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Cobalt | 3.7 | MG/KG | 3.7 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Cobalt | 4.1 | MG/KG | 4.1 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Cobalt | 4.5 | MG/KG | 4.5 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cobalt | 1.5 | MG/KG | 1.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Cobalt | 14.9 | MG/KG | 14.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Cobalt | 1 | MG/KG | 1 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Cobalt | 2.9 | MG/KG | 2.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Cobalt | 5.9 | MG/KG | 5.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Cobalt | 8.5 | MG/KG | 8.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Cobalt | 5.8 | MG/KG | 5.8 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Cobalt | 0.44 | MG/KG | 0.44 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Cobalt | 0.64 | MG/KG | 0.64 | MG/KG | B | A | None | J | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Cobalt | 0.61 | MG/KG | 0.61 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Cobalt | 0.55 | MG/KG | 0.55 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Cobalt | 0.87 | MG/KG | 0.87 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Cobalt | 0.91 | MG/KG | 0.91 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cobalt-57 | 0 | PCI/G | 0 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cobalt-60 | -0.016 | PCI/G | -0.016 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Copper | 1000 | MG/KG | 1000 | MG/KG | None | RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Copper | 230 | MG/KG | 230 | MG/KG | None | RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Copper | 120 | MG/KG | 120 | MG/KG | None | RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Copper | 43 | MG/KG | 43 | MG/KG | None | RPM | I3d | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Copper | 1.9 | MG/KG | 1.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Copper | 7.2 | MG/KG | 7.2 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Copper | 1.8 | MG/KG | 1.8 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Copper | 157 | MG/KG | 157 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Copper | 13.9 | MG/KG | 13.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Copper | 8.9 | MG/KG | 8.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Copper | 33.6 | MG/KG | 33.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Copper | 12.7 | MG/KG | 12.7 | MG/KG | None | A | None | J | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Copper | 1.6 | MG/KG | 1.6 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Copper | 0.52 | MG/KG | 0.52 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Copper | 2.1 | MG/KG | 2.1 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Copper | 1.3 | MG/KG | 1.3 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Copper | 0.75 | MG/KG | 0.75 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Cyanide, Total | 0.56 | MG/KG | 0.56 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Cyanide, Total | 0.55 | MG/KG | 0.55 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Cyanide, Total | 0.54 | MG/KG | 0.54 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Cyanide, Total | 0.57 | MG/KG | 0.57 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Cyanide, Total | 0.6 | MG/KG | 0.6 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Cyanide, Total | 0.6 | MG/KG | 0.6 | MG/KG | B | A | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Cyanide, Total | 0.07 | MG/KG | 0.07 | MG/KG | B | A | None | None | INORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Cyanide, Total | 0.06 | MG/KG | 0.06 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Cyanide, Total | 0.06 | MG/KG | 0.06 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Cyanide, Total | 0.05 | MG/KG | 0.05 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Cyanide, Total | 0.06 | MG/KG | 0.06 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Cyanide, Total | 0.53 | MG/KG | 0.53 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Cyanide, Total | 0.55 | MG/KG | 0.55 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Cyanide, Total | 0.56 | MG/KG | 0.56 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Cyanide, Total | 0.57 | MG/KG | 0.57 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Di-n-butylphthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Di-n-butylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Di-n-butylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Di-n-butylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Di-n-butylphthalate | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Di-n-butylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Di-n-butylphthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Di-n-butylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Di-n-butylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Di-n-butylphthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Di-n-butylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Di-n-butylphthalate | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Di-n-butylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Di-n-octylphthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Di-n-octylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Di-n-octylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Di-n-octylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Di-n-octylphthalate | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Di-n-octylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Di-n-octylphthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Di-n-octylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Di-n-octylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Di-n-octylphthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Di-n-octylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Di-n-octylphthalate | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Di-n-octylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dibenz(a,h)anthracene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dibenz(a,h)anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dibenz(a,h)anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dibenz(a,h)anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dibenz(a,h)anthracene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dibenz(a,h)anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dibenz(a,h)anthracene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dibenz(a,h)anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dibenz(a,h)anthracene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dibenz(a,h)anthracene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dibenz(a,h)anthracene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dibenz(a,h)anthracene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dibenz(a,h)anthracene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dibenzofuran | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dibenzofuran | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dibenzofuran | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dibenzofuran | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dibenzofuran | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dibenzofuran | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dibenzofuran | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dibenzofuran | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dibenzofuran | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dibenzofuran | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dibenzofuran | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dibenzofuran | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dibenzofuran | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dibromo-3-chloropropane[1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dibromo-3-chloropropane[1,2-] | 10 | UG/KG | 10 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dibromoethane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dibromoethane[1,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dibromomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dibromomethane | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorobenzene[1,2-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorobenzene[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dichlorobenzene[1,2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorobenzene[1,2-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorobenzene[1,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dichlorobenzene[1,2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,3-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,3-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,3-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,3-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorobenzene[1,3-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorobenzene[1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,3-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dichlorobenzene[1,3-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,3-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,3-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,3-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,3-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorobenzene[1,3-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorobenzene[1,3-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dichlorobenzene[1,3-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dichlorobenzene[1,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorobenzene[1,4-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorobenzene[1,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dichlorobenzene[1,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzene[1,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorobenzene[1,4-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorobenzene[1,4-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dichlorobenzene[1,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dichlorobenzidine[3,3'-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dichlorobenzidine[3,3'-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dichlorobenzidine[3,3'-] | 720 | UG/KG | 720 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dichlorobenzidine[3,3'-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorobenzidine[3,3'-] | 800 | UG/KG | 800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzidine[3,3'-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dichlorobenzidine[3,3'-] | 740 | UG/KG | 740 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzidine[3,3'-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzidine[3,3'-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzidine[3,3'-] | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dichlorobenzidine[3,3'-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorobenzidine[3,3'-] | 670 | UG/KG | 670 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dichlorobenzidine[3,3'-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorodifluoromethane | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorodifluoromethane | 10 | UG/KG | 10 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloroethane[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloroethane[1,1-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloroethane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloroethane[1,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloroethene[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloroethene[1,1-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloroethene[cis-1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloroethene[cis-1,2-] | 10 | UG/KG | 10 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloroethene[trans-1,2-] | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloroethene[trans-1,2-] | 10 | UG/KG | 10 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dichlorophenol[2,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dichlorophenol[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dichlorophenol[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dichlorophenol[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichlorophenol[2,4-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dichlorophenol[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dichlorophenol[2,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dichlorophenol[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dichlorophenol[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dichlorophenol[2,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dichlorophenol[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichlorophenol[2,4-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dichlorophenol[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloropropane[1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloropropane[1,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloropropane[1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloropropane[1,3-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloropropane[2,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloropropane[2,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloropropene[1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloropropene[1,1-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloropropene[cis-1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloropropene[cis-1,3-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dichloropropene[trans-1,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dichloropropene[trans-1,3-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Diethylphthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Diethylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Diethylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Diethylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Diethylphthalate | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Diethylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Diethylphthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Diethylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Diethylphthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Diethylphthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Diethylphthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Diethylphthalate | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Diethylphthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dimethyl Phthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dimethyl Phthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dimethyl Phthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dimethyl Phthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dimethyl Phthalate | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dimethyl Phthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dimethyl Phthalate | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dimethyl Phthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dimethyl Phthalate | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dimethyl Phthalate | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dimethyl Phthalate | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dimethyl Phthalate | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dimethyl Phthalate | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dimethylphenol[2,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dimethylphenol[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dimethylphenol[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dimethylphenol[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dimethylphenol[2,4-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dimethylphenol[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dimethylphenol[2,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dimethylphenol[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dimethylphenol[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dimethylphenol[2,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dimethylphenol[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dimethylphenol[2,4-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dimethylphenol[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dinitro-2-methylphenol[4,6-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dinitro-2-methylphenol[4,6-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dinitro-2-methylphenol[4,6-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dinitro-2-methylphenol[4,6-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dinitro-2-methylphenol[4,6-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dinitro-2-methylphenol[4,6-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dinitro-2-methylphenol[4,6-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dinitrobenzene[1,3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dinitrophenol[2,4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dinitrophenol[2,4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dinitrophenol[2,4-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dinitrophenol[2,4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dinitrophenol[2,4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dinitrophenol[2,4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dinitrophenol[2,4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dinitrophenol[2,4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dinitrophenol[2,4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dinitrophenol[2,4-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dinitrophenol[2,4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dinitrophenol[2,4-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dinitrophenol[2,4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dinitrotoluene[2,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dinitrotoluene[2,4-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dinitrotoluene[2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,6-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,6-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,6-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,6-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dinitrotoluene[2,6-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Dinitrotoluene[2,6-] | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Dinitrotoluene[2,6-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Dinitrotoluene[2,6-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Ethylbenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Ethylbenzene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Europium-152 | -0.03 | PCI/G | -0.03 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Fluoranthene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Fluoranthene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Fluoranthene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Fluoranthene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Fluoranthene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Fluoranthene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Fluoranthene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Fluoranthene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Fluorene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Fluorene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Fluorene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Fluorene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Fluorene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Fluorene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Fluorene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Fluorene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Fluorene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Fluorene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Fluorene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Fluorene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Fluorene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Hexachlorobenzene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Hexachlorobenzene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Hexachlorobenzene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Hexachlorobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Hexachlorobenzene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Hexachlorobenzene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Hexachlorobenzene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Hexachlorobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Hexachlorobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Hexachlorobenzene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Hexachlorobenzene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Hexachlorobenzene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Hexachlorobenzene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Hexachlorobutadiene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Hexachlorobutadiene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Hexachlorobutadiene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Hexachlorobutadiene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Hexachlorobutadiene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Hexachlorobutadiene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Hexachlorobutadiene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Hexachlorobutadiene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Hexachlorobutadiene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Hexachlorobutadiene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Hexachlorobutadiene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Hexachlorobutadiene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Hexachlorobutadiene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Hexachlorocyclopentadiene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Hexachlorocyclopentadiene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Hexachlorocyclopentadiene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Hexachlorocyclopentadiene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Hexachlorocyclopentadiene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Hexachlorocyclopentadiene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Hexachlorocyclopentadiene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Hexachlorocyclopentadiene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Hexachlorocyclopentadiene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Hexachlorocyclopentadiene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Hexachlorocyclopentadiene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Hexachlorocyclopentadiene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Hexachlorocyclopentadiene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Hexachloroethane | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Hexachloroethane | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Hexachloroethane | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Hexachloroethane | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Hexachloroethane | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Hexachloroethane | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Hexachloroethane | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Hexachloroethane | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Hexachloroethane | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Hexachloroethane | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Hexachloroethane | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Hexachloroethane | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Hexachloroethane | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Hexanone[2-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Hexanone[2-] | 20 | UG/KG | 20 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | HMX | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Indeno(1,2,3-cd)pyrene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Indeno(1,2,3-cd)pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Indeno(1,2,3-cd)pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Indeno(1,2,3-cd)pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Indeno(1,2,3-cd)pyrene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Indeno(1,2,3-cd)pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Indeno(1,2,3-cd)pyrene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Indeno(1,2,3-cd)pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Indeno(1,2,3-cd)pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Indeno(1,2,3-cd)pyrene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Indeno(1,2,3-cd)pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Indeno(1,2,3-cd)pyrene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Indeno(1,2,3-cd)pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Iodomethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Iodomethane | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Iron | 9400 | MG/KG | 9400 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Iron | 10000 | MG/KG | 10000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Iron | 9900 | MG/KG | 9900 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Iron | 11000 | MG/KG | 11000 | MG/KG | None | P | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Iron | 7500 | MG/KG | 7500 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Iron | 14100 | MG/KG | 14100 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Iron | 4290 | MG/KG | 4290 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Iron | 9820 | MG/KG | 9820 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Iron | 13700 | MG/KG | 13700 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Iron | 13500 | MG/KG | 13500 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Iron | 17800 | MG/KG | 17800 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Iron | 2170 | MG/KG | 2170 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Iron | 2810 | MG/KG | 2810 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Iron | 2520 | MG/KG | 2520 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Iron | 3190 | MG/KG | 3190 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Iron | 4100 | MG/KG | 4100 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Iron | 3700 | MG/KG | 3700 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Isophorone | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Isophorone | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Isophorone | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Isophorone | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Isophorone | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Isophorone | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Isophorone | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Isophorone | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Isophorone | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Isophorone | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Isophorone | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Isophorone | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Isophorone | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Isopropylbenzene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Isopropylbenzene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Isopropyltoluene[4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Isopropyltoluene[4-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Lanthanum-140 | -1.9 | PCI/G | -1.9 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Lead | 370 | MG/KG | 370 | MG/KG | None | P RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Lead | 1600 | MG/KG | 1600 | MG/KG | None | P RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Lead | 40000 | MG/KG | 40000 | MG/KG | None | P RPM | I3d | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Lead | 51 | MG/KG | 51 | MG/KG | None | P RPM | I3d | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Lead | 5.7 | MG/KG | 5.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Lead | 18.6 | MG/KG | 18.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Lead | 3 | MG/KG | 3 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Lead | 219 | MG/KG | 219 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Lead | 23 | MG/KG | 23 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Lead | 13.7 | MG/KG | 13.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Lead | 36.7 | MG/KG | 36.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Lead | 15.6 | MG/KG | 15.6 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Lead | 2.1 | MG/KG | 2.1 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Lead | 1.4 | MG/KG | 1.4 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Lead | 2.9 | MG/KG | 2.9 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Lead | 1 | MG/L | 1 | MG/L | U | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Lead | 2.1 | MG/KG | 2.1 | MG/KG | None | P | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Lead | 25 | MG/KG | 25 | MG/KG | None | P | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Lead-211 | 0.2 | PCI/G | 0.2 | PCI/G | U | U | R9A | U | RAD |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Lead-212 | 1.81 | PCI/G | 1.81 | PCI/G | None | None | None | None | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Lead-214 | 1.01 | PCI/G | 1.01 | PCI/G | None | None | None | None | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Magnesium | 1700 | MG/KG | 1700 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Magnesium | 1900 | MG/KG | 1900 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Magnesium | 1600 | MG/KG | 1600 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Magnesium | 2300 | MG/KG | 2300 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Magnesium | 610 | MG/KG | 610 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Magnesium | 1960 | MG/KG | 1960 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Magnesium | 249 | MG/KG | 249 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Magnesium | 1440 | MG/KG | 1440 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Magnesium | 1960 | MG/KG | 1960 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Magnesium | 2130 | MG/KG | 2130 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Magnesium | 2310 | MG/KG | 2310 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Magnesium | 103 | MG/KG | 103 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Magnesium | 139 | MG/KG | 139 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Magnesium | 138 | MG/KG | 138 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Magnesium | 251 | MG/KG | 251 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Magnesium | 130 | MG/KG | 130 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Magnesium | 170 | MG/KG | 170 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Manganese | 340 | MG/KG | 340 | MG/KG | None | J- | I3a | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Manganese | 270 | MG/KG | 270 | MG/KG | None | P J- | I3a | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Manganese | 250 | MG/KG | 250 | MG/KG | None | P J- | I3a | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Manganese | 270 | MG/KG | 270 | MG/KG | None | P J- | I3a | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Manganese | 250 | MG/KG | 250 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Manganese | 1450 | MG/KG | 1450 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Manganese | 251 | MG/KG | 251 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Manganese | 209 | MG/KG | 209 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Manganese | 342 | MG/KG | 342 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Manganese | 482 | MG/KG | 482 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Manganese | 374 | MG/KG | 374 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Manganese | 86.9 | MG/KG | 86.9 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Manganese | 81.1 | MG/KG | 81.1 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Manganese | 186 | MG/KG | 186 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Manganese | 92 | MG/KG | 92 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Manganese | 260 | MG/KG | 260 | MG/KG | None | P | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Manganese | 160 | MG/KG | 160 | MG/KG | None | P | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Manganese-54 | -0.016 | PCI/G | -0.016 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Mercury | 0.14 | MG/KG | 0.14 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Mercury | 0.24 | MG/KG | 0.24 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Mercury | 0.27 | MG/KG | 0.27 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Mercury | 0.11 | MG/KG | 0.11 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Mercury | 0.12 | MG/KG | 0.12 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Mercury | | | 0.06 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Mercury | | | 0.01 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Mercury | | | 0.07 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Mercury | | | 0.03 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Mercury | | | 0.03 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Mercury | | | 0.09 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Mercury | | | 0.1 | MG/KG | B | None | None | UJ | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Mercury | | | 0.02 | MG/KG | B | None | None | UJ | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Mercury | | | 0.01 | MG/KG | B | None | None | UJ | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Mercury | | | 0.03 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Mercury | 5 | UG/L | 0.005 | MG/L | U | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Mercury | 0.11 | MG/KG | 0.11 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Mercury | 0.01 | MG/KG | 0.01 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Mercury-203 | -0.058 | PCI/G | -0.058 | PCI/G | U | U | R9A | U | RAD |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Methyl-2-pentanone[4-] | 24 | UG/KG | 24 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Methyl-2-pentanone[4-] | 20 | UG/KG | 20 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Methylene Chloride | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Methylene Chloride | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Methylnaphthalene[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Methylnaphthalene[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Methylnaphthalene[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Methylnaphthalene[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Methylnaphthalene[2-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Methylnaphthalene[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Methylnaphthalene[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Methylnaphthalene[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Methylnaphthalene[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Methylnaphthalene[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Methylnaphthalene[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Methylnaphthalene[2-] | 340 | UG/KG | 340 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Methylnaphthalene[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Methylphenol[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Methylphenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Methylphenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Methylphenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Methylphenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Methylphenol[2-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Methylphenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Methylphenol[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Methylphenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Methylphenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Methylphenol[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Methylphenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Methylphenol[2-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Methylphenol[4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Methylphenol[4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Methylphenol[4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Methylphenol[4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Methylphenol[4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Methylphenol[4-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Methylphenol[4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Methylphenol[4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Methylphenol[4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Methylphenol[4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Methylphenol[4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Methylphenol[4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Methylphenol[4-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Naphthalene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Naphthalene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Naphthalene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Naphthalene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Naphthalene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Naphthalene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Naphthalene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Naphthalene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Naphthalene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Naphthalene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Naphthalene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Naphthalene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Naphthalene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| | | | | | | | | | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Neptunium-237 | 0.18 | PCI/G | 0.18 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nickel | 5.5 | MG/KG | 5.5 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nickel | 7 | MG/KG | 7 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nickel | 6.8 | MG/KG | 6.8 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nickel | 6.6 | MG/KG | 6.6 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nickel | 2.4 | MG/KG | 2.4 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nickel | 8.6 | MG/KG | 8.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nickel | 1.5 | MG/KG | 1.5 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nickel | 5.3 | MG/KG | 5.3 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nickel | 7 | MG/KG | 7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nickel | 8.4 | MG/KG | 8.4 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nickel | 15.3 | MG/KG | 15.3 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Nickel | 0.61 | MG/KG | 0.61 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Nickel | 2 | MG/KG | 2 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Nickel | 1.3 | MG/KG | 1.3 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Nickel | 1.4 | MG/KG | 1.4 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Nickel | 0.62 | MG/KG | 0.62 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Nickel | 0.41 | MG/KG | 0.41 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitroaniline[2-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitroaniline[2-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitroaniline[2-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitroaniline[2-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitroaniline[2-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[2-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitroaniline[2-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[2-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[2-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[2-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[2-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitroaniline[2-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitroaniline[2-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitroaniline[3-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitroaniline[3-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitroaniline[3-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitroaniline[3-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitroaniline[3-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[3-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitroaniline[3-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[3-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[3-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[3-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[3-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitroaniline[3-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitroaniline[3-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitroaniline[4-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitroaniline[4-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitroaniline[4-] | 720 | UG/KG | 720 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitroaniline[4-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitroaniline[4-] | 800 | UG/KG | 800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[4-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitroaniline[4-] | 740 | UG/KG | 740 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[4-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[4-] | 760 | UG/KG | 760 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[4-] | 710 | UG/KG | 710 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitroaniline[4-] | 780 | UG/KG | 780 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitroaniline[4-] | 670 | UG/KG | 670 | UG/KG | U | None | None | None | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitroanilline[4-] | 730 | UG/KG | 730 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrobenzene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrobenzene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrobenzene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrobenzene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrobenzene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrobenzene | 0.26 | MG/KG | 0.26 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitrobenzene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitrobenzene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrophenol[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrophenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrophenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrophenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrophenol[2-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrophenol[2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[2-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[2-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[2-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitrophenol[2-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitrophenol[2-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrophenol[4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrophenol[4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrophenol[4-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrophenol[4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrophenol[4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrophenol[4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[4-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrophenol[4-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitrophenol[4-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitrophenol[4-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitroso-di-n-propylamine[N-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitroso-di-n-propylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitroso-di-n-propylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitroso-di-n-propylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitroso-di-n-propylamine[N-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitroso-di-n-propylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitroso-di-n-propylamine[N-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitroso-di-n-propylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitroso-di-n-propylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitroso-di-n-propylamine[N-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitroso-di-n-propylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitroso-di-n-propylamine[N-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitroso-di-n-propylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrosodimethylamine[N-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrosodimethylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrosodimethylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrosodimethylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrosodimethylamine[N-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrosodimethylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrosodimethylamine[N-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrosodimethylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrosodimethylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrosodimethylamine[N-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrosodimethylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitrosodimethylamine[N-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitrosodimethylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrosodiphenylamine[N-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrosodiphenylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrosodiphenylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrosodiphenylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrosodiphenylamine[N-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrosodiphenylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrosodiphenylamine[N-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrosodiphenylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrosodiphenylamine[N-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrosodiphenylamine[N-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrosodiphenylamine[N-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Nitrosodiphenylamine[N-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Nitrosodiphenylamine[N-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[2-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[3-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Nitrotoluene[4-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Oxybis(1-chloropropane)[2,2'-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Oxybis(1-chloropropane)[2,2'-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Oxybis(1-chloropropane)[2,2'-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Oxybis(1-chloropropane)[2,2'-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Oxybis(1-chloropropane)[2,2'-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Oxybis(1-chloropropane)[2,2'-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Oxybis(1-chloropropane)[2,2'-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Pentachlorophenol | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Pentachlorophenol | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Pentachlorophenol | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Pentachlorophenol | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Pentachlorophenol | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Pentachlorophenol | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Pentachlorophenol | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Pentachlorophenol | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Pentachlorophenol | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Pentachlorophenol | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Pentachlorophenol | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Pentachlorophenol | 1600 | UG/KG | 1600 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Pentachlorophenol | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Phenanthrene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Phenanthrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Phenanthrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Phenanthrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Phenanthrene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Phenanthrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Phenanthrene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Phenanthrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Phenanthrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Phenanthrene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Phenanthrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Phenanthrene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Phenanthrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Phenol | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Phenol | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Phenol | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Phenol | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Phenol | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Phenol | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Phenol | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Phenol | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Phenol | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Phenol | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Phenol | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Phenol | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Phenol | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Potassium | 1200 | MG/KG | 1200 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Potassium | 1300 | MG/KG | 1300 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Potassium | 1100 | MG/KG | 1100 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Potassium | 1700 | MG/KG | 1700 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Potassium | 560 | MG/KG | 560 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Potassium | 2250 | MG/KG | 2250 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Potassium | 246 | MG/KG | 246 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Potassium | 1320 | MG/KG | 1320 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Potassium | 1860 | MG/KG | 1860 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Potassium | 2220 | MG/KG | 2220 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Potassium | 1820 | MG/KG | 1820 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Potassium | 265 | MG/KG | 265 | MG/KG | B | A U | I4 | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Potassium | 277 | MG/KG | 277 | MG/KG | B | A U | I4 | U | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Potassium | 356 | MG/KG | 356 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Potassium | 422 | MG/KG | 422 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Potassium | 150 | MG/KG | 150 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Potassium | 200 | MG/KG | 200 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Potassium-40 | 37.3 | PCI/G | 37.3 | PCI/G | None | None | None | None | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Propylbenzene[1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Propylbenzene[1-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Protactinium-231 | 1.6 | PCI/G | 1.6 | PCI/G | U | None | None | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Protactinium-233 | 0.07 | PCI/G | 0.07 | PCI/G | U | None | None | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Protactinium-234M | 10 | PCI/G | 10 | PCI/G | U | None | None | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Pyrene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Pyrene | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Pyrene | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Pyrene | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Pyrene | 410 | UG/KG | 410 | UG/KG | None | None | None | None | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Pyrene | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Pyrene | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Pyrene | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Pyrene | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Radium-223 | -0.8 | PCI/G | -0.8 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Radium-224 | 0 | PCI/G | 0 | PCI/G | SQ | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Radium-226 | 2.4 | PCI/G | 2.4 | PCI/G | U | None | None | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Radon-219 | -0.56 | PCI/G | -0.56 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | RDX | 1 | MG/KG | 1 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Ruthenium-106 | 0.05 | PCI/G | 0.05 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Selenium | 1.1 | MG/KG | 1.1 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Selenium | 1.1 | MG/KG | 1.1 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Selenium | 1.1 | MG/KG | 1.1 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Selenium | 1.1 | MG/KG | 1.1 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Selenium | 1.2 | MG/KG | 1.2 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Selenium | 0.66 | MG/KG | 0.66 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Selenium | 0.64 | MG/KG | 0.64 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Selenium | 0.63 | MG/KG | 0.63 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Selenium | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Selenium | 0.6 | MG/KG | 0.6 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Selenium | 0.67 | MG/KG | 0.67 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Selenium | 0.55 | MG/KG | 0.55 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Selenium | 0.58 | MG/KG | 0.58 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Selenium | 0.59 | MG/KG | 0.59 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Selenium | 0.66 | MG/KG | 0.66 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Selenium | 1 | MG/L | 1 | MG/L | U | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Selenium | 1.1 | MG/KG | 1.1 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Selenium | 1.1 | MG/KG | 1.1 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Selenium-75 | 0.021 | PCI/G | 0.021 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Silver | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Silver | 2.2 | MG/KG | 2.2 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Silver | 2.2 | MG/KG | 2.2 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Silver | 2.3 | MG/KG | 2.3 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Silver | 2.4 | MG/KG | 2.4 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Silver | 0.14 | MG/KG | 0.14 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Silver | 0.13 | MG/KG | 0.13 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Silver | 1.6 | MG/KG | 1.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Silver | 0.14 | MG/KG | 0.14 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Silver | 0.13 | MG/KG | 0.13 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Silver | 0.14 | MG/KG | 0.14 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Silver | 0.17 | MG/KG | 0.17 | MG/KG | N* | A RPM P | I3D | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Silver | 0.18 | MG/KG | 0.18 | MG/KG | UN* | A RPM P | I3D | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Silver | 0.18 | MG/KG | 0.18 | MG/KG | UN* | RPM A P | I3D | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Silver | 0.18 | MG/KG | 0.18 | MG/KG | UN* | P A RPM | I3D | R | INORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Silver | 0.1 | MG/L | 0.1 | MG/L | U | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Silver | 0.55 | MG/KG | 0.55 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Silver | 0.54 | MG/KG | 0.54 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Sodium | 170 | MG/KG | 170 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Sodium | 220 | MG/KG | 220 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Sodium | 230 | MG/KG | 230 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Sodium | 250 | MG/KG | 250 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Sodium | 100 | MG/KG | 100 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Sodium | 133 | MG/KG | 133 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Sodium | 84.6 | MG/KG | 84.6 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Sodium | 114 | MG/KG | 114 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Sodium | 103 | MG/KG | 103 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Sodium | 87.5 | MG/KG | 87.5 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Sodium | 227 | MG/KG | 227 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Sodium | 71 | MG/KG | 71 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Sodium | 41.7 | MG/KG | 41.7 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Sodium | 167 | MG/KG | 167 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Sodium | 105 | MG/KG | 105 | MG/KG | B | A | None | None | INORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Sodium | 86 | MG/KG | 86 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Sodium | 84 | MG/KG | 84 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Sodium-22 | -0.1 | PCI/G | -0.1 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Strontium-85 | -0.143 | PCI/G | -0.143 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Styrene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Styrene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Tetrachloroethane[1,1,1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Tetrachloroethane[1,1,1,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Tetrachloroethane[1,1,2,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Tetrachloroethane[1,1,2,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Tetrachloroethene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Tetrachloroethene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Tetryl | 0.65 | MG/KG | 0.65 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Thallium | 0.28 | MG/KG | 0.28 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Thallium | 0.27 | MG/KG | 0.27 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Thallium | 0.27 | MG/KG | 0.27 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Thallium | 0.29 | MG/KG | 0.29 | MG/KG | U | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Thallium | 2.4 | MG/KG | 2.4 | MG/KG | U | None | None | U | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Thallium | 0.17 | MG/KG | 0.17 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Thallium | 0.16 | MG/KG | 0.16 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Thallium | 0.21 | MG/KG | 0.21 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Thallium | 0.08 | MG/KG | 0.08 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Thallium | 0.06 | MG/KG | 0.06 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Thallium | 0.1 | MG/KG | 0.1 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Thallium | 0.65 | MG/KG | 0.65 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Thallium | 0.69 | MG/KG | 0.69 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Thallium | 0.7 | MG/KG | 0.7 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Thallium | 0.7 | MG/KG | 0.7 | MG/KG | U | A | None | U | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Thallium | 0.05 | MG/KG | 0.05 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Thallium | 0.06 | MG/KG | 0.06 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Thallium-208 | 0.68 | PCI/G | 0.68 | PCI/G | None | None | None | None | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Thorium-227 | -0.92 | PCI/G | -0.92 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Thorium-234 | 0.4 | PCI/G | 0.4 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Tin-113 | -0.037 | PCI/G | -0.037 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Toluene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Toluene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Toluene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichloro-1,2,2-trifluoroethane[1,1,2-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Trichlorobenzene[1,2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Trichlorobenzene[1,2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Trichlorobenzene[1,2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Trichlorobenzene[1,2,4-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichlorobenzene[1,2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Trichlorobenzene[1,2,4-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Trichlorobenzene[1,2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Trichlorobenzene[1,2,4-] | | | | | | | | | |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Trichlorobenzene[1,2,4-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Trichlorobenzene[1,2,4-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Trichlorobenzene[1,2,4-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichlorobenzene[1,2,4-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Trichlorobenzene[1,2,4-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichloroethane[1,1,1-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichloroethane[1,1,1-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichloroethane[1,1,2-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichloroethane[1,1,2-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichloroethene | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichloroethene | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichlorofluoromethane | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichlorofluoromethane | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Trichlorophenol[2,4,5-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Trichlorophenol[2,4,5-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Trichlorophenol[2,4,5-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Trichlorophenol[2,4,5-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichlorophenol[2,4,5-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,5-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Trichlorophenol[2,4,5-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,5-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,5-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,5-] | 1700 | UG/KG | 1700 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,5-] | 1900 | UG/KG | 1900 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichlorophenol[2,4,5-] | 1600 | UG/KG | 1600 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Trichlorophenol[2,4,5-] | 1800 | UG/KG | 1800 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Trichlorophenol[2,4,6-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Trichlorophenol[2,4,6-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Trichlorophenol[2,4,6-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Trichlorophenol[2,4,6-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichlorophenol[2,4,6-] | 400 | UG/KG | 400 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,6-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Trichlorophenol[2,4,6-] | 370 | UG/KG | 370 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,6-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,6-] | 380 | UG/KG | 380 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,6-] | 350 | UG/KG | 350 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Trichlorophenol[2,4,6-] | 390 | UG/KG | 390 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichlorophenol[2,4,6-] | 340 | UG/KG | 340 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5964 | RE16-99-0019 | 11.5 | 12 | IN | S2 | ALLH | Trichlorophenol[2,4,6-] | 360 | UG/KG | 360 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trichloropropane[1,2,3-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trichloropropane[1,2,3-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trimethylbenzene[1,2,4-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trimethylbenzene[1,2,4-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trimethylbenzene[1,3,5-] | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Trimethylbenzene[1,3,5-] | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Trinitrobenzene[1,3,5-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |

TABLE D-2.0-4
PRS 16-034(p)
ANALYTICAL RESULTS

| PRS ID | LOCATION ID | SAMPLE ID | BEGIN DEPTH | END DEPTH | DEPTH UNITS | SAMPLE MATRIX CODE | MEDIA CODE | ANALYTE NAME | STD RESULT | STD REPORTING UNITS | SAMPLE RESULTS | REPORTING UNITS | LAB QUALIFIER | LANL QUALIFIER | LANL QUALIFIER REASON | REPORT QUALIFIER | RFI CLASS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Trinitrotoluene[2,4,6-] | 0.25 | MG/KG | 0.25 | MG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Uranium-235 | 0.05 | PCI/G | 0.05 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Vanadium | 13 | MG/KG | 13 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Vanadium | 14 | MG/KG | 14 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Vanadium | 14 | MG/KG | 14 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Vanadium | 17 | MG/KG | 17 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Vanadium | 4.5 | MG/KG | 4.5 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Vanadium | 25.7 | MG/KG | 25.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Vanadium | 2 | MG/KG | 2 | MG/KG | B | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Vanadium | 12.6 | MG/KG | 12.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Vanadium | 22.6 | MG/KG | 22.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Vanadium | 25.3 | MG/KG | 25.3 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Vanadium | 19 | MG/KG | 19 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Vanadium | 1.2 | MG/KG | 1.2 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Vanadium | 1.9 | MG/KG | 1.9 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Vanadium | 1.4 | MG/KG | 1.4 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Vanadium | 2.4 | MG/KG | 2.4 | MG/KG | B | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Vanadium | 1.8 | MG/KG | 1.8 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Vanadium | 2.4 | MG/KG | 2.4 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Vinyl Chloride | 12 | UG/KG | 12 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Vinyl Chloride | 10 | UG/KG | 10 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Xylene (Total) | 6 | UG/KG | 6 | UG/KG | U | None | None | U | ORGANIC |
| 16-034(p) | NA | RE16-98-4003 | 0 | 3 | IN | DT | DEBC | Xylene (Total) | 5.1 | UG/KG | 5.1 | UG/KG | U | None | None | None | ORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Yttrium-88 | -0.02 | PCI/G | -0.02 | PCI/G | U | U | R9A | U | RAD |
| 16-034(p) | 16-5940 | RE16-98-0065 | 0 | 6 | IN | S2 | NA | Zinc | 140 | MG/KG | 140 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0066 | 0 | 6 | IN | S2 | NA | Zinc | 210 | MG/KG | 210 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0067 | 0 | 6 | IN | S2 | NA | Zinc | 290 | MG/KG | 290 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | 16-5947 | RE16-98-0068 | 0 | 6 | IN | S2 | NA | Zinc | 170 | MG/KG | 170 | MG/KG | None | None | None | R | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Zinc | 41 | MG/KG | 41 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5962 | RE16-98-0071 | 0 | 6 | IN | S1 | ALLH | Zinc | 36.6 | MG/KG | 36.6 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0072 | 0 | 6 | IN | S1 | QBT4 | Zinc | 26.9 | MG/KG | 26.9 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-98-0073 | 0 | 6 | IN | S1 | ALLH | Zinc | 197 | MG/KG | 197 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5964 | RE16-98-0074 | 0 | 6 | IN | S1 | ALLH | Zinc | 58.7 | MG/KG | 58.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5965 | RE16-98-0075 | 0 | 6 | IN | S1 | ALLH | Zinc | 36.4 | MG/KG | 36.4 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5966 | RE16-98-0076 | 0 | 6 | IN | S1 | ALLH | Zinc | 257 | MG/KG | 257 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5940 | RE16-98-0077 | 0 | 2 | IN | S1 | QBT4 | Zinc | 20.8 | MG/KG | 20.8 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0083 | 0 | 2 | IN | S1 | QBT4 | Zinc | 10.4 | MG/KG | 10.4 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5941 | RE16-98-0084 | 12 | 18 | IN | S1 | QBT4 | Zinc | 14.2 | MG/KG | 14.2 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5942 | RE16-98-0085 | 12 | 18 | IN | S1 | QBT4 | Zinc | 20.8 | MG/KG | 20.8 | MG/KG | None | A | None | None | INORGANIC |
| 16-034(p) | 16-5963 | RE16-99-0018 | 126 | 132 | IN | S2 | ALLH | Zinc | 18 | MG/KG | 18 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | 16-5986 | RE16-99-0020 | 10.5 | 11 | IN | S2 | ALLH | Zinc | 8.7 | MG/KG | 8.7 | MG/KG | None | None | None | None | INORGANIC |
| 16-034(p) | NA | RE16-98-0069 | 0 | 0 | IN | S1 | ALLH | Zinc-65 | -0.02 | PCI/G | -0.02 | PCI/G | U | U | R9A | U | RAD |

# APPENDIX E. STATISTICAL ANALYSES

## E-1.0 Comparison of V-Site Uranium Results to Local (TA-16) Background Results for Uranium

### E-1.1 Uranium Levels at TA-16

Over the four years of investigations at TA-16, ER Project personnel have collected almost 400 samples (322 soil samples, including approximately 60 that straddled the soil/tuff interface, plus 64 tuff samples) that have been analyzed for uranium. Of these, 111 were taken from PRSs associated with V-Site and building TA-16-27; 29 were taken from PRS 16-017, which contains the footprints of several buildings, including TA-16-27; and the remaining 246 were taken from 26 other PRSs at TA-16. Apart from the 34 V-Site samples that were analyzed by a non-standard CLP metals procedure, the samples were analyzed by ICPMS (following SW-846 Method 6020) or by kinetic phosphorimetry analysis. In every instance for which the sample preparation method was verified, it was reported that a standard weak acid digestion method had been used. Three contract laboratories performed the analyses.

The uranium results are remarkably consistent across all laboratories and methods and, once the PRSs that appear to be contaminated with uranium are eliminated (Section E-1.2), across TA-16. However, the results do contrast sharply with LANL background data. Specifically, a high percentage (59%) of the TA-16 soil sample results fall between the LANL BV (1.82 mg/kg) and the maximum value for the LANL background data (3.6 mg/kg). Because the BV was computed as a (0.95,0.95) UTL, we would not expect more than about 5% of TA-16 results to fall in this range, assuming that the results are actually due to background. If we consider only the samples from the non-V-Site PRSs that are not obviously contaminated with uranium, the percentage of results in this range rises to 70%.

In short, we must conclude either that low-level uranium contamination is uniformly widespread in TA-16 soils, or that there is some other systematic difference between TA-16 data and the background data (e.g., a difference between the analytical methods employed by the laboratories). Knowledge of the historic processes at TA-16, together with the observed consistency of the TA-16 data across laboratories and methods, makes the systematic difference hypothesis seem more likely. Therefore, this appendix presents a local background data set based on uranium data for 112 soil samples taken from 16 TA-16 PRSs where there is no evidence that uranium has been released to the environment. (Uranium also tends to be slightly higher in TA-16 tuff samples than in LANL background tuff samples, but the difference is not significant enough to warrant generating a local background data set for that comparison.) The uranium soil data discussed in Sections 2, 3, and 4 of this report have been compared with this local background data set: we conclude that there is no evidence of a uranium release at any of these V-Site PRSs.

### E-1.2 Selection of Samples for the TA-16 Local Background Data Set

Uranium data were available from 26 PRSs at TA-16, including the south drainage at the Burning Ground, which receives run-off from several of the Burning Ground PRSs. These data are summarized in Table E-1.2-1, which also shows the PRSs that were eliminated from the local background data set. The remaining 16 PRSs, together with the Burning Ground south drainage, represent 112 soil samples, of which 85 exceeded the LANL BV of 1.82 mg/kg, but only 7 exceeded the maximum value of 3.6 mg/kg.

**Table E-1.2-1**
**Comparison of V-Site Uranium Results with the TA-16 Background Data for Uranium**

| PRS | Retained | N[a] | >BV | >Bmax[b] | Max[c] | Description |
|---|---|---|---|---|---|---|
| 16-001(e) | Yes | 2 | 0 | 0 | 1.52 | Dry well, the 300 line |
| 16-003(a) | No | 9 | 8 | 4 | 6.29 | Sump/outfall, TA-16-410, test device assembly |
| 16-003(b) | Yes | 9 | 9 | 2 | 3.98 | Sump/outfall, TA-16-400, truck washing |
| 16-003(i) | Yes | 9 | 9 | 0 | 3.51 | Sump, TA-16-267, in-line assembly work |
| 16-003(j) | Yes | 9 | 7 | 0 | 2.89 | Sump at TA-16-265, in-line assembly |
| 16-003(k) | Yes | 8 | 5 | 0 | 2.89 | Sumps and drainlines, TA-16-260, machining |
| 16-003(n) | No | 8 | 5 | 1 | 6.6 | Sump, TA-16-342, plastic-bonded explosives |
| 16-003(o) | No | 15 | 15 | 9 | 17.3 | Sumps, TA-16-340, plastic-bonded explosives |
| 16-007(a) | Yes | 3 | 3 | 0 | 2.95 | 30s-line ponds |
| 16-010(h) | Yes | 6 | 4 | 0 | 3.03 | TA-16-390, basket wash facility |
| 16-010(i) | No | 14 | 13 | 5 | 7.86 | Burning pad for uranium-contaminated objects |
| 16-010(k) | Yes | 3 | 0 | 0 | 1.25 | Burning ground trough |
| 16-010(l) | Yes | 2 | 1 | 0 | 2.73 | Burning ground trough |
| 16-010(m) | Yes | 3 | 3 | 0 | 3.14 | Burning ground trough |
| 16-010(n) | No | 5 | 5 | 2 | 11.3 | Burning ground trough, specifically for uranium-contaminated water |
| 16-016(c) | Yes | 18 | 15 | 0 | 3.52 | Barium nitrate pile |
| 16-021(c) | No | 37 | 32 | 15 | 8.71 | Outfall, TA-16-260, machining |
| 16-025(s) | Yes | 1 | 1 | 0 | 2.8 | Surface soil, TA-16-48, radiography |
| 16-026(b) | Yes | 11 | 9 | 1 | 3.86 | Outfall, TA-16-307, disassembly |
| 16-026(m) | No | 5 | 5 | 5 | 28.8 | Outfall, TA-16-92, machining |
| 16-026(v) | Yes | 8 | 8 | 3 | 3.86 | Outfall, TA-16-460, analytical chemistry |
| 16-029(g) | Yes | 10 | 7 | 0 | 3.36 | Sump, TA-16-450, materials testing |
| 16-029(l) | No | 7 | 7 | 6 | 64.9 | Sumps, TA-16-92, machining |
| 16-030(d) | No | 9 | 8 | 2 | 5.78 | Outfall, TA-16-280, inspection |
| 16-034(e) | Yes | 2 | 2 | 0 | 3.05 | Surface soil, TA-16-496, storage |
| BG_south | Yes | 8 | 2 | 1 | 4.6 | Burning ground drainage |

[a] N = Number of samples analyzed for uranium.

[b] >Bmax = Number of results above maximum of LANL background data.

[c] Max = Number of results above LANL BV

The uranium data for these samples are approximately normally distributed, as can be seen in Figure E-1.2-1. The LANL background soil data are also shown in Figure E-1.2-1 for comparison.

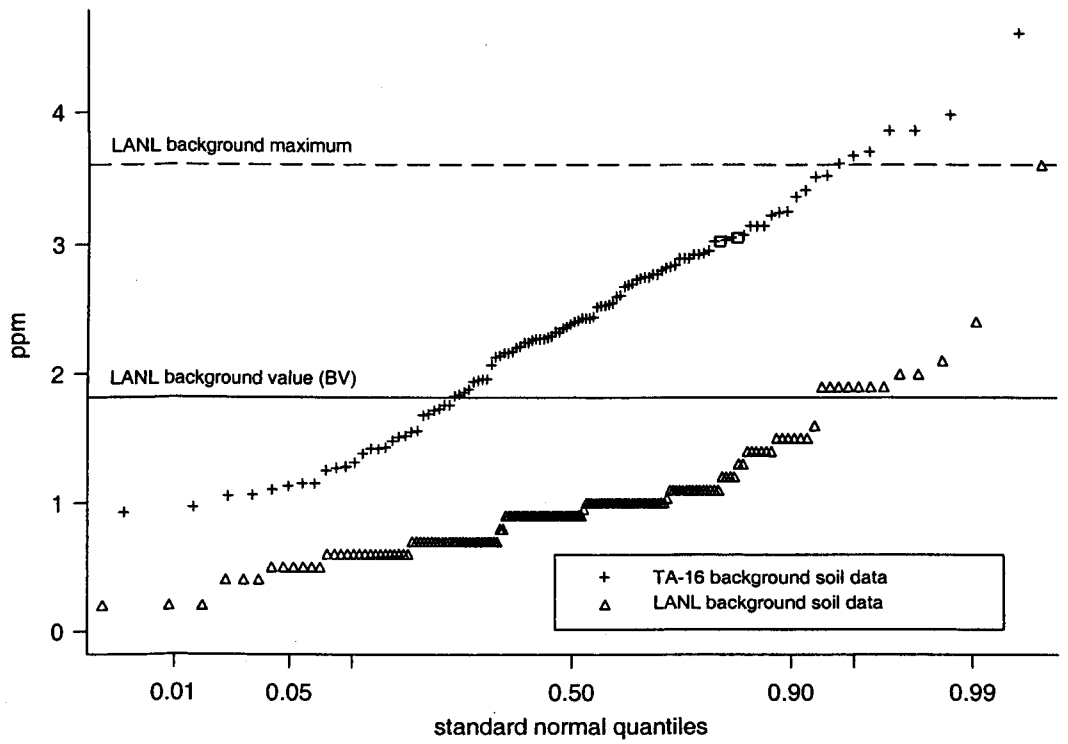



**Figure E-1.2-1. Probability plot of TA-16 background data set**

There are no pronounced trends differentiating samples that contain engineering fill material from those that contain only native soils, or samples that were collected at the soil/tuff interface from those that were collected above it [Figure E-1.2-2(a)]. Nor are there trends across the PRSs, which are shown in Figure E-1.2-2(b), arranged roughly from west to east within TA-16.

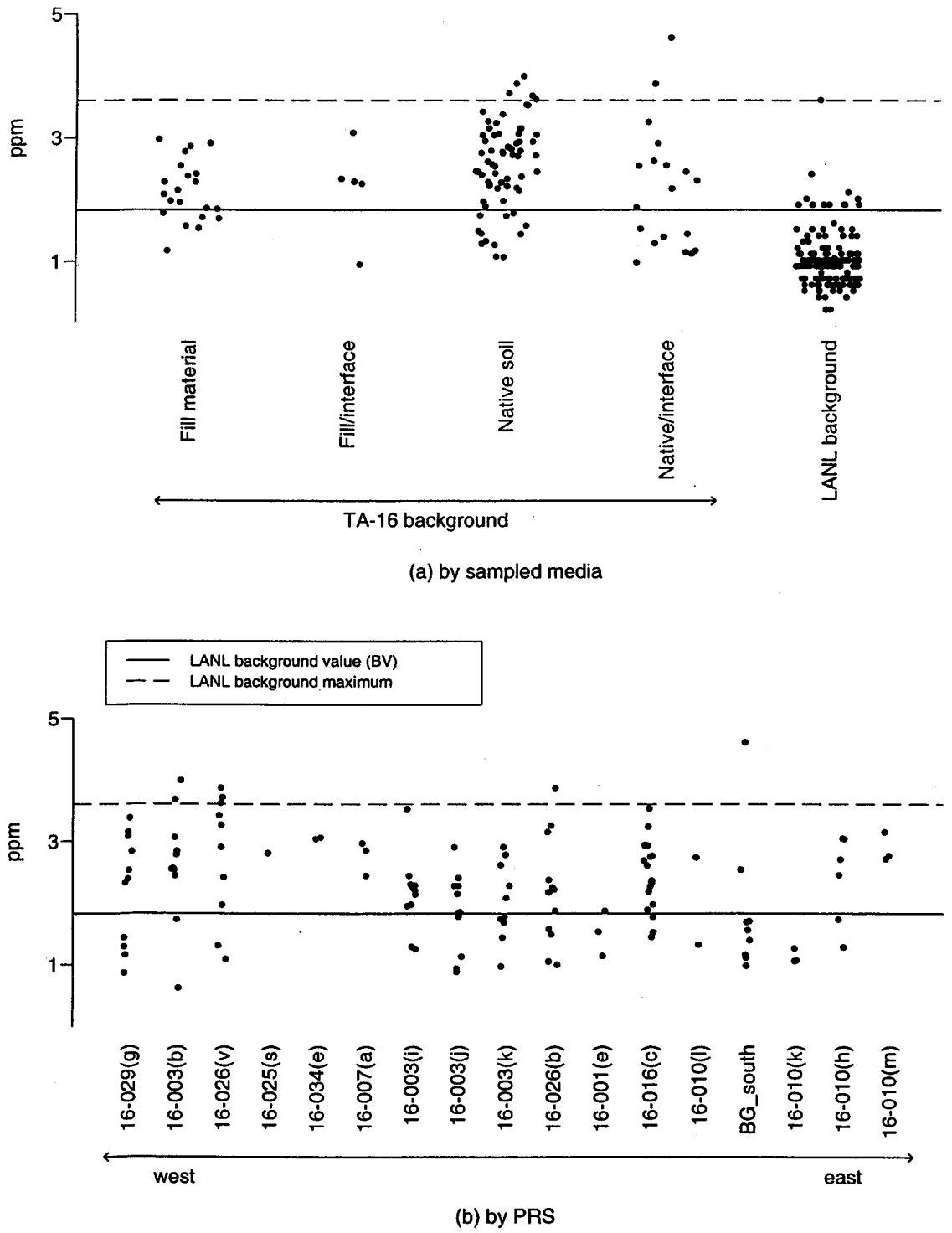



**Figure E-1.2-2. TA-16 background data by sampled media (a) and by PRS (b)**

### E-1.3 Comparison of V-Site PRSs with the TA-16 Background Data Set

A (0.95,0.95) UTL or "background value" based on these TA-16 data would be about 3.85 mg/kg, a value which is exceeded by 4 of the 112 samples (3.6%) in the TA-16 background data set. This value is exceeded by only one of the soil sample results included in this report: 3.98 mg/kg for sample 0316-98-0098 from PRS 16-005(d), which was collected at the soil/tuff interface under the suspected location of the septic tank.

We also performed statistical comparisons of the V-Site data with the TA-16 background data set. The results, which are summarized in Table E-1.3-1, indicate no significant difference between any of the PRSs considered in this report [including PRS 16-005(d)] and the TA-16 background.

**Table E-1.3-1**
**Uranium Data for Soil Samples from TA-16 PRSs, Excluding V-Site PRSs**

| PRS | N[a] | >BV | >Bmax[b] | Max[c] | P-value Wilcoxon | P-value Quantile | Description |
|---|---|---|---|---|---|---|---|
| 16-006(g) | 3/3 | 3 | 0 | 2.24 | 0.81 | 1.00 | Septic tank for TA-16-27 |
| Drum storage Area Aggregate | 1/4 | 0 | 0 | 0.96 | 1.00 | 1.00 | TA-16-517 drum storage and shaker pit |
| 16-005(d) | 6/7 | 6 | 1 | 3.98 | 0.28 | 0.41 | Septic tank for TA-16-515 |

[a] N = Number of samples analyzed for uranium.

[b] >Bmax = Number of results above maximum of LANL background data.

[c] Max = Number of results above LANL BV.

# APPENDIX F. RISK ASSESSMENT CALCULATIONS

## F-1.0 Human Health

Table F-1.0-1 lists the Region 9 PRGs for an industrial receptor for all COPCs identified in this analysis (EPA 1998, 58751).

**Table F-1.0-1**
**Selected Region 9 PRGs, May 1, 1998**

| CAS (Chemical Abstract Service) No. | Chemical | Industrial Soil PRG (mg/kg) |
|---|---|---|
| 67-64-1 | Acetone | 6.1E+03 nc[a] |
| 7429-90-5 | Aluminum | 1.0E+05 max[b] |
| 7440-36-0 | Antimony and compounds | 7.5E+02 nc |
| 7440-38-2 | Arsenic (cancer endpoint) | 3.0E+00 ca[c] |
| 7440-39-3 | Barium and compounds | 1.0E+05 max |
| 65-85-0 | Benzoic acid | 1.0E+05 max |
| 7440-41-7 | Beryllium and compounds | 3.4E+03 nc |
| 117-81-7 | Bis(2-ethylhexyl)phthalate (DEHP) | 2.1E+02 ca |
| 7440-42-8 | Boron | 9.6E+04 nc |
| 104-51-8 | n-Butylbenzene | 5.5E+02 nc |
| 7440-43-9 | Cadmium and compounds | 9.3E+02 nc |
| N/A[d] | Total chromium (1/6 ratio Cr VI/Cr III) | 4.5E+02 ca |
| 7440-50-8 | Copper and compounds | 7.0E+04 nc |
| 542-62-1 | Barium cyanide | 1.0E+05 max |
| 592-01-8 | Calcium cyanide | 4.3E+04 nc |
| 57-12-5 | Free cyanide | 2.1E+04 nc |
| 74-90-8 | Hydrogen cyanide | 3.5E+01 nc |
| 117-84-0 | di-n-Octyl phthalate | 1.0E+04 sat[e] |
| 7439-92-1 | Lead *["California-Modified PRG" (PEA, 1994[f])]* | 1.0E+03 nc |
| 7439-96-5 | Manganese and compounds | 4.5E+04 nc |
| 7487-94-7 | Mercury and compounds | 5.6E+02 nc |
| 75-09-2 | Methylene chloride | 2.0E+01 ca |
| 7440-02-0 | Nickel (soluble salts) *["California-Modified PRG" (PEA, 1994)]* | 3.7E+04 nc |
| 2691-41-0 | Octahydro-1357-tetranitro-1357- tetrazocine (HMX) | 5.3E+04 nc |
| **Polynuclear Aromatic Hydrocarbons (PAHs)** | | |
| 205-99-2 | Benzo[b]fluoranthene | 3.6E+00 ca |
| 53-70-3 | Dibenz[ah]anthracene | 3.6E-01 ca |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 3.6E+00 ca |
| 129-00-0 | Pyrene | 2.6E+04 nc |
| 121-82-4 | RDX (cyclonite) | 2.7E+01 ca |
| 7440-22-4 | Silver and compounds | 9.4E+03 nc |
| 127-18-4 | Tetrachloroethylene (PCE) | 1.6E+01 ca |

**Table F-1.0-1**
**Selected Region 9 PRGs, May 1, 1998 (continued)**

| CAS (Chemical Abstract Service) No. | Chemical | Industrial Soil PRG (mg/kg) |
|---|---|---|
| 563-68-8 | Thallium acetate | 1.7E+02 nc |
| 6533-73-9 | Thallium carbonate | 1.5E+02 nc |
| 7791-12-0 | Thallium chloride | 1.5E+02 nc |
| 10102-45-1 | Thallium nitrate | 1.7E+02 nc |
| 79-01-6 | Trichloroethylene (TCE) | 6.1E+00 ca |
| 7440-62-2 | Vanadium | 1.3E+04 nc |
| 7440-66-6 | Zinc | 1.0E+05 max |

[a] nc = Non-carcinogenic (based on non-carcinogenic effects)

[b] max = PRG exceeds $1 \times 10^{+5}$; maximum value of $1 \times 10^{+5}$ is shown

[c] ca = Carcinogenic (based on carcinogenic effects)

[d] N/A = Not applicable.

[e] sat = Based on saturation limit in soil.

[f] PEA 1994 = Cal-EPA 1994. Preliminary Endangerment Assessment Guidance Manual, Department of Toxic Substances Control, Sacramento, California.

## F-2.0 Ecological

### F-2.0.1 PRS 16-006(g)

Ecological Scoping Checklist, Part A
Scoping Meeting Documentation

| Site ID | PRS 16-006(g) |
|---|---|
| Form of site releases. Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate. | PRS 16-006(g) was a drainline and septic tank that served sinks and toilets in the southeast corner of Building TA-16-515 at V-Site. This septic system did not serve any of the HE-processing areas in the building. Effluent from the septic tank and drainline was discharged to PRS 16-029(x), a common drainline. |
| List of Primary Affected Media<br><br>(Indicate all that apply) | Surface soil –<br><br>Surface water/sediment–<br><br>Subsurface – X<br><br>Groundwater –<br><br>Other; explain – |
| FIMAD vegetation class based on Arcview vegetation coverage<br><br>(Indicate all that apply) | Water –<br><br>Bare ground/unvegetated –<br><br>Spruce/fir/aspen/mixed conifer –<br><br>Ponderosa pine – X<br><br>Piñon juniper/juniper savannah –<br><br>Grassland/shrubland – X<br><br>Developed – X |
| Is T&E Habitat Present?<br><br>If applicable, list species known or suspected to use the site for breeding or foraging. | According to Dave Keller, Biologist, ESH-20, LANL, there are no concerns related to T&E species at V-Site.<br><br>No T&E nesting habitat is on or near V-Site. Site is in potential medium frequency foraging habitat for peregrine falcon, but contamination is subsurface and complete pathways are unlikely (LANL 1999, 62918) |

| | |
|---|---|
| Provide list of Neighboring/ Contiguous/ Upgradient sites and include a brief summary of COPCs and the form of releases for relevant sites; reference a map as appropriate.<br><br>(Use this information to evaluate the need to aggregate sites for screening) | PRS 16-029(x) – Common drainline, serving building TA-16-515<br><br>PRS 16-017 – Group of 23 buildings at V-Site, including building TA-16-515<br><br>PRS 16-031(c) – Drainline connected to common drainline upgradient of PRS 16-006(g)<br><br>These PRSs are not likely to affect PRS 16-006(g) because PRS 16-006(g) is entirely subsurface. PRS 16-006(g) connects to a common drainline, PRS 16-029(x). The cumulative effects from all the drainline PRSs will be investigated more thoroughly when PRS 16-029(x), the common drainline, is analyzed. |
| Surface Water Erosion Potential Information<br><br>Summarize information from AP 4.5 or SOP 2.01, including the run-off subscore (maximum of 46), terminal point of surface water transport, slope, and surface water run-on sources. | Surface water transport is not an issue at PRS 16-006(g). Run-off scores and total erosion scores are not available for PRS 16-006(g) because the site is subsurface. |
| Other Scoping Meeting Notes | The drainline has been removed. It's trenches have been back-filled and then covered with mulch. The site is a likely candidate for NFA status. |

Ecological Scoping Checklist, Part B
Site Visit Documentation

| | |
|---|---|
| Site ID | PRS 16-006(g) |
| Date of Site Visit | February 17, 1999 |
| Site Visit Conducted by | Don Kellett and Deborah Risberg, ICF Kaiser Engineers |

***Receptor Information:***

| | |
|---|---|
| Estimate of cover | **Relative vegetative cover (high, medium, low, none)** = low<br><br>**Relative wetland cover (high, medium, low, none)** = none<br><br>**Relative structures/asphalt, etc. cover (high, medium, low, none)** = low |
| Field notes on the FIMAD vegetation class to assist in ground-truthing the Arc-view information | FIMAD classification of grassland and ponderosa pine mix is correct. |
| Field notes on T&E Habitat, if applicable. Consider the need for a site visit by a T&E subject-matter expert to support the use of the site by T&E receptors. | No T&E species are likely to regularly use the habitats at PRS 16-006(g). There is no need for a site visit by a T&E expert. |
| Are ecological receptors present at the site?<br><br>(yes/no/uncertain)<br><br>Describe the general types of receptors, terrestrial and aquatic, and make notes on the quality of habitat present at the site. | Yes, elk, deer, and pocket gopher sign was observed at the site. Although the quality of the habitat at PRS 16-006(g) is relatively low because of the excavation and backfill of the drainline trenches, it is likely that the site will return to a more natural state as re-vegetation occurs. No aquatic habitats or receptors are present at the site. |

***Contaminant Transport Information:***

| | |
|---|---|
| Surface water transport<br><br>Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable). | Surface water transport is not an issue at PRS 16-006(g). The site has a slight downward slope to the south; however, no surface water is likely to be transported to or from the subsurface site, with the exception of overland flow during extreme precipitation events. |
| Are there any off-site transport pathways (surface water, air, or groundwater)?<br><br>(yes/no/uncertain)<br><br>Provide explanation | Yes, with qualifications. Surface off-site transport pathways are not likely since potential contamination is subsurface. The subsurface nature of the potential contamination also minimizes any transport via wind dispersion. There was potential for off-site transport via the former drainlines themselves. This potential pathway will be investigated when PRS 16-029(x), the common drainline, is analyzed. |
| Interim action needed to limit off-site transport?<br><br>(yes/no/uncertain)<br><br>Provide explanation/ recommendation to Project Lead for IA SMDP. | No. |

***Ecological Effects Information:***

| | |
|---|---|
| Physical Disturbance<br><br>(Provide list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.) | The excavations over the drainlines have disturbed the area; however, backfill, regrading, and a mulch covering have restored the site to a condition suitable for re-vegetation. |
| **Are there obvious ecological effects?**<br>(yes/no/uncertain)<br><br>Provide explanation and apparent cause (e.g., contamination, physical disturbance). | No obvious ecological effects are associated with any release of contaminants at PRS 16-006(g). |

| | |
|---|---|
| Interim action needed to limit apparent ecological effects?<br><br>(yes/no/uncertain)<br><br>Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP. | No. |

***No Exposure/Transport Pathways:***

| |
|---|
| If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to offsite receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include likelihood that future construction activities could make contamination more available for exposure or transport. |

***Adequacy of Site Characterization:***

| | |
|---|---|
| Do existing or proposed data provide information on the nature, rate, and extent of contamination?<br><br>(yes/no/uncertain)<br><br>Provide explanation<br><br>(Consider if the maximum value was captured by existing sample data.) | Yes, the data are adequate to characterize the nature and extent of contamination associated with potential past releases at PRS 16-006(g). |
| Do existing or proposed data for the site address potential transport pathways of site contamination?<br><br>(yes/no/uncertain)<br><br>Provide explanation<br><br>(Consider if other sites should be aggregated to characterize potential ecological risk.) | Yes, the data are adequate to address the potential pathways of contamination associated with potential past releases. No other PRSs are likely to affect PRS 16-006(g). |

***Additional Field Notes:***

| |
|---|
| Provide additional field notes on the site setting and potential ecological receptors.<br><br>Although signs of potential ecological receptors were observed during the site visit, the depth of the known releases at the site minimizes the significance of the pathways and the likelihood of ecological receptors to be exposed to contamination. |

**Provide answers to Questions A through V to develop the Ecological Pathways Conceptual Exposure Model.**

Question A:

Could soil contaminants reach receptors via vapors?

- *Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >10-5 atm-me/mol and molecular weight <200 g/mol).*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** No volatile chemicals were detected at PRS 16-006(g).

Question B:

Could the soil contaminants reach receptors through fugitive dust carried in air?

- *Soil contamination would have to be on the actual surface of the soil to become available for dust.*
- *In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** No contamination is on the surface. The contamination is at depths that are below the expected burrowing activities of receptors.

Question C:

Can contaminated soil be transported to aquatic ecological communities (use AP 4.5 or SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?

- *If the AP 4.5 or SOP 2.01 run-off score* for each PRS included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (*note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).*
- *If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There is no surface water in the vicinity of PRS 16-006(g). In addition, the contamination at the site is subsurface and is not likely to present any exposure pathways at the surface.

Question D:

Is contaminated groundwater potentially available to biological receptors through seeps, springs, or shallow groundwater?

- *Consider known or suspected presence of contaminants in groundwater.*
- *Consider the potential for contaminants to migrate via groundwater and discharge into habitats and/or surface waters.*
- *Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1 m depth).*
- *Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** The depth to groundwater at PRS 16-006(g) is greater than 500 ft below the surface and, as a result, it is highly unlikely that any contaminants at the site will affect groundwater.

Question E:

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- *Consider suspected ability of contaminants to migrate to groundwater.*
- *Consider the potential for contaminants to migrate via groundwater and discharge into habitats and/or surface waters.*
- *Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1 m depth).*
- *Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.*
- *Also consider the importance of mass wasting as a potential release mechanism for subsurface material.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** See Question D's answer for information regarding the depth of groundwater.

Question F:

Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?

- *This question is only applicable to release sites located on or near the mesa edge.*
- *Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** PRS 16-006(g) is not located on or near a mesa edge.

Question G:

Could airborne contaminants interact with receptors through respiration of vapors?

- *Contaminants must be present as volatiles in the air.*
- *Consider the importance of inhalation of vapors for burrowing animals.*
- *Foliar uptake of organic vapors is typically not a significant exposure pathway.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** No volatile chemicals are present at PRS 16-006(g).

Question H:

Could airborne contaminants interact with plants through deposition of particulates or with animals through inhalation of fugitive dust?

- *Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.*
- *Exposure via inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** Contaminants are subsurface and not available for dispersion by wind or deposition on plants.

Question I:

Could contaminants interact with plants through root uptake or rain splash from surficial soils?

- *Contaminants in bulk soil may partition into soil solution, making them available to roots.*
- *Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).*

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway): 2

Terrestrial Plants: 2

**Provide explanation:** Contaminants may be subject to plant uptake, although the pathway is best described as a minor pathway. Deposition on leaf or stem surfaces is not a complete pathway because contaminants are subsurface.

Question J:

Could contaminants interact with receptors through food web transport from surficial soils?

- *The chemicals may bioaccumulate in animals.*
- *Animals may ingest contaminated food items.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** No bioaccumulating chemicals were identified in the subsurface soils at PRS 16-006(g).

Question K:

Could contaminants interact with receptors via incidental ingestion of surficial soils?

- *Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 1

**Terrestrial Animals:** 1

**Provide explanation:** Although it is possible that burrowing animals may be incidentally exposed to contaminants in soil at the depths where suspected contaminants exist (>3 ft), the depths at which contamination has been identified are generally considered to be below the normal burrowing depths of animals at the Laboratory.

Question L:

Could contaminants interact with receptors through dermal contact with surficial soils?

- *Significant exposure via dermal contact would generally be limited to organic contaminants that are lipophilic and that can cross epidermal barriers.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** No organic contaminants were identified at PRS 16-006(g).

Question M:

Could contaminants interact with plants or animals through external irradiation?

- *External irradiation effects are most relevant for gamma-emitting radionuclides.*

- *Burial of contamination attenuates radiological exposure.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** No radionuclides were identified at PRS 16-006(g).

Question N:

Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?

- *Terrestrial plants whose roots are in contact with surface waters may take up contaminants.*
- *Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.*
- *Contaminants in sediment may partition into soil solution, making them available to roots.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Provide explanation:** There are no surface waters, sediments, or aquatic plants at PRS 16-006(g). In addition, contamination is subsurface.

Question O:

Could contaminants interact with receptors through food web transport from water and sediment?

- *The chemicals may bioconcentrate in food items.*
- *Animals may ingest contaminated food items.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** No bioaccùmulating chemicals were identified and no surface water or sediments are found at PRS 16-006(g).

Question P:

Could contaminants interact with receptors via ingestion of water and suspended sediments?

- *If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.*
- *Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking-water source.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** There are no surface waters or sediments at PRS 16-006(g). In addition, contamination is subsurface.

Question Q:

Could contaminants interact with receptors through dermal contact with water and sediment?

- *If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.*
- *Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** There are no surface waters or sediments at PRS 16-006(g). In addition, contamination is subsurface.

Question R:

Could contaminants interact with plants or animals through external irradiation?

- *External irradiation effects are most relevant for gamma-emitting radionuclides.*
- *Burial of contamination attenuates radiological exposure.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** No radionuclides were identified at PRS 16-006(g).

Question S:

Could contaminants bioconcentrate in free-floating aquatic or emergent vegetation or in attached aquatic plants?

- *Aquatic plants are in direct contact with water.*
- *Contaminants in sediment may partition into pore water, making them available to submerged roots.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Aquatic Plants/Emergent Vegetation:** 0

**Provide explanation:** No aquatic or emergent plants are present at PRS 16-006(g), as no surface water is present.

Question T:

Could contaminants bioconcentrate in sedimentary or water column organisms?

- *Aquatic receptors may actively or incidentally ingest sediment while foraging.*
- *Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.*
- *Aquatic receptors may be exposed to contaminants through osmotic exchange, respiration, or ventilation of surface waters.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Aquatic Animals:** 0

**Provide explanation:** No surface water or sediment is present at PRS 16-006(g).

Question U:

Could contaminants bioaccumulate in sedimentary or water column organisms?

- *Lipophilic organic contaminants and some metals may concentrate in an organism's tissues*
- *Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Aquatic Animals:** 0

**Provide explanation:** No surface water or sediment is present at PRS 16-006(g).

Question V:

Could contaminants interact with aquatic plants or animals through external irradiation?

- *External irradiation effects are most relevant for gamma-emitting radionuclides.*
- *The water column acts to absorb radiation; thus, external irradiation is typically more important for sediment-dwelling organisms.*

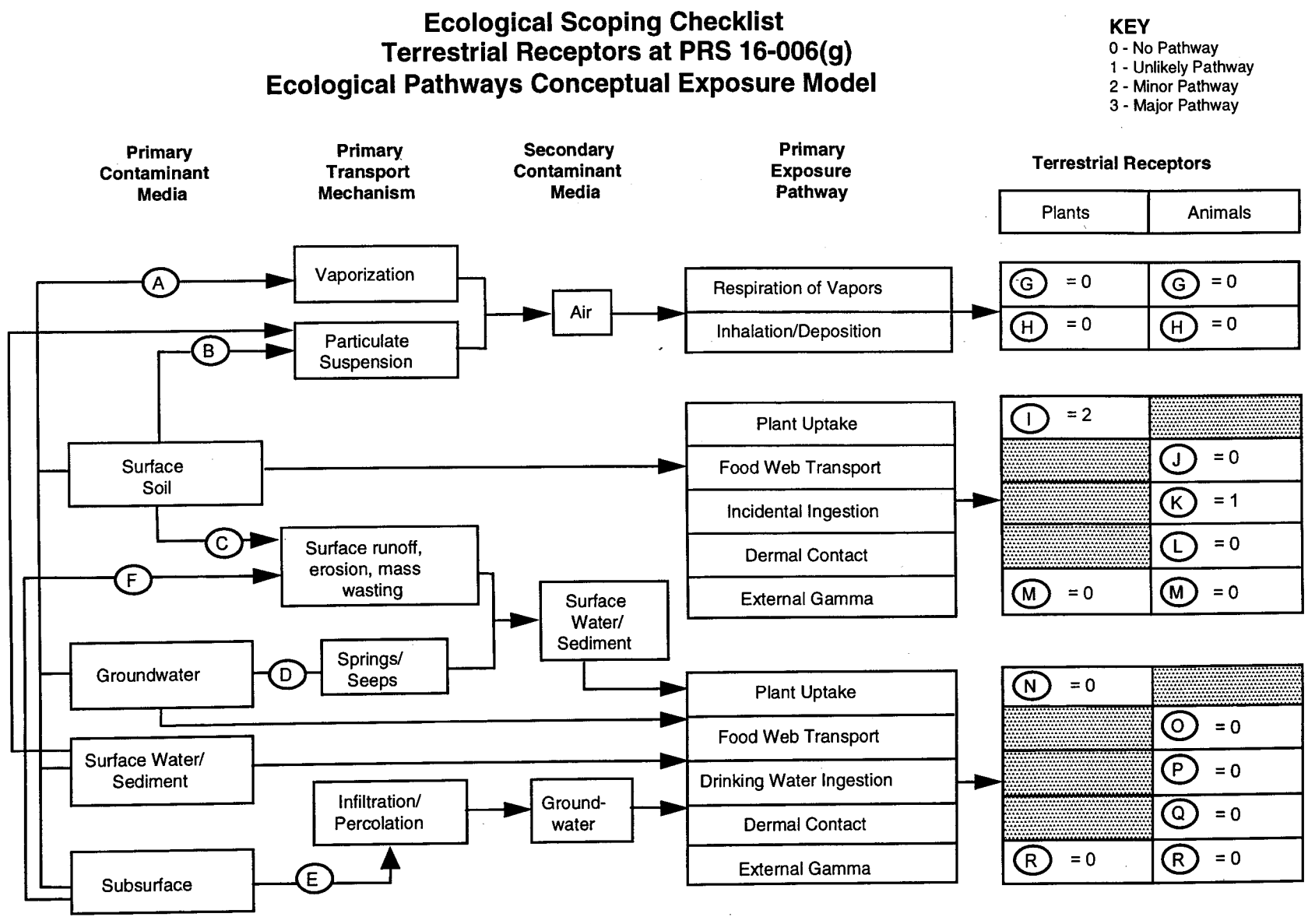
**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Aquatic Plants:** 0

**Aquatic Animals:** 0

**Provide explanation:** No radionuclides were identified at PRS 16-006(g).

# Ecological Scoping Checklist
# Terrestrial Receptors at PRS 16-006(g)
# Ecological Pathways Conceptual Exposure Model




*Note:* Letters correspond to questions on Ecological Scoping Checklist.

**Signatures and certifications:**

**Checklist completed by (provide name, organization and phone number):**

**Name (printed):** Don Kellett

**Name (signature):** Don Kellett

**Organization:** ICF Kaiser Engineers

**Phone number:** (505) 661-5206

**Date completed:** Initial site visit February 17, 1999; checklist completed March 9, 1999; revised March 25, 1999.

**Verification by a member of ER Project Ecological Risk Task Team (provide name, organization and phone number):**

**Name (printed):** LARS SOHOLT

**Name (signature):** Lars F. Soholt

**Organization:** KM/KR

**Phone number:** 505/667-2252

### F-2.0.2 Drum Storage Area Aggregate [PRSs 16-029(g2) and C-16-074]

Ecological Scoping Checklist, Part A
Scoping Meeting Documentation

| Site ID | Drum Storage Area Aggregate [PRSs 16-029(g2) and C-16-074] |
|---|---|
| Form of site releases. Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate. | PRS C-16-074 is a concrete pad that was used to store steel drums. No oil stains are present and only a few rust rings remain on the concrete. PRS 16-029(g2), pit TA-16-523, or the shaker pit, is directly under C-16-074. The pit, which held a remotely controlled vibration table, was abandoned in 1945 and later filled with dirt and covered with the concrete pad of PRS C-16-074. No incidents related to releases were reported at PRS 16-029(g2). |
| List of Primary Affected Media<br><br>(Indicate all that apply) | Surface soil –<br><br>Surface water/sediment–<br><br>Subsurface – X<br><br>Groundwater –<br><br>Other; explain – |
| FIMAD vegetation class based on Arcview vegetation coverage<br><br>(Indicate all that apply) | Water –<br><br>Bare ground/unvegetated –<br><br>Spruce/fir/aspen/mixed conifer –<br><br>Ponderosa pine – X<br><br>Piñon juniper/juniper savannah –<br><br>Grassland/shrubland – X<br><br>Developed – X |
| Is T&E Habitat Present?<br><br>If applicable, list species known or suspected to use the site for breeding or foraging. | According to Dave Keller, Biologist, ESH-20, LANL, there are no concerns related to T&E species at V-Site.<br><br>No T&E nesting habitat is on or near V-Site. Site is in potential medium frequency foraging habitat for peregrine falcon, but contamination is subsurface and complete pathways are unlikely (LANL 1999, 62918) |

| | |
|---|---|
| Provide list of Neighboring/ Contiguous/ Upgradient sites and include a brief summary of COPCs and the form of releases for relevant sites; reference a map as appropriate.<br><br>(Use this information to evaluate the need to aggregate sites for screening) | PRS 16-006(h) – Steam-heating distribution pump pit TA-16-526<br><br>PRS 16-013 – Courtyard storage area at V-Site<br><br>PRS 16-017 – Group of 23 buildings, including buildings 516 and 517<br><br>The releases from the neighboring and contiguous PRSs are not expected to affect the Drum Storage Area Aggregate. PRSs 16-029(g2) and C-16-074 have been aggregated because of their spatial homogeneity. |
| Surface Water Erosion Potential Information<br><br>Summarize information from AP 4.5 or SOP 2.01, including the run-off subscore (maximum of 46), terminal point of surface water transport, slope, and surface water run-on sources. | Surface water transport is not an issue at the Drum Storage Area Aggregate. No run-off scores are available for either PRS, although the total erosion score for PRS C-16-074 is 3.6. PRS 16-029(g2) is subsurface and not subject to erosion. |
| Other Scoping Meeting Notes | The shaker pit, PRS 16-029(g2), had been filled with soil and covered with a concrete slab. No radioactive materials were used in this pit and no incidents occurred here. |

Ecological Scoping Checklist, Part B
Site Visit Documentation

| | |
|---|---|
| Site ID | Drum Storage Area Aggregate [PRSs 16-029(g2) and C-16-074] |
| Date of Site Visit | February 17, 1999 |
| Site Visit Conducted by | Don Kellett and Deborah Risberg, ICF Kaiser Engineers |

***Receptor Information:***

| | |
|---|---|
| Estimate of cover | **Relative vegetative cover (high, medium, low, none)** = none<br>**Relative wetland cover (high, medium, low, none)** = none<br>**Relative structures/asphalt, etc. cover (high, medium, low, none)** = high |
| Field notes on the FIMAD vegetation class to assist in ground-truthing the Arcview information | FIMAD classification of grassland and ponderosa pine mix is correct. |
| Field notes on T&E Habitat, if applicable. Consider the need for a site visit by a T&E subject-matter expert to support the use of the site by T&E receptors. | No T&E species are likely to regularly use the habitats at the Drum Storage Area Aggregate. There is no need for a site visit by a T&E expert. |
| Are ecological receptors present at the site?<br>(yes/no/uncertain)<br>Describe the general types of receptors, terrestrial and aquatic, and make notes on the quality of habitat present at the site. | Yes, elk, deer, and pocket gopher sign was observed in the areas south of the site. The quality of the habitat at the Drum Storage Area Aggregate is relatively low because of the surrounding asphalt, concrete and building development. No aquatic habitats or receptors are present at the site. |

***Contaminant Transport Information:***

| | |
|---|---|
| Surface water transport<br><br>Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable). | Surface water transport is not a significant issue at the Drum Storage Area Aggregate because the contaminants are subsurface and there is no perennial flow in the area. |
| Are there any off-site transport pathways (surface water, air, or groundwater)?<br><br>(yes/no/uncertain)<br><br>Provide explanation | No, wind dispersion and surface water flow would not be likely to affect the contaminants in, or adjacent to, the dirt-filled shaker pit. |
| Interim action needed to limit off-site transport?<br><br>(yes/no/uncertain)<br><br>Provide explanation/ recommendation to Project Lead for IA SMDP. | No. |

***Ecological Effects Information:***

| | |
|---|---|
| Physical Disturbance<br><br>(Provide list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.) | There is no natural habitat at these PRSs; the site is concrete-covered and adjacent to an asphalt-covered courtyard and buildings. |
| **Are there obvious ecological effects?**<br>(yes/no/uncertain)<br><br>Provide explanation and apparent cause (e.g., contamination, physical disturbance). | No obvious ecological effects are associated with any release of contaminants at the Drum Storage Area Aggregate. |

| | |
|---|---|
| Interim action needed to limit apparent ecological effects?<br><br>(yes/no/uncertain)<br><br>Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP. | No. |

***No Exposure/Transport Pathways:***

If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to offsite receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include likelihood that future construction activities could make contamination more available for exposure or transport.

*An ecological NFA is recommended for the drum storage area aggregate because there are no complete exposure pathways for ecological receptors and no off-site transport pathways.*

**Signatures and certifications:**

**Checklist completed by (provide name, organization and phone number):**

**Name (printed):** Don Kellett

**Name (signature):** Don Kellett

**Organization:** ICF Kaiser Engineers

**Phone number:** (505) 661-5206

**Date completed:** Initial site visit February 17, 1999; checklist completed March 3, 1999; revised March 25, 1999.

**Verification by a member of ER Project Ecological Risk Task Team (provide name, organization and phone number):**

**Name (printed):** LARS SOHOL

**Name (signature):** Lars C. Sohol

**Organization:** LF/ER

**Phone number:** 505/667-2257

### F-2.0.3 PRS 16-005(d)

Ecological Scoping Checklist, Part A
Scoping Meeting Documentation

| Site ID | PRS 16-005(d) |
|---|---|
| Form of site releases. Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate. | PRS 16-005(d) was a drainline and septic tank (TA-16-177) that served lavatories in building TA-16-27 (which has been removed). Building TA-16-27, used for HE casting and other laboratory procedures, was highly contaminated and by association, the septic system was also assumed to be contaminated. The septic tank and drainlines have been removed. The drainline ran several hundred feet to the southeast from building TA-16-27. |
| List of Primary Affected Media<br><br>(Indicate all that apply) | Surface soil –<br><br>Surface water/sediment–<br><br>Subsurface – X<br><br>Groundwater –<br><br>Other; explain – |
| FIMAD vegetation class based on Arcview vegetation coverage<br><br>(Indicate all that apply) | **Water –**<br><br>**Bare ground/unvegetated –**<br><br>**Spruce/fir/aspen/mixed conifer –**<br><br>**Ponderosa pine –** X<br><br>**Piñon juniper/juniper savannah –**<br><br>**Grassland/shrubland –** X<br><br>**Developed –** |
| Is T&E Habitat Present?<br><br>If applicable, list species known or suspected to use the site for breeding or foraging. | According to Dave Keller, Biologist, ESH-20, LANL, there are no concerns related to T&E species at PRS 16-005(d).<br><br>No T&E nesting habitat is on or near V-Site. Site is in potential medium frequency foraging habitat for peregrine falcon, but contamination is subsurface and complete pathways are unlikely (LANL 1999, 62918) |

| | |
|---|---|
| Provide list of Neighboring/ Contiguous/ Upgradient sites and include a brief summary of COPCs and the form of releases for relevant sites; reference a map as appropriate.<br><br>(Use this information to evaluate the need to aggregate sites for screening) | PRS 16-026(q) – Building TA-16-27 sumps and drainages<br><br>PRS 16-031(d) – Cooling tower TA-16-28<br><br>PRS 16-017 – Group of 23 buildings, including building TA-16-27<br><br>These PRSs are not likely to affect PRS 16-005(d) because 16-005(d) is entirely subsurface. There is no need to aggregate PRS 16-005(d) with these other PRSs. |
| Surface Water Erosion Potential Information<br><br>Summarize information from AP 4.5 or SOP 2.01, including the run-off subscore (maximum of 46), terminal point of surface water transport, slope, and surface water run-on sources. | Surface water transport is not an issue at PRS 16-005(d). The total erosion score is 10.5, which indicates a low priority. Run-off scores are not available for PRS 16-005(d). |
| Other Scoping Meeting Notes | The septic tank and drainlines have been removed and back-filled, and the trenches have been covered with mulch; the PRS is likely to be recommended for NFA status. |

Ecological Scoping Checklist, Part B
Site Visit Documentation

| | |
|---|---|
| Site ID | PRS 16-005(d) |
| Date of Site Visit | February 17, 1999 |
| Site Visit Conducted by | Don Kellett and Deborah Risberg, ICF Kaiser Engineers |

***Receptor Information:***

| | |
|---|---|
| Estimate of cover | **Relative vegetative cover (high, medium, low, none)** = low<br><br>**Relative wetland cover (high, medium, low, none)** = none<br><br>**Relative structures/asphalt, etc. cover (high, medium, low, none)** = none |
| Field notes on the FIMAD vegetation class to assist in ground-truthing the Arc-view information | FIMAD classification of grassland and ponderosa pine mix is correct. |
| Field notes on T&E Habitat, if applicable. Consider the need for a site visit by a T&E subject-matter expert to support the use of the site by T&E receptors. | No T&E species are likely to regularly use the habitats at PRS 16-005(d). There is no need for a site visit by a T&E expert. |
| Are ecological receptors present at the site?<br><br>(yes/no/uncertain)<br><br>Describe the general types of receptors, terrestrial and aquatic, and make notes on the quality of habitat present at the site. | Yes, birds were observed foraging during the site visit and elk, deer, and pocket gopher sign were observed at the site. Although the quality of the habitat at PRS 16-005(d) is relatively low because of the excavation and backfill of the septic tank and drainline trenches, it is likely that the site will return to a more natural state as re-vegetation occurs. No aquatic habitats or receptors are present at the site. |

***Contaminant Transport Information:***

| | |
|---|---|
| Surface water transport<br><br>Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable). | Surface water transport is not an issue at PRS 16-005(d). The site has a slight downward slope to the southeast; however, no surface water is likely to be transported to or from the subsurface site, with the exception of overland flow during extreme precipitation events. |
| Are there any off-site transport pathways (surface water, air, or groundwater)?<br><br>(yes/no/uncertain)<br><br>Provide explanation | Yes, with qualifications. Although pathways are not likely, there are potential off-site transport pathways because an excessive precipitation event could erode into the subsurface site and then flow into the "Mother Ditch." The subsurface nature of the potential contamination minimizes any transport via wind dispersion. |
| Interim action needed to limit off-site transport?<br><br>(yes/no/uncertain)<br><br>Provide explanation/ recommendation to Project Lead for IA SMDP. | No. |

***Ecological Effects Information:***

| | |
|---|---|
| Physical Disturbance<br><br>(Provide list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.) | The excavations over the drainlines have disturbed the area; however, backfill, re-grading, and a mulch covering have restored the site to a condition suitable for re-vegetation. |
| **Are there obvious ecological effects?**<br>(yes/no/uncertain)<br><br>Provide explanation and apparent cause (e.g., contamination, physical disturbance). | No obvious ecological effects are associated with any release of contaminants at PRS 16-005(d). |

| | |
|---|---|
| Interim action needed to limit apparent ecological effects?<br><br>(yes/no/uncertain)<br><br>Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP. | No. |

***No Exposure/Transport Pathways:***

| |
|---|
| If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to offsite receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include likelihood that future construction activities could make contamination more available for exposure or transport. |

***Adequacy of Site Characterization:***

| | |
|---|---|
| Do existing or proposed data provide information on the nature, rate, and extent of contamination?<br><br>(yes/no/uncertain)<br><br>Provide explanation<br><br>(Consider if the maximum value was captured by existing sample data.) | Yes, the data are adequate to characterize the nature and extent of contamination associated with potential past releases at PRS 16-005(d). |
| Do existing or proposed data for the site address potential transport pathways of site contamination?<br><br>(yes/no/uncertain)<br><br>Provide explanation<br><br>(Consider if other sites should be aggregated to characterize potential ecological risk.) | Yes, the data are adequate to address the potential pathways of contamination associated with potential past releases. No other PRSs are likely to affect PRS 16-005(d). |

***Additional Field Notes:***

| |
|---|
| Provide additional field notes on the site setting and potential ecological receptors.<br><br>Although signs of potential ecological receptors were observed during the site visit, the depth of the known releases at the site minimizes the significance of the pathways and the likelihood of ecological receptors to be exposed to contamination. |

**Provide answers to Questions A through V to develop the Ecological Pathways Conceptual Exposure Model.**

Question A:

Could soil contaminants reach receptors via vapors?

- *Volatility of the hazardous substance (volatile chemicals generally have Henry's Law constant >10-5 atm-me/mol and molecular weight <200 g/mol).*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** No volatile chemicals were detected at PRS 16-005(d).

Question B:

Could the soil contaminants reach receptors through fugitive dust carried in air?

- *Soil contamination would have to be on the actual surface of the soil to become available for dust.*
- *In the case of dust exposures to burrowing animals, the contamination would have to occur in the depth interval where these burrows occur.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** No contamination is on the surface. The contamination is at depths that are below the expected burrowing activities of receptors.

Question C:

Can contaminated soil be transported to aquatic ecological communities (use AP 4.5 or SOP 2.01 run-off score and terminal point of surface water runoff to help answer this question)?

- *If the AP 4.5 or SOP 2.01 run-off score* for each PRS included in the site is equal to zero, this suggests that erosion at the site is not a transport pathway. (*note that the runoff score is not the entire erosion potential score, rather it is a subtotal of this score with a maximum value of 46 points).*
- *If erosion is a transport pathway, evaluate the terminal point to see if aquatic receptors could be affected by contamination from this site.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** There is no surface water in the vicinity of PRS 16-005(d). In addition, the contamination at the site is subsurface and is not likely to present any exposure pathways at the surface.

Question D:

Is contaminated groundwater potentially available to biological receptors through seeps, springs, or shallow groundwater?

- *Consider known or suspected presence of contaminants in groundwater.*
- *Consider the potential for contaminants to migrate via groundwater and discharge into habitats and/or surface waters.*
- *Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1 m depth).*
- *Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** The depth to groundwater at PRS 16-005(d) is greater than 500 ft below the surface and, as a result, it is highly unlikely that any contaminants at the site will affect groundwater.

Question E:

Is infiltration/percolation from contaminated subsurface material a viable transport and exposure pathway?

- *Consider suspected ability of contaminants to migrate to groundwater.*
- *Consider the potential for contaminants to migrate via groundwater and discharge into habitats and/or surface waters.*
- *Contaminants may be taken up by terrestrial and rooted aquatic plants whose roots are in contact with groundwater present within the root zone (~1 m depth).*
- *Terrestrial wildlife receptors generally will not contact groundwater unless it is discharged to the surface.*
- *Also consider the importance of mass wasting as a potential release mechanism for subsurface material.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** See Question D's answer for information regarding the depth of groundwater.

Question F:

Might erosion or mass wasting events be a potential release mechanism for contaminants from subsurface materials or perched aquifers to the surface?

- *This question is only applicable to release sites located on or near the mesa edge.*
- *Consider the erodability of surficial material and the geologic processes of canyon/mesa edges.*

**Answer (likely/unlikely/uncertain):** Unlikely

**Provide explanation:** PRS 16-005(d) is not located on or near a mesa edge.

Question G:

Could airborne contaminants interact with receptors through respiration of vapors?

- *Contaminants must be present as volatiles in the air.*
- *Consider the importance of inhalation of vapors for burrowing animals.*
- *Foliar uptake of organic vapors is typically not a significant exposure pathway.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** No volatile chemicals are present at PRS 16-005(d).

Question H:

Could airborne contaminants interact with plants through deposition of particulates or with animals through inhalation of fugitive dust?

- *Contaminants must be present as particulates in the air or as dust for this exposure pathway to be complete.*
- *Exposure via inhalation of fugitive dust is particularly applicable to ground-dwelling species that would be exposed to dust disturbed by their foraging or burrowing activities or by wind movement.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** Contaminants are subsurface and not available for dispersion by wind or deposition on plants.

Question I:

Could contaminants interact with plants through root uptake or rain splash from surficial soils?

- *Contaminants in bulk soil may partition into soil solution, making them available to roots.*
- *Exposure of terrestrial plants to contaminants present in particulates deposited on leaf and stem surfaces by rain striking contaminated soils (i.e., rain splash).*

Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway): 2

Terrestrial Plants: 2

**Provide explanation:** Contaminants may be subject to plant uptake, although the pathway is best described as a minor pathway. Deposition on leaf or stem surfaces is not a complete pathway because contaminants are subsurface.

Question J:

Could contaminants interact with receptors through food web transport from surficial soils?

- *The chemicals may bioaccumulate in animals.*
- *Animals may ingest contaminated food items.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** No bioaccumulating chemicals were identified in the subsurface soils at PRS 16-005(d).

Question K:

Could contaminants interact with receptors via incidental ingestion of surficial soils?

- *Incidental ingestion of contaminated soil could occur while animals grub for food resident in the soil, feed on plant matter covered with contaminated soil, or while grooming themselves clean of soil.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 1

**Terrestrial Animals:** 1

**Provide explanation:** Although it is possible that burrowing animals may be incidentally exposed to contaminants in soil at the depths where suspected contaminants exist (>3 ft), the depths at which contamination has been identified are generally considered to be below the normal burrowing depths of animals at the Laboratory.

Question L:

Could contaminants interact with receptors through dermal contact with surficial soils?

- *Significant exposure via dermal contact would generally be limited to organic contaminants that are lipophilic and that can cross epidermal barriers.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** No organic contaminants were identified at PRS 16-005(d).

Question M:

Could contaminants interact with plants or animals through external irradiation?

- *External irradiation effects are most relevant for gamma-emitting radionuclides.*
- *Burial of contamination attenuates radiological exposure.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** No radionuclides were identified at PRS 16-005(d).

Question N:

Could contaminants interact with plants through direct uptake from water and sediment or sediment rain splash?

- *Terrestrial plants whose roots are in contact with surface waters may take up contaminants.*
- *Terrestrial plants may be exposed to particulates deposited on leaf and stem surfaces by rain striking contaminated sediments (i.e., rain splash) in an area that is only periodically inundated with water.*
- *Contaminants in sediment may partition into soil solution, making them available to roots.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Provide explanation:** There are no surface waters, sediments, or aquatic plants at PRS 16-005(d). In addition, contamination is subsurface.

Question O:

Could contaminants interact with receptors through food web transport from water and sediment?

- *The chemicals may bioconcentrate in food items.*
- *Animals may ingest contaminated food items.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** No bioaccumulating chemicals were identified and no surface water or sediments are found at PRS 16-005(d).

Question P:

Could contaminants interact with receptors via ingestion of water and suspended sediments?

- *If sediments are present in an area that is only periodically inundated with water, terrestrial receptors may incidentally ingest sediments.*

- *Terrestrial receptors may ingest water-borne contaminants if contaminated surface waters are used as a drinking-water source.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** There are no surface waters or sediments at PRS 16-005(d). In addition, contamination is subsurface.

Question Q:

Could contaminants interact with receptors through dermal contact with water and sediment?

- *If sediments are present in an area that is only periodically inundated with water, terrestrial species may be dermally exposed during dry periods.*
- *Terrestrial organisms may be dermally exposed to water-borne contaminants as a result of wading or swimming in contaminated waters.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Animals:** 0

**Provide explanation:** There are no surface waters or sediments at PRS 16-005(d). In addition, contamination is subsurface.

Question R:

Could contaminants interact with plants or animals through external irradiation?

- *External irradiation effects are most relevant for gamma-emitting radionuclides.*
- *Burial of contamination attenuates radiological exposure.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Terrestrial Plants:** 0

**Terrestrial Animals:** 0

**Provide explanation:** No radionuclides were identified at PRS 16-005(d).

Question S:

Could contaminants bioconcentrate in free-floating aquatic or emergent vegetation or in attached aquatic plants?

- *Aquatic plants are in direct contact with water.*
- *Contaminants in sediment may partition into pore water, making them available to submerged roots.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Aquatic Plants/Emergent Vegetation:** 0

**Provide explanation:** No aquatic or emergent plants are present at PRS 16-005(d), as no surface water is present.

Question T:

Could contaminants bioconcentrate in sedimentary or water column organisms?

- *Aquatic receptors may actively or incidentally ingest sediment while foraging.*
- *Aquatic receptors may be directly exposed to contaminated sediments or may be exposed to contaminants through osmotic exchange, respiration, or ventilation of sediment pore waters.*
- *Aquatic receptors may be exposed through osmotic exchange, respiration, or ventilation of surface waters.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Aquatic Animals:** 0

**Provide explanation:** No surface water or sediment is present at PRS 16-005(d).

Question U:

Could contaminants bioaccumulate in sedimentary or water column organisms?

- *Lipophilic organic contaminants and some metals may concentrate in an organism's tissues*
- *Ingestion of contaminated food items may result in contaminant bioaccumulation through the food web.*

**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Aquatic Animals:** 0

**Provide explanation:** No surface water or sediment is present at PRS 16-005(d).

Question V:

Could contaminants interact with aquatic plants or animals through external irradiation?

- *External irradiation effects are most relevant for gamma-emitting radionuclides.*
- *The water column acts to absorb radiation; thus, external irradiation is typically more important for sediment-dwelling organisms.*

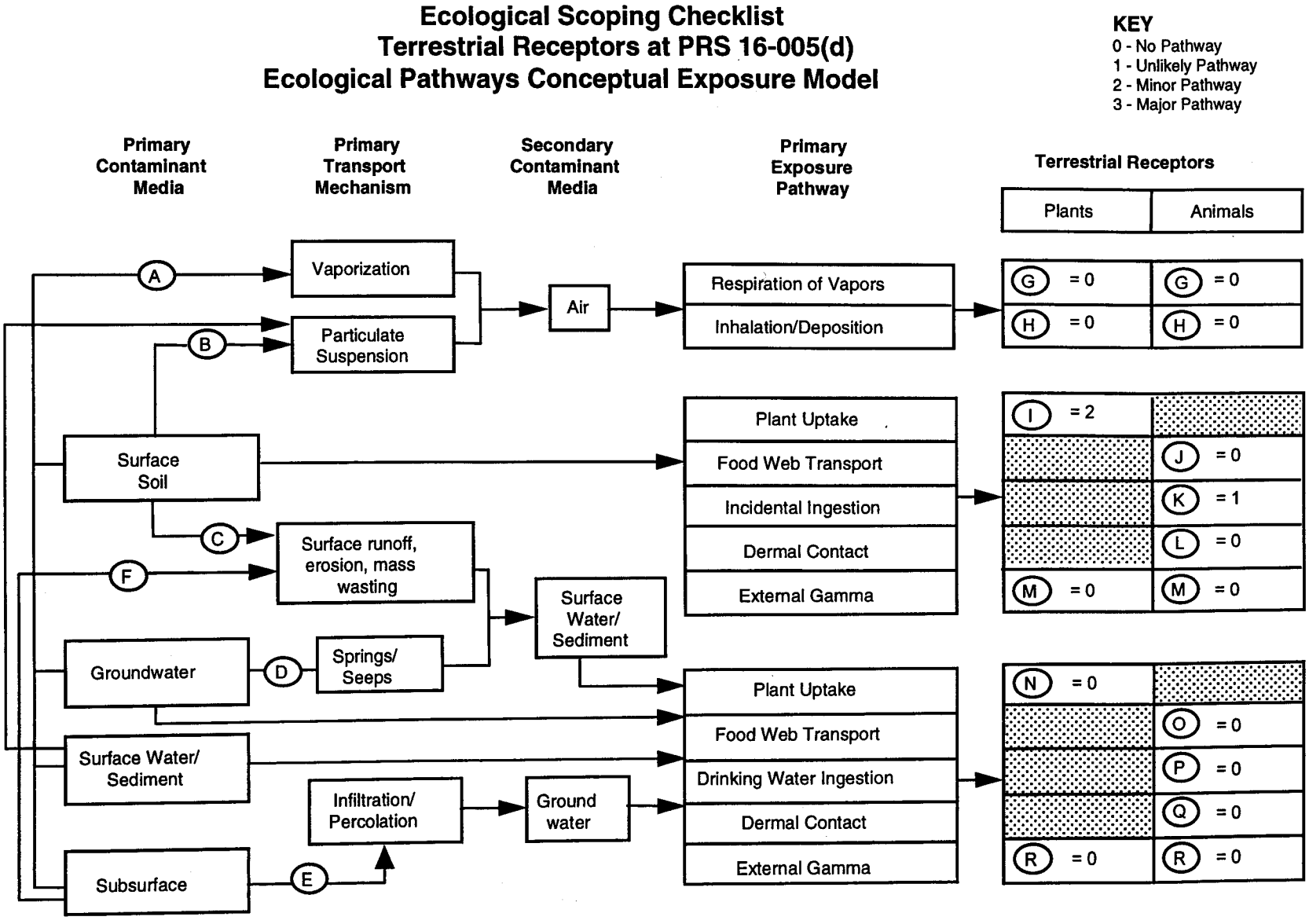
**Provide quantification of exposure pathway (0=no pathway, 1=unlikely pathway, 2=minor pathway, 3=major pathway):** 0

**Aquatic Plants:** 0

**Aquatic Animals:** 0

**Provide explanation:** No radionuclides were identified at PRS 16-005(d).

# Ecological Scoping Checklist
# Terrestrial Receptors at PRS 16-005(d)
# Ecological Pathways Conceptual Exposure Model




*Note:* Letters correspond to questions on Ecological Scoping Checklis

**Signatures and certifications:**

**Checklist completed by (provide name, organization and phone number):**

**Name (printed):** Deborah Rieberg

**Name (signature):** Deborah Rieberg

**Organization:** ICF Kaiser Engineers

**Phone number:** (505) 661-5243

**Date completed:** Initial site visit February 17, 1999; checklist completed March 3, 1999; revised March 25, 1999.

**Verification by a member of ER Project Ecological Risk Task Team (provide name, organization and phone number):**

**Name (printed):** DON KELLETT

**Name (signature):** Don Kellett

**Organization:** ICF KAISER ENGINEERS

**Phone number:** 303 793-5275

### F-2.0.4 PRS 16-034(p)

Ecological Scoping Checklist, Part A
Scoping Meeting Documentation

| Site ID | PRSs 16-034(p) |
|---|---|
| Form of site releases. Describe all relevant known or suspected mechanisms of release (spills, dumping, material disposal, outfall, explosive testing, etc.) and describe potential areas of release. Reference locations on a map as appropriate. | PRS 16-034(p) includes the soil beneath and around the extant foundation of building TA-16-41. The building was originally used as office space and later served as a laboratory. Its basement was used as an incinerator after the building was removed in 1962. The incinerator was removed in 1995 and the remains of the foundation were removed in 1998. Releases are associated with the incineration of material in the basement. |
| List of Primary Affected Media<br><br>(Indicate all that apply) | Surface soil –<br><br>Surface water/sediment–<br><br>Subsurface – X<br><br>Groundwater –<br><br>Other; explain – |
| FIMAD vegetation class based on Arcview vegetation coverage<br><br>(Indicate all that apply) | **Water –**<br><br>**Bare ground/unvegetated –**<br><br>**Spruce/fir/aspen/mixed conifer –**<br><br>**Ponderosa pine –** X<br><br>**Piñon juniper/juniper savannah –**<br><br>**Grassland/shrubland –** X<br><br>**Developed –** |
| Is T&E Habitat Present?<br><br>If applicable, list species known or suspected to use the site for breeding or foraging. | According to Dave Keller, Biologist, ESH-20, LANL, there are no concerns related to T&E species at PRS 16-034(p).<br><br>No T&E nesting habitat is on or near V-Site. Site is in potential medium frequency foraging habitat for peregrine falcon, but contamination is subsurface and complete pathways are unlikely (LANL 1999, 62918) |
| Provide list of Neighboring/ Contiguous/ Upgradient sites and include a brief summary of COPCs and the form of releases for relevant sites; reference a map as appropriate.<br><br>(Use this information to evaluate the need to aggregate sites for screening) | There are no neighboring, contiguous, or upgradient PRSs that are likely to affect PRS 16-034(p). |

| | |
|---|---|
| Surface Water Erosion Potential Information<br><br>Summarize information from AP 4.5 or SOP 2.01, including the run-off subscore (maximum of 46), terminal point of surface water transport, slope, and surface water run-on sources. | Surface water transport is not an issue at the site. No run-off scores are available for this site, although the total erosion score for PRS 16-034(p) is 15.3. The contamination at the site is 10 ft or more beneath the surface and not subject to erosion. |
| Other Scoping Meeting Notes | Any potential releases at the site would have been in the basement of the extant Building TA-16-41. The current surface grade is at least 10 ft higher than the elevation at which releases may have occurred. |

Ecological Scoping Checklist, Part B
Site Visit Documentation

| | |
|---|---|
| Site ID | PRS 16-034(p) |
| Date of Site Visit | February 17, 1999 |
| Site Visit Conducted by | Don Kellett and Deborah Risberg, ICF Kaiser Engineers |

***Receptor Information:***

| | |
|---|---|
| Estimate of cover | **Relative vegetative cover (high, medium, low, none)** = low<br><br>**Relative wetland cover (high, medium, low, none)** = none<br><br>**Relative structures/asphalt, etc. cover (high, medium, low, none)** = none |
| Field notes on the FIMAD vegetation class to assist in ground-truthing the Arc-view information | FIMAD classification of grassland and ponderosa pine mix is correct. |
| Field notes on T&E Habitat, if applicable. Consider the need for a site visit by a T&E subject-matter expert to support the use of the site by T&E receptors. | No T&E species are likely to regularly use the habitats at PRS 16-034(p). There is no need for a site visit by a T&E expert. |
| Are ecological receptors present at the site?<br><br>(yes/no/uncertain)<br><br>Describe the general types of receptors, terrestrial and aquatic, and make notes on the quality of habitat present at the site. | Yes, elk, deer, and pocket gopher sign was observed in the vicinity of the site. No aquatic habitats or receptors are present at the site. The quality of the habitat at the site is moderate because, although no development is currently on the site, there is a lack of site-specific vegetation to provide cover and/or forage for ecological receptors. |

***Contaminant Transport Information:***

| | |
|---|---|
| Surface water transport<br><br>Field notes on the erosion potential, including a discussion of the terminal point of surface water transport (if applicable). | Surface water transport is not a significant issue at PRS 16-034(p) because the contaminants are at least 10 ft below the surface and there is no perennial flow in the area. |
| Are there any off-site transport pathways (surface water, air, or groundwater)?<br><br>(yes/no/uncertain)<br><br>Provide explanation | No, wind dispersion and surface water flow would not be likely to affect the contaminants, which are at depths of 10 ft and more. |
| Interim action needed to limit off-site transport?<br><br>(yes/no/uncertain)<br><br>Provide explanation/ recommendation to Project Lead for IA SMDP. | No. |

***Ecological Effects Information:***

| | |
|---|---|
| Physical Disturbance<br><br>(Provide list of major types of disturbances, including erosion and construction activities; review historical aerial photos where appropriate.) | There is significant disturbance as a result of the excavation and removal of the building foundation. The site has been backfilled, graded, and covered with mulch, and is suitable for re-vegetation. |
| **Are there obvious ecological effects?**<br>(yes/no/uncertain)<br><br>Provide explanation and apparent cause (e.g., contamination, physical disturbance). | No obvious ecological effects are associated with any release of contaminants at PRS 16-034(p). |

| | |
|---|---|
| Interim action needed to limit apparent ecological effects?<br><br>(yes/no/uncertain)<br><br>Provide explanation and recommendations to mitigate apparent exposure pathways to project lead for IA SMDP. | No. |

***No Exposure/Transport Pathways:***

If there are no complete exposure pathways to ecological receptors onsite and no transport pathways to offsite receptors, the remainder of the checklist should not be completed. Stop here and provide additional explanation/justification for proposing an ecological No Further Action recommendation (if needed). At a minimum, the potential for future transport should include likelihood that future construction activities could make contamination more available for exposure or transport.

An ecological NFA is recommended for PRS 16-034(p) because there are no complete exposure pathways for ecological receptors and no off-site transport pathways.

**Signatures and certifications:**

**Checklist completed by (provide name, organization and phone number):**

**Name (printed):** Deborah Risberg

**Name (signature):** Deborah Risberg

**Organization:** ICF Kaiser Engineers

**Phone number:** (505) 661-5243

**Date completed:** Initial site visit February 17, 1999; checklist completed March 3, 1999; revised March 25, 1999.

**Verification by a member of ER Project Ecological Risk Task Team (provide name, organization and phone number):**

**Name (printed):** Don Kellett

**Name (signature):** Don Kellett

**Organization:** ICF Kaiser Engineers

**Phone number:** 303 795-5275

# APPENDIX G. RELEVANT DOCUMENTS

## G-1.0 Documentation of Regulatory History

Relevant information and proposed SAPs for the V-Site PRSs addressed in this VCM completion report were initially presented in the RFI work plan for OU 1082, Addendum 1, which was submitted to the AA (EPA) for review on July 1, 1994. Subsequent to review, the EPA issued a notice of deficiency (NOD) on Addendum 1 to the work plan on October 20, 1994. The Laboratory submitted an immediate response to deficiency 58 on December 22, 1994. The EPA then approved Addendum 1 (with modification) on January 12, 1995. The Laboratory completed the regulatory record by submitting a response to all remaining NOD comments on February 24, 1995, and submitting the final RFI work plan for OU 1082, Addendum 1, on July 25, 1995.

When the opportunity became available to coordinate accelerated cleanup activities with D&D activities at these PRSs, the Laboratory drafted and submitted a VCM plan. This plan incorporated and augmented the sampling strategy that had been proposed and approved in the RFI work plan for OU 1082, outlined cleanup levels and activities, and was submitted to NMED's Hazardous and Radioactive Materials Bureau (NMED-HRMB) for review on March 25, 1997. The Laboratory submitted a response to the NOD on May 22, 1997. Following review, the NMED-HRMB approved the VCA plan on October 10, 1997.

In November 1997, DOE determined that some of the buildings associated with V-Site were historically significant and would remain intact. In response to this determination and to the need to address some additional perimeter sampling, LANL contacted NMED-HRMB in December 1997 to propose modifications and augmentation to the SAP within the approved VCA plan. The Laboratory then prepared and submitted an addendum to the VCM to NMED-HRMB on July 6, 1998.

### G-1.1 Referenced Documents

No non-reference set referenced documents are applicable to this report.