*ANALYTICAL SUMMARY DATA PACKAGE*
SDG # KIRTLAND_014

**PROJECT NAME:** KIRTLAND AFB 2011
**PROJECT LOCATION:** ALBUQUERQUE, NEW MEXICO

**SUBMITTAL TO:**
Pamela Moss
SHAW E&I
7604 Technology Way, Suite 300
Denver, CO 80237

**SUBMITTAL BY:**
Empirical Laboratories, LLC (EL)
621 Mainstream Drive, Suite 270
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Original Report Date: June 17, 2011
Report Revision #: N/A
Revision Date: N/A
Total # of Pages: 461

**THIS DOCUMENT MEETS DoD QSM 4.1 STANDARDS**

*The results relate to only the samples associated with the referenced SDG and the submitted data has been produced in accordance with laboratory procedures. The Laboratory's Technical Lab Director, Mr. Rick Davis, is responsible for the final data produced and reported. His signature is listed at the end of the Case Narrative within the Analytical Data Package. If applicable to this report package, details on report revisions and the information on subcontracted analysis are listed in the package Case Narrative. This report shall not be reproduced, except in full, without the written approval of Empirical Laboratories, LLC.*

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## Sample Delivery Group Case Narrative

**Receipt Information**
The samples were received within the preservation guidelines for the associated methods. The information associated with sample receipt and the Sample Delivery Group (SDG) are included within section 4 of this package, which also provides information on the link between the client sample ID listed on the COC and laboratory's assigned unique sample ID or WorkOrder #. The sample is tracked through the laboratory for all analysis via the assigned WorkOrder #.

All samples that were received were analyzed and none of the samples were placed on hold without analyses. There were no subcontracted analyses for this SDG.

Trip Blank received with the samples on CoC 140705-GW049 but was not listed on the CoC. The sample ID on the container was GW8049-TB and the laboratory ID assigned is 1105217-03.

**Changes to the Revision**
This is an original submittal of the final report package.

**Analytical Information**
All samples were prepped (where applicable) and analyzed within the standard allowed holding times, unless noted within the exceptions listed below. The laboratory analyzed all samples within the program and method guidelines. The following information is provided specific to individual methods:

**Chromatographic Flags for Manual Integration:**
The following letters are used to denote manual integrations on the laboratory's raw data in association with chromatographic integrations:

**A:** The peak was manually integrated as it was not integrated in the original chromatogram.
**B:** The peak was manually integrated due to resolution or coelution issues in the original chromatogram.
**C:** The peak was manually integrated to correct the baseline from the original chromatogram.
**D:** The peak was manually integrated to identify the correct peak as the wrong peak was identified in the original chromatogram.
**E:** The peak was manually integrated to include the entire peak as the original chromatogram only integrated part of the peak.

**SW8260B:**
The method blank 1E28001-BLK1 has a positive result for Naphthalene and 1,2,3-Trichlorobenzene. The method blank 1F050040-BLK1 has a positive result for Hexachlorobutadiene.

The batch spikes associated to batch 1E28001 exceeded recovery criteria with a

negative bias and exceeded relative percent difference criteria for Bromomethane. The batch spike duplicate 1E28001-BSD1 was analyzed 12 hours 15 minutes after the associated tune standard.

The continuing calibration verifications exceeded criteria in 1E15001-CCV1 with a negative bias for Bromomethane and in 1F15708-CCV1 with a negative bias for Bromomethane and Vinyl Chloride.

No additional anomalies or deviations are noted and the proper data qualifiers have been applied.

**SW8270C BNA:**
The batch spikes associated to batch 1E24013 exceeded recovery criteria with a positive bias for Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, 4-Bromophenyl phenyl ether, Bis(2-chloroethoxy)methane, 4-Chlorophenyl phenyl ether, Dibenzofuran, Diethylphthalate, 4,6-Dinitro-2-methylphenol, 2,4-Dinitrotoluene, Di-n-octylphthalate, Hexachlorobenzene, 4-Nitroaniline, Nitrobenzene, and Pentachlorophenol and with a negative bias for Caprolactam. The batch spike associated to batch 1E27018 exceeded criteria with a positive bias for Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Carbazole, Di-n-octylphthalate, 4-Nitroaniline, Pentachlorophenol, and Dibenz(a,h)anthracene and exceeded with a negative bias for Caprolactam, Hexachlorobutadiene, Hexachlorocyclopentadiene, and Hexachloroethane. Due to the % recovery being less than 10% for some of the compounds with a low bias recovery in 1E27018-BS1/BSD1, sample 1105217-01, 1105225-01, and -03 were re-extracted and analyzed. Since 11052117-01, 1105225-01, and -03 were re-extracted outside of the EPA recommended holding time, both original and re-extract are provided in the report. The batch spike associated to batch 1F01024 exceeded criteria with a negative bias for Caprolactam and with a positive bias for Benzo(a)anthracene, Benzo(b)fluoranthene, 4-Bromophenyl phenyl ether, Butylbenzylphthalate, Bis(2-chloroethoxy)methane, 2-Chloronaphthalene, 4-Chlorophenyl phenyl ether, Chrysene, Dibenzofuran, Di-n-butylphthalate, Diethylphthalate, 3,3'-Dichlorobenzidine, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, Bis(2-ethylhexyl)phthalate, Hexachlorobenzene, and Phenanthrene.

The initial calibration verification 1E12203-ICV3 exceeded criteria with a positive bias for 2,4-Dinitrophenol.

The continuing calibration verifications exceeded criteria in 1E14710-CCV1 with a negative bias for 3,3'-Dichlorobenzidine and with a positive bias for Benzidine, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene, 4,6-Dinitro-2-methylphenol, 2,4-Dinitrophenol, Di-n-octylphthalate, Fluorene, Indeno(1,2,3-cd)pyrene, and 4-Nitroaniline, in 1E15103-CCV1 with a positive bias for Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, 4,6-Dinitro-2-methylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, Di-n-octylphthalate, Hexachlorocyclopentadiene, 4-Nitroaniline, 3-Nitroaniline, 2-Nitroaniline, 4-Nitrophenol, 2,4,6-Trichlorophenol, and 2,4,5-Trichlorophenol, in 1E15110-CCV1 with a negative bias for Benzaldehyde and 2,2'-Oxybis-1-chloropropane

and with a positive bias for Benzidine, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, Dibenz(a,h)anthracene, Di-n-octylphthalate, 1,2-Diphenylhydrazine, Indeno(1,2,3-cd)pyrene, and 4-Nitroaniline, in 1F15808-CCV1 with a positive bias for Benzidine, 4-Chloro-3-methylphenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, Hexachlorobutadiene, and 4-Nitroaniline and with a negative bias for Bis(2-chloroethyl)ether, 2,2'-Oxybis-1-chloropropane, Di-n-octylphthalate, 1,2-Diphenylhydrazine, Bis(2-ethylhexyl)phthalate, and N-nitroso-di-n-propylamine, and in 1F15812-CCV1 with a positive bias for Benzidine.

No additional anomalies or deviations are noted and the proper data qualifiers have been applied.

**SW8015B GRO:**
No anomalies or deviations are noted.

**SW8015B DRO:**
The surrogate o-Terphenyl exceeded the retention time window in 1E23013-BLK1, 1E31004-BLK1, -BS1, 1105217-01, 1105225-01, -03 and 1F15315-CCV3. The result bias due to the retention time shift was determined to be negligible for all affected batch QC, samples, and instrument QC.

No additional anomalies or deviations are noted and the proper data qualifiers have been applied.

**SW8011 EDB:**
No anomalies or deviations are noted.

**SW6010B:**
The continuing calibration verifications 1F16015-CCV5 and –CCV6 exceeded criteria with a positive bias for Manganese (dissolved).

No additional anomalies or deviations are noted and the proper data qualifiers have been applied.

**Wet Chemistry:**
Samples 1105208-01, 1105225-01, and 1105225-03 are qualified with an M for Chloride (1mg/L) and Sulfate as SO4 (2.5mg/L) to indicate that the LOQ was raised due to the RL standard that was in control being at the level indicated. Sample 1105217-01 is qualified with an M for Chloride and Sulfate as SO4 to indicate that the LOQ was raised to 2.5mg/L which is the level of the RL standard that was within criteria.

The continuing calibration blank 1F15709-CCB2 has positive results for Chloride and Nitrate as N.

No additional anomalies or deviations are noted and the proper data qualifiers have been applied.

**Data Qualifiers**
As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

## Analytical Report Terms and Qualifiers

**MDL:** The method detection limit (MDL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The MDL is determined from analysis of a sample containing the analyte in a given matrix. For DoD QSM 4.1 reporting purposes, this definition is also applied to the reported Detection Limit (DL).

**LOD:** The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM 4.1 revisions as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.

**LOQ:** The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM 4.1 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: An exceeding quality control criteria is associated with the reported result.

**B**: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.

**D:** When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".

**E:** The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound.

**H1**: The result was analyzed outside of the EPA recommended holding time.

**H2**: The result was extracted outside of the EPA recommended holding time.

**H3**: The sample for this analyte was received outside of the EPA recommended holding time.

**J:** The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the EQL. One should feel confident that the result is greater than zero and less than the EQL.

**M**: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters MDL/RL has been raised.

**N:** The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.

**P**: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.

**Q**: The RPD and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

**S**: The associated internal standard failed criteria.

**U**: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.

**X**: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.

**Y**: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.

**Z**: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

**LIMS Definitions / Naming Conventions:**

The following are general naming conventions that are used throughout the laboratory; however, on a method by method basis, there are additional QAQC items that are named in a consistent format.

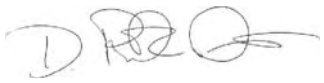
**BLK**: LIMS assigns a unique identifier to the Method Blank by naming it as the letters BLK appended to the Batch ID. A Method Blank is an analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The Method Blank is used to assess for possible contamination during preparation and/or analysis steps. Method Blanks within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally.

**BS**: LIMS assigns a unique identifier to the Blank Spike by naming it as the letters BS appended to the Batch ID. The Blank Spike or Lab Control Sample is a controlled analyte-free matrix, which is spiked with known and verified concentrations of target analytes. Spiking concentrations can be referenced in the method SOP. The BS is used to evaluate the viability of analytes taken through the entire prep (when applicable) and analytical process. Blank Spikes within a Batch or Analytical sequence will be appended with a numerical value beginning with 1 that will increase incrementally. A duplicate Blank Spike will be designated as a BSD.

**MS**: The LIMS assigns each Client sample with a unique identifier. The Matrix Spike is designated with a MS at the end of the sample's unique identifier. The Matrix Spike sample is used to assess the effect of the sample matrix on the precision and accuracy of the results generated using the selected method. A duplicate Matrix Spike will be designated as a MSD.

**IDs**: The LIMS assigns each Client sample with a unique identifier. The letter "RE" may potentially be appended to the end of the LIMS Sample ID. And "**RE"** implies that the sample was either re-prepped, re-analyzed straight, or re-analyzed at a dilution. Subsequent re-analysis for the sample will be appended with a numerical value beginning with 1 that will increase incrementally. Eg: RE1, RE2, RE3, etc.

**Statement of Data Authenticity:**
I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in this Case Narrative, as verified by my signature below. During absences, Ms. Marcia K. McGinnity is authorized to sign this Statement of Data Authenticity.



_____
Mr. Rick D. Davis
Laboratory Technical Director / VP Operations

## ORGANIC CALCULATIONS

**GC/MS Volatiles**

$$\text{Final Concentration} = \frac{\text{On-column(ug/L or ug/Kg) * Expected Vol/Weight (mL or g) * Dilution}}{\text{Initial Vol/Weight (mL or g) * (Percent Solids/100) (if applicable)}}$$

***Note - Expected Vol/Weight value is found in "Final Vol" column of Preparation Batch Summary.***

**GC/MS Extractables**

$$\text{Final Concentration} = \frac{\text{On-column(ng/uL) * Final Vol (ml) * Dilution *(1000uL/mL)}}{\text{Initial Vol/Weight (mL or g) * (Percent Solids/100) (if applicable)}}$$

= ng/mL or ng/g

= ug/L or ug/kg

**GC or LC Extractables**

$$\text{Final Concentration} = \frac{\text{On-column(ng/mL) * Final Vol (mL) * Dilution}}{\text{Initial Vol/Weight (mL or g) * (Percent Solids/100) (if applicable)}}$$

= ng/mL or ng/g

= ug/L or ug/kg

# Sample Receipt Information

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Shaw E & I, Inc.

# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-140705



11

Project Number: 140705
Project Name: Kirtland AFB
Sample Coordinator: Mark Lyon
Turnaround Time:

Samples Shipment Date: 23 MAY 2011
Lab Destination: Empirical Laboratories, Inc.
Lab Contact: Sonya Gordon
Project Contact: Pamela Moss
Carrier/Waybill No.: Fed Ex/875889884593

Bill To: Shaw Environmental, Inc. - Accounts P
PO Box 98519
Baton Rouge LA 70884

Report To: Pamela Moss
7604 Technology Way, Suite 300
Denver CO 80237

Special Instructions:

Possible Hazard Indentification:
Non-hazard X Flammable Skin Irritant Poison B Radiological Unknown

Sample Disposal:
Return to Client Disposal by Lab Y Archive (mos.)

1. Relinquished By (Signature/Affiliation) [signature] Shaw Eco — Date: 5/23/11 Time: 1638
2. Relinquished By (Signature/Affiliation) — Date: Time:
3. Relinquished By (Signature/Affiliation) — Date: Time:

1. Received By (Signature/Affiliation) Reginald Lolley — Date: 5.24.11 Time: 0900
2. Received By (Signature/Affiliation) — Date: Time:
3. Received By (Signature/Affiliation) — Date: Time:

Comments:

1105208

| Sample No | Sample Name | Sample Date | Sample Time | Container | Ctr Qty | Preservative | Requested Testing Program | Sample Vol | Units | Fil | CID | Condition On Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 40 mL VOA VIAL | 3 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |
| GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 40 mL VOA VIAL | 3 | None except cool to 4 C | EDB by SW846 8011 | | | N | | |
| GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 40 mL VOA VIAL | 3 | HCl<pH 2 | TPH as Gasoline by SW846 8015B | | | N | | |
| GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 1000 mL A GLASS | 2 | None except cool to 4 C | TPH as Diesel by SW846 8015B | | | N | | |
| GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 250 mL HDPE | 1 | None except cool to 4 C | Chloride, Nitrate, and Sulfate by EPA 300, Alkalinity by SM2320B | | | N | | |
| GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 250 mL HDPE | 1 | Zinc Acetate and NaOH>9 | Sulfide by SM4500S-2CF | | | N | | |
| GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 1000 mL A GLASS | 2 | None except cool to 4 C | SVOCs by SW846 8270C | | | N | | |
| GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 250 mL HDPE | 1 | H2SO4<pH 2 | Ammonia by SM4500B,D | | | N | | |

KIRTLAND_014 Summ Package

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# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-140705



| Sample No | Sample Name | Sample Date | Sample Time | Container | | Preservative | Requested Testing Program | Sample Vol | Units | Fil | CID | Condition On Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -02 GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | Y | | |
| -✓ GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | N | | |
| 01 GW0102 | KAFB10684-GW-GW0102-REG | 23 MAY 2011 | 14:43 | 250 mL HDPE | 1 | HNO3<pH 2 | Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C | | | N | | |
| -03 GW8012-RB | FIELDQC-BW-GW8012-RB-ER | 23 MAY 2011 | 08:47 | 40 mL VOA VIAL | 3 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |
| GW8012-RB | FIELDQC-BW-GW8012-RB-ER | 23 MAY 2011 | 08:47 | 40 mL VOA VIAL | 3 | HCl<pH 2 | TPH as Gasoline by SW846 8015B | | | N | | |
| GW8012-RB | FIELDQC-BW-GW8012-RB-ER | 23 MAY 2011 | 08:47 | 1000 mL A GLASS | 2 | None except cool to 4 C | TPH as Diesel by SW846 8015B | | | N | | |
| GW8012-RB | FIELDQC-BW-GW8012-RB-ER | 23 MAY 2011 | 08:47 | 250 mL HDPE | 1 | HNO3<pH 2 | Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C | | | N | | |
| -04 GW8012-RB | FIELDQC-BW-GW8012-RB-ER | 23 MAY 2011 | 08:47 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | N | | |
| ✓ GW8012-RB | FIELDQC-BW-GW8012-RB-ER | 23 MAY 2011 | 08:47 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | Y | | |
| -03 GW8012-RB | FIELDQC-BW-GW8012-RB-ER | 23 MAY 2011 | 08:47 | 1000 mL A GLASS | 2 | None except cool to 4 C | SVOCs by SW846 8270C | | | N | | |
| -05 ~~04~~ GW8048-TB ← RT | FIELDQC-BW-GW8048-TB-TB | 23 MAY 2011 | 08:00 | 40 mL VOA VIAL | 2 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |

**EMPIRICAL LABORATORIES**
**COOLER RECEIPT FORM**

LIMS Number: 1105208 Number of Coolers: 1 of 1

Client: SHAW E&I INC. Project: KIRTLAND AFB

Date/Time Received: 5.24.11 9:00 Date cooler(s) opened: 5.24.11

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive? FedEx UPS DHL Hand Delivered EL Courier Other: _____

If applicable, enter airbill number here: 4593

2. Were custody seals on outside of cooler(s)? ..... Yes No

How many: 1 Seal date: 5.23.11 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... Yes No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... Yes No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... Yes No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... Yes No N/A
7. Was project identifiable from custody papers? ..... Yes No N/A
8. If required, was enough ice present in the cooler(s)? ..... Yes No N/A

Type of Coolant: WET DRY BLUE NONE

Temperature of Samples upon Receipt: Initial Value: 2.1 °C Correction Factor: +1.4 °C Final Value: 3.5 °C

Dates samples were logged-in: 5.24.11

9. Initial this form to acknowledge login of sample(s): (Name): Reginald Talley (Initial): RT
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

Ph for metals and ammonia are <2

Shaw™
Shaw E & I, Inc.

# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-GW049



14

Project Number: 140705
Project Name: Kirtland AFB
Sample Coordinator: Mark Lyon
Turnaround Time:

Samples Shipment Date: 24 MAY 2011
Lab Destination: Empirical Laboratories, Inc.
Lab Contact: Sonya Gordon
Project Contact: Pamela Moss
Carrier/Waybill No.: Fed Ex/875889884608

Bill To: Shaw Environmental, Inc. - Accounts P
PO Box 98519
Baton Rouge LA 70884

Report To: Pamela Moss
7604 Technology Way, Suite 300
Denver CO 80237

Special Instructions:

Possible Hazard Indentification:
Non-hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Radiological ☐ Unknown ☐

Sample Disposal:
Return to Client ☐ Disposal by Lab ☐ Archive (mos.)

1. Relinquished By (Signature/Affiliation) [signature] Date: 5/24/11 Time: 1511
2. Relinquished By (Signature/Affiliation) Date: Time:
3. Relinquished By (Signature/Affiliation) Date: Time:

1. Received By (Signature/Affiliation) [signature] 2.8° Date: 5.25.11 Time: 0800
2. Received By (Signature/Affiliation) Date: Time:
3. Received By (Signature/Affiliation) Date: Time:

Comments:

1105217

| Sample No | Sample Name | Sample Date | Sample Time | Container | Ctr Qty | Preservative | Requested Testing Program | Sample Vol | Units | Fil | CID | Condition On Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 40 mL VOA VIAL | 3 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |
| GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 40 mL VOA VIAL | 3 | None except cool to 4 C | EDB by SW846 8011 | | | N | | |
| GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 40 mL VOA VIAL | 3 | HCl<pH 2 | TPH as Gasoline by SW846 8015B | | | N | | |
| GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 1000 mL A GLASS | 2 | None except cool to 4 C | TPH as Diesel by SW846 8015B | | | N | | |
| GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 250 mL HDPE | 1 | HNO3<pH 2 | Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C | | | N | | |
| -02 GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | N | | |

KIRTLAND_014 Summ Package

Shaw™
Shaw E & I, Inc.

# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-GW049



| | Sample No | Sample Name | Sample Date | Sample Time | Container | | Preservative | Requested Testing Program | Sample Vol | Units | Fil | CID | Condition On Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 | GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 250 mL HDPE | 1 | None except cool to 4 C | Chloride, Nitrate, and Sulfate by EPA 300, Alkalinity by SM2320B | | | N | | |
| | GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 250 mL HDPE | 1 | H2SO4<pH 2 | Ammonia by SM4500B,D | | | N | | |
| | GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 250 mL HDPE | 1 | Zinc Acetate and NaOH>9 | Sulfide by SM4500S-2CF | | | N | | |
| | GW0064 | KAFB10622-GW-GW0064-REG | 24 MAY 2011 | 13:58 | 1000 mL A GLASS | 2 | None except cool to 4 C | SVOCs by SW846 8270C | | | N | | |

-03 Trip Blank

**EMPIRICAL LABORATORIES**
**COOLER RECEIPT FORM**

LIMS Number: 1105217 Number of Coolers: 1 of 1

Client: SHAW E&I INC Project: Kirtland AFB

Date/Time Received: 5.25.11 9:00 Date cooler(s) opened: 5.25.11

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive? (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4608

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 5.24.11 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE

Temperature of Samples upon Receipt: Initial Value: 1.4 °C Correction Factor: +1.4 °C Final Value: 2.8 °C

Dates samples were logged-in: 5.25.11

9. Initial this form to acknowledge login of sample(s): (Name): Reginald Talley (Initial): RT

10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A
11. Did all bottles arrive unbroken? ..... (Yes) No N/A
12. Was all required bottle label information complete? ..... (Yes) No N/A
13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A
14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A
15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... (Yes) No N/A
18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

Received Trip Blanks no listed on COC GW8049-TB

If Non-Conformance issues were present, list by sample ID: _____

Ph for metals and ammonia samples were <2

Ph for sulfide was ~~5~~ >9
RT

Shaw™
Shaw E & I, Inc.

# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-GW050



17

Project Number: 140705
Project Name: Kirtland AFB
Sample Coordinator: Mark Lyon
Turnaround Time:

Samples Shipment Date: 25 MAY 2011
Lab Destination: Empirical Laboratories, Inc.
Lab Contact: Sonya Gordon
Project Contact: Pamela Moss
Carrier/Waybill No.: Fed Ex/875889884619

Bill To: Shaw Environmental, Inc. - Accounts P
PO Box 98519
Baton Rouge LA 70884

Report To: Pamela Moss
7604 Technology Way, Suite 300
Denver CO 80237

Special Instructions:

Possible Hazard Indentification:
Non-hazard X Flammable ☐ Skin Irritant ☐ Poison B ☐ Radiological ☐ Unknown ☐

Sample Disposal:
Return to Client ☐ Disposal by Lab X Archive (mos.)

1. Relinquished By (Signature/Affiliation) Shaw Kim — Date: 5/25/11 Time: 1415
1. Received By (Signature/Affiliation) Reginald Talley 2.3 — Date: 5.26.11 Time: 0900
2. Relinquished By (Signature/Affiliation) — Date: Time:
2. Received By (Signature/Affiliation) — Date: Time:
3. Relinquished By (Signature/Affiliation) — Date: Time:
3. Received By (Signature/Affiliation) — Date: Time:

Comments:

1105225

| Sample No | Sample Name | Sample Date | Sample Time | Container | Ctr Qty | Preservative | Requested Testing Program | Sample Vol | Units | Fil | CID | Condition On Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 40 mL VOA VIAL | 3 | None except cool to 4 C | EDB by SW846 8011 | | | N | | |
| GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 40 mL VOA VIAL | 3 | HCl<pH 2 | TPH as Gasoline by SW846 8015B | | | N | | |
| GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 1000 mL A GLASS | 2 | None except cool to 4 C | TPH as Diesel by SW846 8015B | | | N | | |
| GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 40 mL VOA VIAL | 3 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |
| GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 250 mL HDPE | 1 | HNO3<pH 2 | Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C | | | N | | |
| -01d GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | Y | | |

KIRTLAND_014 Summ Package

Shaw™
Shaw E & I, Inc.

# ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-GW050



| | Sample No | Sample Name | Sample Date | Sample Time | Container | | Preservative | Requested Testing Program | Sample Vol | Units | Fil | CID | Condition On Receipt |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -01 | GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 250 mL HDPE | 1 | H2SO4<pH 2 | Ammonia by SM4500B,D | | | N | | |
| | GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 1000 mL A GLASS | 2 | None except cool to 4 C | SVOCs by SW846 8270C | | | N | | |
| | GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 250 mL HDPE | 1 | Zinc Acetate and NaOH>9 | Sulfide by SM4500S-2CF | | | N | | |
| | GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 250 mL HDPE | 1 | None except cool to 4 C | Chloride, Nitrate, and Sulfate by EPA 300, Alkalinity by SM2320B | | | N | | |
| -02 | GW0065 | KAFB10623-GW-GW0065-REG | 25 MAY 2011 | 10:42 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | N | | |
| -03 | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 40 mL VOA VIAL | 3 | None except cool to 4 C | EDB by SW846 8011 | | | N | | |
| | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 40 mL VOA VIAL | 3 | HCl<pH 2 | TPH as Gasoline by SW846 8015B | | | N | | |
| | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 1000 mL A GLASS | 2 | None except cool to 4 C | TPH as Diesel by SW846 8015B | | | N | | |
| | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 250 mL HDPE | 1 | HNO3<pH 2 | Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C | | | N | | |
| -04 | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | N | | |
| | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 250 mL HDPE | 1 | HNO3<pH 2 | Dissolved Iron and Manganese by SW846 6010C | | | Y | | |
| -03 | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 250 mL HDPE | 1 | None except cool to 4 C | Chloride, Nitrate, and Sulfate by EPA 300, Alkalinity by SM2320B | | | N | | |
| | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 250 mL HDPE | 1 | H2SO4<pH 2 | Ammonia by SM4500B,D | | | N | | |
| | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 250 mL HDPE | 1 | Zinc Acetate and NaOH>9 | Sulfide by SM4500S-2CF | | | N | | |
| | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 1000 mL A GLASS | 2 | None except cool to 4 C | SVOCs by SW846 8270C | | | N | | |
| | GW0066 | KAFB10624-GW-GW0066-REG | 25 MAY 2011 | 13:56 | 40 mL VOA VIAL | 3 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |
| -05 | GW8013-AB | FIELDQC-BW-GW8013-AB-AB | 25 MAY 2011 | 13:56 | 40 mL VOA VIAL | 2 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |
| | GW8049-TB | FIELDQC-BW-GW8049-TB-TB | 24 MAY 2011 | 10:30 | 40 mL VOA VIAL | 2 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |
| -06 | GW8050-TB | FIELDQC-BW-GW8050-TB-TB | 25 MAY 2011 | 08:00 | 40 mL VOA VIAL | 2 | HCl<pH 2 | VOCs by SW846 8260B | | | N | | |

**EMPIRICAL LABORATORIES**
**COOLER RECEIPT FORM**

LIMS Number: 1105226 Number of Coolers: 1 of 1

Client: Shaw E&I Inc Project: Redstone PMC

Date/Time Received: 5.26.11 9:00 Date cooler(s) opened: 5.26.11

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive? (FedEx) UPS DHL Hand Delivered EL Courier Other: _____

If applicable, enter airbill number here: 4619

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 5.25.11 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... Yes No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... Yes No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... Yes No N/A
7. Was project identifiable from custody papers? ..... Yes No N/A
8. If required, was enough ice present in the cooler(s)? ..... Yes No N/A

Type of Coolant: WET DRY BLUE NONE

Temperature of Samples upon Receipt: Initial Value: 0.9 °C Correction Factor: +1.4 °C Final Value: 2.3 °C

Dates samples were logged-in: 5.26.11

9. Initial this form to acknowledge login of sample(s): (Name): Reginald Talley (Initial): RT
10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes (No) N/A
13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A
14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A
15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... (Yes) No N/A
18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

2 GW0065 TPH as Gasoline broken
1 GW0066 VOC Broken
Missing GW8049-TB

If Non-Conformance issues were present, list by sample ID: _____

Ph For metal and ammonia was <2

Ph For sulfide was >9

**WORK ORDER**

**1105208**

**Printed: 6/17/2011 4:00:10PM**

# Empirical Laboratories, LLC

**Client:** **Shaw E & I (I700)**
**Project:** **Kirtland AFB 2011**

**Project Manager:** **Sonya Gordon**
**Project Number:** **SHW_Kirtland**

**Report To:**
Shaw E & I (I700)
Pamela Moss
7604 Technology Way, Suite 300
Denver, CO 80237
Phone: (720) 554-8252
Fax: (225) 932-2661

**Invoice To:**
Shaw E & I (I700)
Accounts Payable
PO Box 98519
Baton Rouge, LA 70884
Phone :(225) 932-2500
Fax: (225) 932-2661

Date Due: 06/14/2011 16:00 (15 day TAT)

Received By: Reginald Talley
Logged In By: Reginald Talley

Date Received: 05/24/2011 09:00
Date Logged In 05/24/2011 09:52

Samples Received at: **3.5°C**

| | | | |
|---|---|---|---|
| Custody Seals | Yes | Received On Ice | Yes |
| Containers Intact | Yes | | |
| COC/Labels Agree | Yes | | |
| Preservation Confir | Yes | | |

| Analysis | Due | TAT | Expires | Version | Comments |
|---|---|---|---|---|---|

WORK ORDER

**1105208**

Printed: 6/17/2011 4:00:10PM

## Empirical Laboratories, LLC

**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011

**Project Manager:** Sonya Gordon
**Project Number:** SHW_Kirtland

| Analysis | Due | TAT | Expires | Version | Comments |
|---|---|---|---|---|---|
| **1105208-01 GW0102 [Water] Sampled 05/23/2011 14:43 Mountain** | | | | | |
| SM4500S2CF | 06/09/2011 14:00 | 15 | 05/30/2011 15:43 | | |
| SW8015B DRO | 06/09/2011 14:00 | 15 | 05/30/2011 15:43 | | |
| SW8011 | 06/09/2011 14:00 | 15 | 06/06/2011 15:43 | | |
| SW8270C | 06/09/2011 14:00 | 15 | 05/30/2011 15:43 | | |
| SW8015B GRO | 06/09/2011 14:00 | 15 | 06/06/2011 15:43 | | |
| SW8260B | 06/09/2011 14:00 | 15 | 06/06/2011 15:43 | | |
| SM2320B | 06/09/2011 14:00 | 15 | 06/06/2011 15:43 | | carb/bicarb |
| SM4500NH3BG | 06/09/2011 14:00 | 15 | 06/20/2011 15:43 | | |
| SW6010B | 06/09/2011 14:00 | 15 | 11/19/2011 15:43 | | Ca, Pb, K, Na, Mg |
| E300.0 | 06/09/2011 14:00 | 15 | 05/25/2011 15:43 | | NO3 |
| E300.0 | 06/09/2011 14:00 | 15 | 06/20/2011 15:43 | | Cl, SO4 |
| **1105208-02 GW0102 [Water] Sampled 05/23/2011 14:43 Mountain** | | | | | |
| SW6010B | 06/09/2011 14:00 | 15 | 11/19/2011 15:43 | | Fe & Mn |
| **1105208-03 GW8012-RB [Water] Sampled 05/23/2011 08:47 Mountain** | | | | | |
| SW6010B | 06/09/2011 14:00 | 15 | 11/19/2011 09:47 | | Ca, Pb, K, Na, Mg |
| SW8015B DRO | 06/09/2011 14:00 | 15 | 05/30/2011 09:47 | | |
| SW8270C | 06/09/2011 14:00 | 15 | 05/30/2011 09:47 | | |
| SW8015B GRO | 06/09/2011 14:00 | 15 | 06/06/2011 09:47 | | |
| SW8260B | 06/09/2011 14:00 | 15 | 06/06/2011 09:47 | | |
| **1105208-04 GW8012-RB [Water] Sampled 05/23/2011 08:47 Mountain** | | | | | |
| SW6010B | 06/09/2011 14:00 | 15 | 11/19/2011 09:47 | | Fe & Mn |

WORK ORDER

**1105208**

Printed: 6/17/2011 4:00:10PM

## Empirical Laboratories, LLC

**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011

**Project Manager:** Sonya Gordon
**Project Number:** SHW_Kirtland

| Analysis | Due | TAT | Expires | Version | Comments |
|---|---|---|---|---|---|
| **1105208-05 GW8048-TB [Water] Sampled 05/23/2011 08:00 Mountain** | | | | | |
| SW8260B | 06/09/2011 14:00 | 15 | 06/06/2011 09:00 | | |

WORK ORDER

**1105217**

Printed: 6/17/2011 3:59:48PM

# Empirical Laboratories, LLC

**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011

**Project Manager:** Sonya Gordon
**Project Number:** SHW_Kirtland

**Report To:**
Shaw E & I (I700)
Pamela Moss
7604 Technology Way, Suite 300
Denver, CO 80237
Phone: (720) 554-8252
Fax: (225) 932-2661

**Invoice To:**
Shaw E & I (I700)
Accounts Payable
PO Box 98519
Baton Rouge, LA 70884
Phone :(225) 932-2500
Fax: (225) 932-2661

Date Due: 06/15/2011 16:00 (15 day TAT)

Received By: Reginald Talley
Logged In By: Reginald Talley

Date Received: 05/25/2011 09:00
Date Logged In 05/25/2011 11:19

Samples Received at: **2.8°C**

| | | | |
|---|---|---|---|
| Custody Seals | Yes | Received On Ice | Yes |
| Containers Intact | Yes | | |
| COC/Labels Agree | Yes | | |
| Preservation Confir | Yes | | |

| Analysis | Due | TAT | Expires | Version | Comments |
|---|---|---|---|---|---|

WORK ORDER

**1105217**

Printed: 6/17/2011 3:59:48PM

# Empirical Laboratories, LLC

**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011

**Project Manager:** Sonya Gordon
**Project Number:** SHW_Kirtland

| Analysis | Due | TAT | Expires | Version | Comments |
|---|---|---|---|---|---|
| **1105217-01 GW0064 [Water] Sampled 05/24/2011 13:58 Mountain** | | | | | |
| SM4500S2CF | 06/10/2011 14:00 | 15 | 05/31/2011 14:58 | | |
| E300.0 | 06/10/2011 14:00 | 15 | 05/26/2011 14:58 | | NO3 |
| E300.0 | 06/10/2011 14:00 | 15 | 06/21/2011 14:58 | | Cl, SO4 |
| SM4500NH3BG | 06/10/2011 14:00 | 15 | 06/21/2011 14:58 | | |
| SM2320B | 06/10/2011 14:00 | 15 | 06/07/2011 14:58 | | carb/bicarb |
| SW8260B | 06/10/2011 14:00 | 15 | 06/07/2011 14:58 | | |
| SW8015B GRO | 06/10/2011 14:00 | 15 | 06/07/2011 14:58 | | |
| SW8270C | 06/10/2011 14:00 | 15 | 05/31/2011 14:58 | | |
| SW8011 | 06/10/2011 14:00 | 15 | 06/07/2011 14:58 | | |
| SW8015B DRO | 06/10/2011 14:00 | 15 | 05/31/2011 14:58 | | |
| SW6010B | 06/10/2011 14:00 | 15 | 11/20/2011 14:58 | | Ca, Pb, K, Na, Mg |
| **1105217-02 GW0064 [Water] Sampled 05/24/2011 13:58 Mountain** | | | | | |
| SW6010B | 06/10/2011 14:00 | 15 | 11/20/2011 14:58 | | Fe & Mn |
| **1105217-03 GW8049-TB [Water] Sampled 05/24/2011 10:30 Mountain** | | | | | |
| SW8260B | 06/10/2011 14:00 | 15 | 06/07/2011 11:30 | | |

WORK ORDER

**1105225**

Printed: 6/17/2011 3:59:29PM

# Empirical Laboratories, LLC

**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011

**Project Manager:** Sonya Gordon
**Project Number:** SHW_Kirtland

**Report To:**
Shaw E & I (I700)
Pamela Moss
7604 Technology Way, Suite 300
Denver, CO 80237
Phone: (720) 554-8252
Fax: (225) 932-2661

**Invoice To:**
Shaw E & I (I700)
Accounts Payable
PO Box 98519
Baton Rouge, LA 70884
Phone :(225) 932-2500
Fax: (225) 932-2661

Date Due: 06/16/2011 16:00 (15 day TAT)

Received By: Reginald Talley
Date Received: 05/26/2011 09:00

Logged In By: Reginald Talley
Date Logged In 05/26/2011 09:55

Samples Received at: **2.3°C**

| | | | |
|---|---|---|---|
| Custody Seals | Yes | Received On Ice | Yes |
| Containers Intact | Yes | | |
| COC/Labels Agree | Yes | | |
| Preservation Confir | Yes | | |

| Analysis | Due | TAT | Expires | Version | Comments |
|---|---|---|---|---|---|

WORK ORDER

**1105225**

Printed: 6/17/2011 3:59:29PM

# Empirical Laboratories, LLC

**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011

**Project Manager:** Sonya Gordon
**Project Number:** SHW_Kirtland

| Analysis | Due | TAT | Expires | Version | Comments |
|---|---|---|---|---|---|
| **1105225-01 GW0065 [Water] Sampled 05/25/2011 10:42 Mountain** | | | | | |
| SM4500S2CF | 06/13/2011 14:00 | 15 | 06/01/2011 11:42 | | |
| SW8015B DRO | 06/13/2011 14:00 | 15 | 06/01/2011 11:42 | | |
| SW8011 | 06/13/2011 14:00 | 15 | 06/08/2011 11:42 | | |
| SW8270C | 06/13/2011 14:00 | 15 | 06/01/2011 11:42 | | |
| SW8015B GRO | 06/13/2011 14:00 | 15 | 06/08/2011 11:42 | | |
| SW8260B | 06/13/2011 14:00 | 15 | 06/08/2011 11:42 | | |
| SM2320B | 06/13/2011 14:00 | 15 | 06/08/2011 11:42 | | carb/bicarb |
| SM4500NH3BG | 06/13/2011 14:00 | 15 | 06/22/2011 11:42 | | |
| SW6010B | 06/13/2011 14:00 | 15 | 11/21/2011 11:42 | | Ca, Pb, K, Na, Mg |
| E300.0 | 06/13/2011 14:00 | 15 | 05/27/2011 11:42 | | NO3 |
| E300.0 | 06/13/2011 14:00 | 15 | 06/22/2011 11:42 | | Cl, SO4 |
| **1105225-02 GW0065 [Water] Sampled 05/25/2011 10:42 Mountain** | | | | | |
| SW6010B | 06/13/2011 14:00 | 15 | 11/21/2011 11:42 | | Fe & Mn |

WORK ORDER

1105225

Printed: 6/17/2011 3:59:29PM

# Empirical Laboratories, LLC

**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011

**Project Manager:** Sonya Gordon
**Project Number:** SHW_Kirtland

| Analysis | Due | TAT | Expires | Version | Comments |
|---|---|---|---|---|---|
| **1105225-03 GW0066 [Water] Sampled 05/25/2011 13:56 Mountain** | | | | | |
| SW8260B | 06/13/2011 14:00 | 15 | 06/08/2011 14:56 | | |
| E300.0 | 06/13/2011 14:00 | 15 | 05/27/2011 14:56 | | NO3 |
| E300.0 | 06/13/2011 14:00 | 15 | 06/22/2011 14:56 | | Cl, SO4 |
| SM2320B | 06/13/2011 14:00 | 15 | 06/08/2011 14:56 | | carb/bicarb |
| SW6010B | 06/13/2011 14:00 | 15 | 11/21/2011 14:56 | | Ca, Pb, K, Na, Mg |
| SW8015B GRO | 06/13/2011 14:00 | 15 | 06/08/2011 14:56 | | |
| SW8270C | 06/13/2011 14:00 | 15 | 06/01/2011 14:56 | | |
| SW8011 | 06/13/2011 14:00 | 15 | 06/08/2011 14:56 | | |
| SW8015B DRO | 06/13/2011 14:00 | 15 | 06/01/2011 14:56 | | |
| SM4500S2CF | 06/13/2011 14:00 | 15 | 06/01/2011 14:56 | | |
| SM4500NH3BG | 06/13/2011 14:00 | 15 | 06/22/2011 14:56 | | |
| **1105225-04 GW0066 [Water] Sampled 05/25/2011 13:56 Mountain** | | | | | |
| SW6010B | 06/13/2011 14:00 | 15 | 11/21/2011 14:56 | | Fe & Mn |
| **1105225-05 GW8013-AB [Water] Sampled 05/25/2011 13:56 Mountain** | | | | | |
| SW8260B | 06/13/2011 14:00 | 15 | 06/08/2011 14:56 | | |
| **1105225-06 GW8050-TB [Water] Sampled 05/25/2011 08:00 Mountain** | | | | | |
| SW8260B | 06/13/2011 14:00 | 15 | 06/08/2011 09:00 | | |

## Sample Delivery Group Assignment Form

**CLIENT:** Shaw E & I (I700)
**PROJECT NAME:** Kirtland AFB 2011
**SDG #:** Kirtland_014
**MATRIX:** Water

**QC LEVEL:** Level IV
**Report Due:** 6/14/2011
**Client Sample Count:** 13

| Sample Type | Sampled | Received | Lab ID | Client ID | E300.0 | SM2320B | SM4500NH3BG | SM4500S2CF | SW6010B | SW8011 | SW8015B DRO | SW8015B GRO | SW8260B | SW8270C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Client Sample | 5/23/2011 | 5/24/2011 | 1105208-01 | GW0102 | X | X | X | X | X | X | X | X | X | X |
| Client Sample | 5/23/2011 | 5/24/2011 | 1105208-02 | GW0102 | | | | | X | | | | | |
| Client Sample | 5/23/2011 | 5/24/2011 | 1105208-03 | GW8012-RB | | | | | X | | X | X | X | X |
| Client Sample | 5/23/2011 | 5/24/2011 | 1105208-04 | GW8012-RB | | | | | X | | | | | |
| Client Sample | 5/23/2011 | 5/24/2011 | 1105208-05 | GW8048-TB | | | | | | | | | X | |
| Client Sample | 5/24/2011 | 5/25/2011 | 1105217-01 | GW0064 | X | X | X | X | X | X | X | X | X | X |
| Client Sample | 5/24/2011 | 5/25/2011 | 1105217-02 | GW0064 | | | | | X | | | | | |
| Trip Blank | 5/24/2011 | 5/25/2011 | 1105217-03 | GW8049-TB | | | | | | | | | X | |
| Client Sample | 5/25/2011 | 5/26/2011 | 1105225-01 | GW0065 | X | X | X | X | X | X | X | X | X | X |
| Client Sample | 5/25/2011 | 5/26/2011 | 1105225-02 | GW0065 | | | | | X | | | | | |
| Client Sample | 5/25/2011 | 5/26/2011 | 1105225-03 | GW0066 | X | X | X | X | X | X | X | X | X | X |
| Client Sample | 5/25/2011 | 5/26/2011 | 1105225-04 | GW0066 | | | | | X | | | | | |
| Client Sample | 5/25/2011 | 5/26/2011 | 1105225-05 | GW8013-AB | | | | | | | | | X | |
| Client Sample | 5/25/2011 | 5/26/2011 | 1105225-06 | GW8050-TB | | | | | | | | | X | |

# Data for SW8260B Forms

# ANALYSIS DATA SHEET

**GW0102**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-01 | File ID: | 0520801.D |
| Sampled: | 05/23/11 14:43 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 16:47 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | | 2.50 | 5.00 | 10.0 | U |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Q, Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW0102**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-01 | File ID: | 0520801.D |
| Sampled: | 05/23/11 14:43 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 16:47 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | | 0.250 | 0.500 | 1.00 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | 0.724 | 0.250 | 0.500 | 1.00 | J |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 29.49 | 98.3 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 30.30 | 101 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.38 | 101 | 70 - 120 | |
| Toluene-d8 | 30.00 | 33.12 | 110 | 85 - 120 | |

# ANALYSIS DATA SHEET

**GW8012-RB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-03 | File ID: | 0520803.D |
| Sampled: | 05/23/11 08:47 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 13:43 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | | 2.50 | 5.00 | 10.0 | U |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | 0.771 | 0.250 | 0.500 | 1.00 | J |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Q, Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | 2.22 | 0.250 | 0.500 | 1.00 | |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | 0.603 | 0.250 | 0.500 | 1.00 | J |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW8012-RB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-03 | File ID: | 0520803.D |
| Sampled: | 05/23/11 08:47 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 13:43 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | | 0.250 | 0.500 | 1.00 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 28.49 | 95.0 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 29.25 | 97.5 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.99 | 103 | 70 - 120 | |
| Toluene-d8 | 30.00 | 31.36 | 105 | 85 - 120 | |

# ANALYSIS DATA SHEET

**GW8048-TB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-05 | File ID: | 0520805.D |
| Sampled: | 05/23/11 08:00 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 13:17 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 2.65 | 2.50 | 5.00 | 10.0 | J |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Q, Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW8048-TB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-05 | File ID: | 0520805.D |
| Sampled: | 05/23/11 08:00 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 13:17 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | 6.66 | 0.500 | 1.00 | 2.00 | |
| 91-20-3 | Naphthalene | 0.259 | 0.250 | 0.500 | 1.00 | J, B |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 30.17 | 101 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 29.53 | 98.4 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.20 | 101 | 70 - 120 | |
| Toluene-d8 | 30.00 | 31.95 | 107 | 85 - 120 | |

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01 | File ID: | 0521701.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 18:06 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 2.77 | 2.50 | 5.00 | 10.0 | J |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Y, Q, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | 1.01 | 0.250 | 0.500 | 1.00 | |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01 | File ID: | 0521701.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 18:06 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | 2.03 | 0.250 | 0.500 | 1.00 | |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | 0.816 | 0.250 | 0.500 | 1.00 | J, B |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 29.77 | 99.2 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 29.68 | 98.9 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.88 | 103 | 70 - 120 | |
| Toluene-d8 | 30.00 | 32.60 | 109 | 85 - 120 | |

# ANALYSIS DATA SHEET

**GW8049-TB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-03 | File ID: | 0521703.D |
| Sampled: | 05/24/11 10:30 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 15:01 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 3.38 | 2.50 | 5.00 | 10.0 | J |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Y, Q, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW8049-TB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-03 | File ID: | 0521703.D |
| Sampled: | 05/24/11 10:30 | Prepared: | 05/28/11 00:00 | Analyzed: | 05/28/11 15:01 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | 6.64 | 0.500 | 1.00 | 2.00 | |
| 91-20-3 | Naphthalene | | 0.250 | 0.500 | 1.00 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 29.22 | 97.4 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 29.67 | 98.9 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.86 | 103 | 70 - 120 | |
| Toluene-d8 | 30.00 | 32.40 | 108 | 85 - 120 | |

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01 | File ID: | 0522501.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 06/05/11 00:00 | Analyzed: | 06/05/11 21:57 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | | 2.50 | 5.00 | 10.0 | U |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01 | File ID: | 0522501.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 06/05/11 00:00 | Analyzed: | 06/05/11 21:57 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | | 0.250 | 0.500 | 1.00 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | Y, U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 31.40 | 105 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 30.47 | 102 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.08 | 100 | 70 - 120 | |
| Toluene-d8 | 30.00 | 31.23 | 104 | 85 - 120 | |

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03 | File ID: | 0522503.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 06/05/11 00:00 | Analyzed: | 06/05/11 22:23 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | | 2.50 | 5.00 | 10.0 | U |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03 | File ID: | 0522503.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 06/05/11 00:00 | Analyzed: | 06/05/11 22:23 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | | 0.250 | 0.500 | 1.00 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | Y, U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 30.92 | 103 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 29.99 | 100 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 29.34 | 97.8 | 70 - 120 | |
| Toluene-d8 | 30.00 | 30.37 | 101 | 85 - 120 | |

# ANALYSIS DATA SHEET

**GW8013-AB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-05 | File ID: | 0522505.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 06/05/11 00:00 | Analyzed: | 06/05/11 22:49 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | | 2.50 | 5.00 | 10.0 | U |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW8013-AB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-05 | File ID: | 0522505.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 06/05/11 00:00 | Analyzed: | 06/05/11 22:49 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | | 0.250 | 0.500 | 1.00 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | Y, U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 31.34 | 104 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 31.28 | 104 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.36 | 101 | 70 - 120 | |
| Toluene-d8 | 30.00 | 31.04 | 103 | 85 - 120 | |

# ANALYSIS DATA SHEET

**GW8050-TB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-06 | File ID: | 0522506.D |
| Sampled: | 05/25/11 08:00 | Prepared: | 06/05/11 00:00 | Analyzed: | 06/05/11 19:22 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | | 2.50 | 5.00 | 10.0 | U |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**GW8050-TB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-06 | File ID: | 0522506.D |
| Sampled: | 05/25/11 08:00 | Prepared: | 06/05/11 00:00 | Analyzed: | 06/05/11 19:22 |
| Solids: | | Preparation: | 5030B | Dilution: | 1 |

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | | 0.250 | 0.500 | 1.00 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | Y, U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 32.12 | 107 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 30.26 | 101 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.23 | 101 | 70 - 120 | |
| Toluene-d8 | 30.00 | 31.49 | 105 | 85 - 120 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15001 | Instrument: | MS-VOA5 |
| | | Calibration: | 1110001 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E15001-CCV1 ) ug/L** | | | | Lab File ID: 0528CC1.D | | Analyzed: 05/28/11 10:35 | | |
| Bromofluorobenzene | 30.00 | 98.9 | 80 - 120 | 12.247 | 12.247 | 0.0000 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 97.8 | 80 - 120 | 6.879 | 6.879 | 0.0000 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 103 | 80 - 120 | 7.381 | 7.381 | 0.0000 | +/-1.000 | |
| Toluene-d8 | 30.00 | 104 | 80 - 120 | 9.617 | 9.617 | 0.0000 | +/-1.000 | |
| **LCS (1E28001-BS1 ) ug/L** | | | | Lab File ID: 0528LS1.D | | Analyzed: 05/28/11 11:10 | | |
| Bromofluorobenzene | 30.00 | 97.4 | 75 - 120 | 12.251 | 12.247 | 0.0040 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 102 | 85 - 115 | 6.882 | 6.879 | 0.0030 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 98.9 | 70 - 120 | 7.385 | 7.381 | 0.0040 | +/-1.000 | |
| Toluene-d8 | 30.00 | 104 | 85 - 120 | 9.611 | 9.617 | -0.0060 | +/-1.000 | |
| **Blank (1E28001-BLK1 ) ug/L** | | | | Lab File ID: 0528BL1.D | | Analyzed: 05/28/11 12:26 | | |
| Bromofluorobenzene | 30.00 | 98.2 | 75 - 120 | 12.241 | 12.247 | -0.0060 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 98.8 | 85 - 115 | 6.872 | 6.879 | -0.0070 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 93.5 | 70 - 120 | 7.375 | 7.381 | -0.0060 | +/-1.000 | |
| Toluene-d8 | 30.00 | 106 | 85 - 120 | 9.611 | 9.617 | -0.0060 | +/-1.000 | |
| **GW8048-TB (1105208-05 ) ug/L** | | | | Lab File ID: 0520805.D | | Analyzed: 05/28/11 13:17 | | |
| Bromofluorobenzene | 30.00 | 101 | 75 - 120 | 12.234 | 12.247 | -0.0130 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 98.4 | 85 - 115 | 6.875 | 6.879 | -0.0040 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 101 | 70 - 120 | 7.377 | 7.381 | -0.0040 | +/-1.000 | |
| Toluene-d8 | 30.00 | 107 | 85 - 120 | 9.604 | 9.617 | -0.0130 | +/-1.000 | |
| **GW8012-RB (1105208-03 ) ug/L** | | | | Lab File ID: 0520803.D | | Analyzed: 05/28/11 13:43 | | |
| Bromofluorobenzene | 30.00 | 95.0 | 75 - 120 | 12.237 | 12.247 | -0.0100 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 97.5 | 85 - 115 | 6.878 | 6.879 | -0.0010 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 103 | 70 - 120 | 7.371 | 7.381 | -0.0100 | +/-1.000 | |
| Toluene-d8 | 30.00 | 105 | 85 - 120 | 9.607 | 9.617 | -0.0100 | +/-1.000 | |
| **GW8049-TB (1105217-03 ) ug/L** | | | | Lab File ID: 0521703.D | | Analyzed: 05/28/11 15:01 | | |
| Bromofluorobenzene | 30.00 | 97.4 | 75 - 120 | 12.237 | 12.247 | -0.0100 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 98.9 | 85 - 115 | 6.878 | 6.879 | -0.0010 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 103 | 70 - 120 | 7.371 | 7.381 | -0.0100 | +/-1.000 | |
| Toluene-d8 | 30.00 | 108 | 85 - 120 | 9.607 | 9.617 | -0.0100 | +/-1.000 | |
| **GW0102 (1105208-01 ) ug/L** | | | | Lab File ID: 0520801.D | | Analyzed: 05/28/11 16:47 | | |
| Bromofluorobenzene | 30.00 | 98.3 | 75 - 120 | 12.231 | 12.247 | -0.0160 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 101 | 85 - 115 | 6.872 | 6.879 | -0.0070 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 101 | 70 - 120 | 7.375 | 7.381 | -0.0060 | +/-1.000 | |
| Toluene-d8 | 30.00 | 110 | 85 - 120 | 9.601 | 9.617 | -0.0160 | +/-1.000 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15001 | Instrument: | MS-VOA5 |
| | | Calibration: | 1110001 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **GW0064 (1105217-01 ) ug/L** | | | | Lab File ID: 0521701.D | | Analyzed: 05/28/11 18:06 | | |
| Bromofluorobenzene | 30.00 | 99.2 | 75 - 120 | 12.231 | 12.247 | -0.0160 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 98.9 | 85 - 115 | 6.872 | 6.879 | -0.0070 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 103 | 70 - 120 | 7.375 | 7.381 | -0.0060 | +/-1.000 | |
| Toluene-d8 | 30.00 | 109 | 85 - 120 | 9.601 | 9.617 | -0.0160 | +/-1.000 | |
| **LCS Dup (1E28001-BSD1 ) ug/L** | | | | Lab File ID: 0528LSD1.D | | Analyzed: 05/28/11 22:25 | | |
| Bromofluorobenzene | 30.00 | 101 | 75 - 120 | 12.233 | 12.247 | -0.0140 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 102 | 85 - 115 | 6.875 | 6.879 | -0.0040 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 98.9 | 70 - 120 | 7.377 | 7.381 | -0.0040 | +/-1.000 | |
| Toluene-d8 | 30.00 | 102 | 85 - 120 | 9.603 | 9.617 | -0.0140 | +/-1.000 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15708 | Instrument: | MS-VOA4 |
| | | Calibration: | 1154004 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F15708-CCV1 ) ug/L** | | | | Lab File ID: 0605CCVE.D | | Analyzed: 06/05/11 17:14 | | |
| Bromofluorobenzene | 30.00 | 115 | 80 - 120 | 12.31 | 12.31 | 0.0000 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 101 | 80 - 120 | 6.983 | 6.983 | 0.0000 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 98.3 | 80 - 120 | 7.476 | 7.476 | 0.0000 | +/-1.000 | |
| Toluene-d8 | 30.00 | 114 | 80 - 120 | 9.686 | 9.686 | 0.0000 | +/-1.000 | |
| **LCS (1F05004-BS1 ) ug/L** | | | | Lab File ID: 0605LCSE.D | | Analyzed: 06/05/11 17:40 | | |
| Bromofluorobenzene | 30.00 | 109 | 75 - 120 | 12.31 | 12.31 | 0.0000 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 102 | 85 - 115 | 6.983 | 6.983 | 0.0000 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 101 | 70 - 120 | 7.476 | 7.476 | 0.0000 | +/-1.000 | |
| Toluene-d8 | 30.00 | 109 | 85 - 120 | 9.686 | 9.686 | 0.0000 | +/-1.000 | |
| **Blank (1F05004-BLK1 ) ug/L** | | | | Lab File ID: 0605BLKE.D | | Analyzed: 06/05/11 18:56 | | |
| Bromofluorobenzene | 30.00 | 104 | 75 - 120 | 12.309 | 12.31 | -0.0010 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 102 | 85 - 115 | 6.982 | 6.983 | -0.0010 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 99.8 | 70 - 120 | 7.475 | 7.476 | -0.0010 | +/-1.000 | |
| Toluene-d8 | 30.00 | 102 | 85 - 120 | 9.695 | 9.686 | 0.0090 | +/-1.000 | |
| **GW8050-TB (1105225-06 ) ug/L** | | | | Lab File ID: 0522506.D | | Analyzed: 06/05/11 19:22 | | |
| Bromofluorobenzene | 30.00 | 107 | 75 - 120 | 12.309 | 12.31 | -0.0010 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 101 | 85 - 115 | 6.982 | 6.983 | -0.0010 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 101 | 70 - 120 | 7.476 | 7.476 | 0.0000 | +/-1.000 | |
| Toluene-d8 | 30.00 | 105 | 85 - 120 | 9.695 | 9.686 | 0.0090 | +/-1.000 | |
| **GW0065 (1105225-01 ) ug/L** | | | | Lab File ID: 0522501.D | | Analyzed: 06/05/11 21:57 | | |
| Bromofluorobenzene | 30.00 | 105 | 75 - 120 | 12.312 | 12.31 | 0.0020 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 102 | 85 - 115 | 6.986 | 6.983 | 0.0030 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 100 | 70 - 120 | 7.479 | 7.476 | 0.0030 | +/-1.000 | |
| Toluene-d8 | 30.00 | 104 | 85 - 120 | 9.688 | 9.686 | 0.0020 | +/-1.000 | |
| **GW0066 (1105225-03 ) ug/L** | | | | Lab File ID: 0522503.D | | Analyzed: 06/05/11 22:23 | | |
| Bromofluorobenzene | 30.00 | 103 | 75 - 120 | 12.309 | 12.31 | -0.0010 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 100 | 85 - 115 | 6.982 | 6.983 | -0.0010 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 97.8 | 70 - 120 | 7.475 | 7.476 | -0.0010 | +/-1.000 | |
| Toluene-d8 | 30.00 | 101 | 85 - 120 | 9.695 | 9.686 | 0.0090 | +/-1.000 | |
| **GW8013-AB (1105225-05 ) ug/L** | | | | Lab File ID: 0522505.D | | Analyzed: 06/05/11 22:49 | | |
| Bromofluorobenzene | 30.00 | 104 | 75 - 120 | 12.314 | 12.31 | 0.0040 | +/-1.000 | |
| Dibromofluoromethane | 30.00 | 104 | 85 - 115 | 6.987 | 6.983 | 0.0040 | +/-1.000 | |
| 1,2-Dichloroethane-d4 | 30.00 | 101 | 70 - 120 | 7.48 | 7.476 | 0.0040 | +/-1.000 | |
| Toluene-d8 | 30.00 | 103 | 85 - 120 | 9.69 | 9.686 | 0.0040 | +/-1.000 | |

# LCS / LCS DUPLICATE RECOVERY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E28001 | Laboratory ID: | 1E28001-BS1 |
| Preparation: | 5030B | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Acetone | 100.0 | 111 | 111 | 40 - 140 |
| Benzene | 50.00 | 52.5 | 105 | 80 - 120 |
| Bromobenzene | 50.00 | 51.4 | 103 | 75 - 125 |
| Bromochloromethane | 50.00 | 47.3 | 94.6 | 65 - 130 |
| Bromodichloromethane | 50.00 | 46.5 | 93.0 | 75 - 120 |
| Bromoform | 50.00 | 44.5 | 89.0 | 70 - 130 |
| **Bromomethane** | **50.00** | **14.7** | **29.4** | **30 - 145** |
| n-Butylbenzene | 50.00 | 51.3 | 103 | 70 - 135 |
| 2-Butanone | 100.0 | 111 | 111 | 30 - 150 |
| sec-Butylbenzene | 50.00 | 51.1 | 102 | 70 - 125 |
| tert-Butylbenzene | 50.00 | 50.5 | 101 | 70 - 130 |
| Carbon disulfide | 50.00 | 58.7 | 117 | 35 - 160 |
| Carbon tetrachloride | 50.00 | 44.2 | 88.3 | 65 - 140 |
| Chlorobenzene | 50.00 | 52.1 | 104 | 80 - 120 |
| Chloroethane | 50.00 | 46.0 | 92.0 | 60 - 135 |
| Chloroform | 50.00 | 45.5 | 91.0 | 65 - 135 |
| Chloromethane | 50.00 | 46.5 | 92.9 | 40 - 125 |
| 2-Chlorotoluene | 50.00 | 50.5 | 101 | 75 - 125 |
| 4-Chlorotoluene | 50.00 | 50.8 | 102 | 75 - 130 |
| Dibromochloromethane | 50.00 | 47.6 | 95.1 | 60 - 135 |
| 1,2-Dibromo-3-chloropropane | 50.00 | 51.0 | 102 | 50 - 130 |
| 1,2-Dibromoethane (EDB) | 50.00 | 50.2 | 100 | 80 - 120 |
| Dibromomethane | 50.00 | 49.2 | 98.4 | 75 - 125 |
| 1,2-Dichlorobenzene | 50.00 | 50.4 | 101 | 70 - 120 |
| 1,3-Dichlorobenzene | 50.00 | 48.7 | 97.4 | 75 - 125 |
| 1,4-Dichlorobenzene | 50.00 | 46.4 | 92.8 | 75 - 125 |
| Dichlorodifluoromethane | 50.00 | 58.0 | 116 | 30 - 155 |
| 1,1-Dichloroethane | 50.00 | 51.3 | 103 | 70 - 135 |
| 1,2-Dichloroethane | 50.00 | 44.5 | 89.0 | 70 - 130 |
| 1,1-Dichloroethene | 50.00 | 51.7 | 103 | 70 - 130 |

# LCS / LCS DUPLICATE RECOVERY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E28001 | Laboratory ID: | 1E28001-BS1 |
| Preparation: | 5030B | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| cis-1,2-Dichloroethene | 50.00 | 50.0 | 99.9 | 70 - 125 |
| trans-1,2-Dichloroethene | 50.00 | 50.0 | 99.9 | 60 - 140 |
| 1,2-Dichloropropane | 50.00 | 50.4 | 101 | 75 - 125 |
| 1,3-Dichloropropane | 50.00 | 49.9 | 99.9 | 75 - 125 |
| 2,2-Dichloropropane | 50.00 | 43.0 | 85.9 | 70 - 135 |
| 1,1-Dichloropropene | 50.00 | 48.8 | 97.6 | 75 - 130 |
| cis-1,3-Dichloropropene | 50.00 | 45.4 | 90.7 | 70 - 130 |
| trans-1,3-Dichloropropene | 50.00 | 54.2 | 108 | 55 - 140 |
| Ethylbenzene | 50.00 | 51.9 | 104 | 75 - 125 |
| Hexachlorobutadiene | 50.00 | 48.5 | 97.0 | 50 - 140 |
| 2-Hexanone | 100.0 | 102 | 102 | 55 - 130 |
| Isopropylbenzene | 50.00 | 53.5 | 107 | 75 - 125 |
| p-Isopropyltoluene | 50.00 | 51.5 | 103 | 75 - 130 |
| Methylene chloride | 50.00 | 51.8 | 104 | 55 - 140 |
| Naphthalene | 50.00 | 58.1 | 116 | 55 - 140 |
| 4-Methyl-2-pentanone | 100.0 | 105 | 105 | 60 - 135 |
| Methyl t-Butyl Ether | 50.00 | 49.5 | 98.9 | 65 - 125 |
| n-Propylbenzene | 50.00 | 53.0 | 106 | 70 - 130 |
| Styrene | 50.00 | 51.7 | 103 | 65 - 135 |
| 1,1,2,2-Tetrachloroethane | 50.00 | 54.2 | 108 | 65 - 130 |
| 1,1,1,2-Tetrachloroethane | 50.00 | 47.5 | 95.0 | 80 - 130 |
| Tetrachloroethene | 50.00 | 51.9 | 104 | 45 - 150 |
| Toluene | 50.00 | 51.3 | 103 | 75 - 120 |
| 1,2,3-Trichlorobenzene | 50.00 | 49.9 | 99.7 | 55 - 140 |
| 1,2,4-Trichlorobenzene | 50.00 | 48.1 | 96.2 | 65 - 135 |
| 1,1,2-Trichloroethane | 50.00 | 50.5 | 101 | 75 - 125 |
| 1,1,1-Trichloroethane | 50.00 | 43.6 | 87.2 | 65 - 130 |
| Trichloroethene | 50.00 | 48.6 | 97.2 | 70 - 125 |
| Trichlorofluoromethane | 50.00 | 47.0 | 94.1 | 60 - 145 |
| 1,2,3-Trichloropropane | 50.00 | 46.0 | 91.9 | 75 - 125 |

# LCS / LCS DUPLICATE RECOVERY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E28001 | Laboratory ID: | 1E28001-BS1 |
| Preparation: | 5030B | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | 50.00 | 49.7 | 99.5 | 75 - 130 |
| 1,2,4-Trimethylbenzene | 50.00 | 50.8 | 102 | 75 - 130 |
| Vinyl chloride | 50.00 | 43.2 | 86.5 | 50 - 145 |
| m,p-Xylene | 100.0 | 100 | 100 | 75 - 130 |
| o-Xylene | 50.00 | 49.8 | 99.6 | 80 - 120 |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Acetone | 100.0 | 97.4 | 97.4 | 12.7 | 30 | 40 - 140 |
| Benzene | 50.00 | 52.1 | 104 | 0.912 | 30 | 80 - 120 |
| Bromobenzene | 50.00 | 50.1 | 100 | 2.48 | 30 | 75 - 125 |
| Bromochloromethane | 50.00 | 47.3 | 94.5 | 0.112 | 30 | 65 - 130 |
| Bromodichloromethane | 50.00 | 47.0 | 94.0 | 1.01 | 30 | 75 - 120 |
| Bromoform | 50.00 | 45.3 | 90.6 | 1.72 | 30 | 70 - 130 |
| **Bromomethane** | **50.00** | **6.87** | **13.7 *** | **72.5 *** | **30** | **30 - 145** |
| n-Butylbenzene | 50.00 | 47.6 | 95.3 | 7.35 | 30 | 70 - 135 |
| 2-Butanone | 100.0 | 113 | 113 | 2.64 | 30 | 30 - 150 |
| sec-Butylbenzene | 50.00 | 48.3 | 96.7 | 5.58 | 30 | 70 - 125 |
| tert-Butylbenzene | 50.00 | 50.4 | 101 | 0.180 | 30 | 70 - 130 |
| Carbon disulfide | 50.00 | 55.3 | 111 | 6.08 | 30 | 35 - 160 |
| Carbon tetrachloride | 50.00 | 47.2 | 94.5 | 6.72 | 30 | 65 - 140 |
| Chlorobenzene | 50.00 | 49.4 | 98.9 | 5.30 | 30 | 80 - 120 |
| Chloroethane | 50.00 | 41.6 | 83.1 | 10.1 | 30 | 60 - 135 |
| Chloroform | 50.00 | 47.7 | 95.5 | 4.78 | 30 | 65 - 135 |
| Chloromethane | 50.00 | 40.1 | 80.2 | 14.7 | 30 | 40 - 125 |
| 2-Chlorotoluene | 50.00 | 50.9 | 102 | 0.694 | 30 | 75 - 125 |
| 4-Chlorotoluene | 50.00 | 50.4 | 101 | 0.783 | 30 | 75 - 130 |
| Dibromochloromethane | 50.00 | 45.5 | 91.0 | 4.39 | 30 | 60 - 135 |
| 1,2-Dibromo-3-chloropropane | 50.00 | 51.5 | 103 | 0.919 | 30 | 50 - 130 |
| 1,2-Dibromoethane (EDB) | 50.00 | 48.9 | 97.8 | 2.73 | 30 | 80 - 120 |

# LCS / LCS DUPLICATE RECOVERY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E28001 | Laboratory ID: | 1E28001-BSD1 |
| Preparation: | 5030B | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Dibromomethane | 50.00 | 51.1 | 102 | 3.90 | 30 | 75 - 125 |
| 1,2-Dichlorobenzene | 50.00 | 49.2 | 98.4 | 2.44 | 30 | 70 - 120 |
| 1,3-Dichlorobenzene | 50.00 | 47.4 | 94.9 | 2.63 | 30 | 75 - 125 |
| 1,4-Dichlorobenzene | 50.00 | 44.8 | 89.6 | 3.43 | 30 | 75 - 125 |
| Dichlorodifluoromethane | 50.00 | 55.0 | 110 | 5.31 | 30 | 30 - 155 |
| 1,1-Dichloroethane | 50.00 | 51.3 | 103 | 0.00895 | 30 | 70 - 135 |
| 1,2-Dichloroethane | 50.00 | 47.3 | 94.7 | 6.13 | 30 | 70 - 130 |
| 1,1-Dichloroethene | 50.00 | 49.1 | 98.1 | 5.30 | 30 | 70 - 130 |
| cis-1,2-Dichloroethene | 50.00 | 48.3 | 96.6 | 3.42 | 30 | 70 - 125 |
| trans-1,2-Dichloroethene | 50.00 | 49.1 | 98.1 | 1.84 | 30 | 60 - 140 |
| 1,2-Dichloropropane | 50.00 | 50.4 | 101 | 0.0123 | 30 | 75 - 125 |
| 1,3-Dichloropropane | 50.00 | 49.4 | 98.8 | 1.05 | 30 | 75 - 125 |
| 2,2-Dichloropropane | 50.00 | 36.0 | 72.0 | 17.6 | 30 | 70 - 135 |
| 1,1-Dichloropropene | 50.00 | 48.9 | 97.7 | 0.156 | 30 | 75 - 130 |
| cis-1,3-Dichloropropene | 50.00 | 44.8 | 89.6 | 1.24 | 30 | 70 - 130 |
| trans-1,3-Dichloropropene | 50.00 | 51.3 | 103 | 5.48 | 30 | 55 - 140 |
| Ethylbenzene | 50.00 | 50.4 | 101 | 2.89 | 30 | 75 - 125 |
| Hexachlorobutadiene | 50.00 | 41.6 | 83.2 | 15.4 | 30 | 50 - 140 |
| 2-Hexanone | 100.0 | 101 | 101 | 1.21 | 30 | 55 - 130 |
| Isopropylbenzene | 50.00 | 51.8 | 104 | 3.24 | 30 | 75 - 125 |
| p-Isopropyltoluene | 50.00 | 49.4 | 98.8 | 4.07 | 30 | 75 - 130 |
| Methylene chloride | 50.00 | 50.0 | 99.9 | 3.52 | 30 | 55 - 140 |
| Naphthalene | 50.00 | 58.8 | 118 | 1.27 | 30 | 55 - 140 |
| 4-Methyl-2-pentanone | 100.0 | 110 | 110 | 4.80 | 30 | 60 - 135 |
| Methyl t-Butyl Ether | 50.00 | 50.9 | 102 | 2.92 | 30 | 65 - 125 |
| n-Propylbenzene | 50.00 | 51.2 | 102 | 3.33 | 30 | 70 - 130 |
| Styrene | 50.00 | 50.0 | 99.9 | 3.38 | 30 | 65 - 135 |
| 1,1,2,2-Tetrachloroethane | 50.00 | 53.7 | 107 | 0.898 | 30 | 65 - 130 |
| 1,1,1,2-Tetrachloroethane | 50.00 | 48.6 | 97.1 | 2.22 | 30 | 80 - 130 |
| Tetrachloroethene | 50.00 | 48.6 | 97.3 | 6.51 | 30 | 45 - 150 |

# LCS / LCS DUPLICATE RECOVERY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E28001 | Laboratory ID: | 1E28001-BSD1 |
| Preparation: | 5030B | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Toluene | 50.00 | 49.5 | 98.9 | 3.68 | 30 | 75 - 120 |
| 1,2,3-Trichlorobenzene | 50.00 | 46.8 | 93.7 | 6.24 | 30 | 55 - 140 |
| 1,2,4-Trichlorobenzene | 50.00 | 44.1 | 88.2 | 8.71 | 30 | 65 - 135 |
| 1,1,2-Trichloroethane | 50.00 | 47.9 | 95.9 | 5.31 | 30 | 75 - 125 |
| 1,1,1-Trichloroethane | 50.00 | 46.4 | 92.8 | 6.23 | 30 | 65 - 130 |
| Trichloroethene | 50.00 | 50.9 | 102 | 4.50 | 30 | 70 - 125 |
| Trichlorofluoromethane | 50.00 | 46.3 | 92.5 | 1.63 | 30 | 60 - 145 |
| 1,2,3-Trichloropropane | 50.00 | 47.8 | 95.6 | 3.99 | 30 | 75 - 125 |
| 1,3,5-Trimethylbenzene | 50.00 | 50.2 | 100 | 0.941 | 30 | 75 - 130 |
| 1,2,4-Trimethylbenzene | 50.00 | 49.7 | 99.3 | 2.30 | 30 | 75 - 130 |
| Vinyl chloride | 50.00 | 32.8 | 65.5 | 27.6 | 30 | 50 - 145 |
| m,p-Xylene | 100.0 | 97.9 | 97.9 | 2.33 | 30 | 75 - 130 |
| o-Xylene | 50.00 | 47.4 | 94.8 | 4.89 | 30 | 80 - 120 |

# LCS / LCS DUPLICATE RECOVERY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F05004 | Laboratory ID: | 1F05004-BS1 |
| Preparation: | 5030B | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Acetone | 100.0 | 96.2 | 96.2 | 40 - 140 |
| Benzene | 50.00 | 49.1 | 98.1 | 80 - 120 |
| Bromobenzene | 50.00 | 48.9 | 97.9 | 75 - 125 |
| Bromochloromethane | 50.00 | 48.9 | 97.8 | 65 - 130 |
| Bromodichloromethane | 50.00 | 51.7 | 103 | 75 - 120 |
| Bromoform | 50.00 | 45.4 | 90.8 | 70 - 130 |
| Bromomethane | 50.00 | 30.1 | 60.1 | 30 - 145 |
| n-Butylbenzene | 50.00 | 47.0 | 94.0 | 70 - 135 |
| 2-Butanone | 100.0 | 100 | 100 | 30 - 150 |
| sec-Butylbenzene | 50.00 | 47.0 | 93.9 | 70 - 125 |
| tert-Butylbenzene | 50.00 | 47.4 | 94.9 | 70 - 130 |
| Carbon disulfide | 50.00 | 47.4 | 94.8 | 35 - 160 |
| Carbon tetrachloride | 50.00 | 45.7 | 91.3 | 65 - 140 |
| Chlorobenzene | 50.00 | 47.5 | 95.1 | 80 - 120 |
| Chloroethane | 50.00 | 53.7 | 107 | 60 - 135 |
| Chloroform | 50.00 | 48.4 | 96.8 | 65 - 135 |
| Chloromethane | 50.00 | 40.9 | 81.7 | 40 - 125 |
| 2-Chlorotoluene | 50.00 | 47.0 | 94.0 | 75 - 125 |
| 4-Chlorotoluene | 50.00 | 48.1 | 96.3 | 75 - 130 |
| Dibromochloromethane | 50.00 | 47.2 | 94.3 | 60 - 135 |
| 1,2-Dibromo-3-chloropropane | 50.00 | 45.6 | 91.2 | 50 - 130 |
| 1,2-Dibromoethane (EDB) | 50.00 | 48.2 | 96.5 | 80 - 120 |
| Dibromomethane | 50.00 | 48.9 | 97.7 | 75 - 125 |
| 1,2-Dichlorobenzene | 50.00 | 48.2 | 96.5 | 70 - 120 |
| 1,3-Dichlorobenzene | 50.00 | 48.0 | 96.1 | 75 - 125 |
| 1,4-Dichlorobenzene | 50.00 | 47.0 | 94.0 | 75 - 125 |
| Dichlorodifluoromethane | 50.00 | 54.9 | 110 | 30 - 155 |
| 1,1-Dichloroethane | 50.00 | 50.6 | 101 | 70 - 135 |
| 1,2-Dichloroethane | 50.00 | 50.3 | 101 | 70 - 130 |
| 1,1-Dichloroethene | 50.00 | 49.6 | 99.2 | 70 - 130 |

# LCS / LCS DUPLICATE RECOVERY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F05004 | Laboratory ID: | 1F05004-BS1 |
| Preparation: | 5030B | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| cis-1,2-Dichloroethene | 50.00 | 47.1 | 94.1 | 70 - 125 |
| trans-1,2-Dichloroethene | 50.00 | 53.4 | 107 | 60 - 140 |
| 1,2-Dichloropropane | 50.00 | 50.4 | 101 | 75 - 125 |
| 1,3-Dichloropropane | 50.00 | 50.1 | 100 | 75 - 125 |
| 2,2-Dichloropropane | 50.00 | 40.7 | 81.5 | 70 - 135 |
| 1,1-Dichloropropene | 50.00 | 48.5 | 97.0 | 75 - 130 |
| cis-1,3-Dichloropropene | 50.00 | 47.1 | 94.1 | 70 - 130 |
| trans-1,3-Dichloropropene | 50.00 | 52.7 | 105 | 55 - 140 |
| Ethylbenzene | 50.00 | 47.8 | 95.6 | 75 - 125 |
| Hexachlorobutadiene | 50.00 | 54.5 | 109 | 50 - 140 |
| 2-Hexanone | 100.0 | 106 | 106 | 55 - 130 |
| Isopropylbenzene | 50.00 | 49.4 | 98.7 | 75 - 125 |
| p-Isopropyltoluene | 50.00 | 50.1 | 100 | 75 - 130 |
| Methylene chloride | 50.00 | 49.4 | 98.8 | 55 - 140 |
| Naphthalene | 50.00 | 47.1 | 94.3 | 55 - 140 |
| 4-Methyl-2-pentanone | 100.0 | 102 | 102 | 60 - 135 |
| Methyl t-Butyl Ether | 50.00 | 47.8 | 95.7 | 65 - 125 |
| n-Propylbenzene | 50.00 | 48.1 | 96.2 | 70 - 130 |
| Styrene | 50.00 | 49.2 | 98.4 | 65 - 135 |
| 1,1,2,2-Tetrachloroethane | 50.00 | 45.9 | 91.7 | 65 - 130 |
| 1,1,1,2-Tetrachloroethane | 50.00 | 46.8 | 93.6 | 80 - 130 |
| Tetrachloroethene | 50.00 | 45.3 | 90.7 | 45 - 150 |
| Toluene | 50.00 | 48.1 | 96.2 | 75 - 120 |
| 1,2,3-Trichlorobenzene | 50.00 | 49.2 | 98.4 | 55 - 140 |
| 1,2,4-Trichlorobenzene | 50.00 | 49.0 | 98.1 | 65 - 135 |
| 1,1,2-Trichloroethane | 50.00 | 48.5 | 97.0 | 75 - 125 |
| 1,1,1-Trichloroethane | 50.00 | 46.1 | 92.1 | 65 - 130 |
| Trichloroethene | 50.00 | 47.7 | 95.5 | 70 - 125 |
| Trichlorofluoromethane | 50.00 | 47.7 | 95.4 | 60 - 145 |
| 1,2,3-Trichloropropane | 50.00 | 45.0 | 90.0 | 75 - 125 |

# LCS / LCS DUPLICATE RECOVERY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F05004 | Laboratory ID: | 1F05004-BS1 |
| Preparation: | 5030B | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| 1,3,5-Trimethylbenzene | 50.00 | 47.1 | 94.2 | 75 - 130 |
| 1,2,4-Trimethylbenzene | 50.00 | 48.2 | 96.5 | 75 - 130 |
| Vinyl chloride | 50.00 | 40.7 | 81.3 | 50 - 145 |
| m,p-Xylene | 100.0 | 95.4 | 95.4 | 75 - 130 |
| o-Xylene | 50.00 | 48.0 | 96.1 | 80 - 120 |

# PREPARATION BATCH SUMMARY

## SW8260B

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E28001 Batch Matrix: Water Preparation: 5030B

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 05/28/11 00:00 | 5.00 | 5.00 |
| GW8012-RB | 1105208-03 | 05/28/11 00:00 | 5.00 | 5.00 |
| GW8048-TB | 1105208-05 | 05/28/11 00:00 | 5.00 | 5.00 |
| GW0064 | 1105217-01 | 05/28/11 00:00 | 5.00 | 5.00 |
| GW8049-TB | 1105217-03 | 05/28/11 00:00 | 5.00 | 5.00 |
| Blank | 1E28001-BLK1 | 05/28/11 00:00 | 5.00 | 5.00 |
| LCS | 1E28001-BS1 | 05/28/11 00:00 | 5.00 | 5.00 |
| LCS Dup | 1E28001-BSD1 | 05/28/11 00:00 | 5.00 | 5.00 |

# PREPARATION BATCH SUMMARY

## SW8260B

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F05004 Batch Matrix: Water Preparation: 5030B

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0065 | 1105225-01 | 06/05/11 00:00 | 5.00 | 5.00 |
| GW0066 | 1105225-03 | 06/05/11 00:00 | 5.00 | 5.00 |
| GW8013-AB | 1105225-05 | 06/05/11 00:00 | 5.00 | 5.00 |
| GW8050-TB | 1105225-06 | 06/05/11 00:00 | 5.00 | 5.00 |
| Blank | 1F05004-BLK1 | 06/05/11 00:00 | 5.00 | 5.00 |
| LCS | 1F05004-BS1 | 06/05/11 00:00 | 5.00 | 5.00 |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | 0415TU1.D | Injection Date: | 04/15/11 |
| Instrument ID: | MS-VOA5 | Injection Time: | 08:29 |
| Sequence: | 1D10810 | Lab Sample ID: | 1D10810-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15 - 40% of 95 | 18.4 | PASS |
| 75 | 30 - 60% of 95 | 38.6 | PASS |
| 95 | Base peak, 100% relative abundance | 100 | PASS |
| 96 | 5 - 9% of 95 | 6.52 | PASS |
| 173 | Less than 2% of 174 | 0 | PASS |
| 174 | 50 - 200% of 95 | 101 | PASS |
| 175 | 5 - 9% of 174 | 7.11 | PASS |
| 176 | 95 - 101% of 174 | 95.6 | PASS |
| 177 | 5 - 9% of 176 | 5.75 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | 0528TU1.D | Injection Date: | 05/28/11 |
| Instrument ID: | MS-VOA5 | Injection Time: | 10:10 |
| Sequence: | 1E15001 | Lab Sample ID: | 1E15001-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15 - 40% of 95 | 24.8 | PASS |
| 75 | 30 - 60% of 95 | 41 | PASS |
| 95 | Base peak, 100% relative abundance | 100 | PASS |
| 96 | 5 - 9% of 95 | 6.31 | PASS |
| 173 | Less than 2% of 174 | 0 | PASS |
| 174 | 50 - 200% of 95 | 73.1 | PASS |
| 175 | 5 - 9% of 174 | 6.95 | PASS |
| 176 | 95 - 101% of 174 | 95.8 | PASS |
| 177 | 5 - 9% of 176 | 6.76 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | 0601TU1.D | Injection Date: | 06/01/11 |
| Instrument ID: | MS-VOA4 | Injection Time: | 09:04 |
| Sequence: | 1F15404 | Lab Sample ID: | 1F15404-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15 - 40% of 95 | 20.7 | PASS |
| 75 | 30 - 60% of 95 | 41.8 | PASS |
| 95 | Base peak, 100% relative abundance | 100 | PASS |
| 96 | 5 - 9% of 95 | 7.12 | PASS |
| 173 | Less than 2% of 174 | 0 | PASS |
| 174 | 50 - 200% of 95 | 106 | PASS |
| 175 | 5 - 9% of 174 | 7.41 | PASS |
| 176 | 95 - 101% of 174 | 97.5 | PASS |
| 177 | 5 - 9% of 176 | 6.85 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | 0601TU2.D | Injection Date: | 06/01/11 |
| Instrument ID: | MS-VOA4 | Injection Time: | 23:49 |
| Sequence: | 1F15404 | Lab Sample ID: | 1F15404-TUN2 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15 - 40% of 95 | 20.9 | PASS |
| 75 | 30 - 60% of 95 | 41.8 | PASS |
| 95 | Base peak, 100% relative abundance | 100 | PASS |
| 96 | 5 - 9% of 95 | 6.77 | PASS |
| 173 | Less than 2% of 174 | 0 | PASS |
| 174 | 50 - 200% of 95 | 116 | PASS |
| 175 | 5 - 9% of 174 | 7.33 | PASS |
| 176 | 95 - 101% of 174 | 97 | PASS |
| 177 | 5 - 9% of 176 | 6.74 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | 0601TU3.D | Injection Date: | 06/02/11 |
| Instrument ID: | MS-VOA4 | Injection Time: | 06:07 |
| Sequence: | 1F15404 | Lab Sample ID: | 1F15404-TUN3 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15 - 40% of 95 | 20.3 | PASS |
| 75 | 30 - 60% of 95 | 41.3 | PASS |
| 95 | Base peak, 100% relative abundance | 100 | PASS |
| 96 | 5 - 9% of 95 | 6.72 | PASS |
| 173 | Less than 2% of 174 | 0 | PASS |
| 174 | 50 - 200% of 95 | 122 | PASS |
| 175 | 5 - 9% of 174 | 6.95 | PASS |
| 176 | 95 - 101% of 174 | 96.7 | PASS |
| 177 | 5 - 9% of 176 | 6.61 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | 0605TU1E.D | Injection Date: | 06/05/11 |
| Instrument ID: | MS-VOA4 | Injection Time: | 16:48 |
| Sequence: | 1F15708 | Lab Sample ID: | 1F15708-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15 - 40% of 95 | 21.7 | PASS |
| 75 | 30 - 60% of 95 | 42.8 | PASS |
| 95 | Base peak, 100% relative abundance | 100 | PASS |
| 96 | 5 - 9% of 95 | 6.99 | PASS |
| 173 | Less than 2% of 174 | 0 | PASS |
| 174 | 50 - 200% of 95 | 109 | PASS |
| 175 | 5 - 9% of 174 | 7.14 | PASS |
| 176 | 95 - 101% of 174 | 95.7 | PASS |
| 177 | 5 - 9% of 176 | 6.7 | PASS |

# ANALYSIS SEQUENCE SUMMARY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1D10810 | Instrument: | MS-VOA5 |
| Calibration: | 1110001 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1D10810-TUN1 | 0415TU1.D | 04/15/11 08:29 |
| Cal Standard | 1D10810-CAL1 | 0415CAL1.D | 04/15/11 09:53 |
| Cal Standard | 1D10810-CAL2 | 0415CAL2.D | 04/15/11 10:18 |
| Cal Standard | 1D10810-CAL3 | 0415CAL3.D | 04/15/11 10:43 |
| Cal Standard | 1D10810-CAL4 | 0415CAL4.D | 04/15/11 11:07 |
| Cal Standard | 1D10810-CAL5 | 0415CAL5.D | 04/15/11 11:32 |
| Cal Standard | 1D10810-CAL6 | 0415CAL6.D | 04/15/11 11:57 |
| Cal Standard | 1D10810-CAL7 | 0415CAL7.D | 04/15/11 12:22 |
| Cal Standard | 1D10810-CAL8 | 0415CAL8.D | 04/15/11 12:47 |
| Cal Standard | 1D10810-CAL9 | 0415CAL9.D | 04/15/11 13:12 |
| Initial Cal Check | 1D10810-ICV2 | 0415ICV2.D | 04/15/11 14:01 |
| Cal Standard | 1D10810-CALA | 0415CALA.D | 04/15/11 14:26 |
| Cal Standard | 1D10810-CALB | 0415CALB.D | 04/15/11 14:51 |
| Cal Standard | 1D10810-CALC | 0415CALC.D | 04/15/11 15:16 |
| Cal Standard | 1D10810-CALD | 0415CALD.D | 04/15/11 15:41 |
| Cal Standard | 1D10810-CALE | 0415CALE.D | 04/15/11 16:05 |
| Cal Standard | 1D10810-CALF | 0415CALF.D | 04/15/11 16:30 |
| Cal Standard | 1D10810-CALG | 0415CALG.D | 04/15/11 16:55 |
| Cal Standard | 1D10810-CALH | 0415CALH.D | 04/15/11 17:20 |
| Cal Standard | 1D10810-CALI | 0415CALI.D | 04/15/11 17:45 |
| Initial Cal Check | 1D10810-ICV4 | 0415ICV4.D | 04/15/11 18:35 |

# ANALYSIS SEQUENCE SUMMARY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15001 | Instrument: | MS-VOA5 |
| Calibration: | 1110001 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1E15001-TUN1 | 0528TU1.D | 05/28/11 10:10 |
| Calibration Check | 1E15001-CCV1 | 0528CC1.D | 05/28/11 10:35 |
| LCS | 1E28001-BS1 | 0528LS1.D | 05/28/11 11:10 |
| Blank | 1E28001-BLK1 | 0528BL1.D | 05/28/11 12:26 |
| GW8048-TB | 1105208-05 | 0520805.D | 05/28/11 13:17 |
| GW8012-RB | 1105208-03 | 0520803.D | 05/28/11 13:43 |
| GW8049-TB | 1105217-03 | 0521703.D | 05/28/11 15:01 |
| GW0102 | 1105208-01 | 0520801.D | 05/28/11 16:47 |
| GW0064 | 1105217-01 | 0521701.D | 05/28/11 18:06 |
| LCS Dup | 1E28001-BSD1 | 0528LSD1.D | 05/28/11 22:25 |

# ANALYSIS SEQUENCE SUMMARY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15404 | Instrument: | MS-VOA4 |
| Calibration: | 1154004 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1F15404-TUN1 | 0601TU1.D | 06/01/11 09:04 |
| Cal Standard | 1F15404-CAL1 | 0601CAL1.D | 06/01/11 09:44 |
| Cal Standard | 1F15404-CAL2 | 0601CAL2.D | 06/01/11 10:15 |
| Cal Standard | 1F15404-CAL3 | 0601CAL3.D | 06/01/11 10:47 |
| Cal Standard | 1F15404-CAL4 | 0601CAL4.D | 06/01/11 11:22 |
| Cal Standard | 1F15404-CAL5 | 0601CAL5.D | 06/01/11 11:57 |
| Cal Standard | 1F15404-CAL6 | 0601CAL6.D | 06/01/11 12:33 |
| Cal Standard | 1F15404-CAL7 | 0601CAL7.D | 06/01/11 13:16 |
| Cal Standard | 1F15404-CAL8 | 0601CAL8.D | 06/01/11 14:07 |
| Cal Standard | 1F15404-CAL9 | 0601CAL9.D | 06/01/11 14:49 |
| Initial Cal Check | 1F15404-ICV2 | 0601ICV2.D | 06/01/11 16:25 |
| MS Tune | 1F15404-TUN2 | 0601TU2.D | 06/01/11 23:49 |
| Cal Standard | 1F15404-CALJ | 0601CALJ.D | 06/02/11 00:18 |
| Cal Standard | 1F15404-CALK | 0601CALK.D | 06/02/11 00:47 |
| Cal Standard | 1F15404-CALL | 0601CALL.D | 06/02/11 01:15 |
| Cal Standard | 1F15404-CALM | 0601CALM.D | 06/02/11 01:44 |
| Cal Standard | 1F15404-CALN | 0601CALN.D | 06/02/11 02:13 |
| Cal Standard | 1F15404-CALO | 0601CALO.D | 06/02/11 02:40 |
| Cal Standard | 1F15404-CALP | 0601CALP.D | 06/02/11 03:08 |
| Cal Standard | 1F15404-CALQ | 0601CALQ.D | 06/02/11 03:36 |
| Cal Standard | 1F15404-CALR | 0601CALR.D | 06/02/11 04:04 |
| MS Tune | 1F15404-TUN3 | 0601TU3.D | 06/02/11 06:07 |
| Cal Standard | 1F15404-CALA | 601CALA.D | 06/02/11 06:47 |
| Cal Standard | 1F15404-CALB | 601CALB.D | 06/02/11 07:14 |
| Cal Standard | 1F15404-CALC | 601CALC.D | 06/02/11 07:43 |
| Cal Standard | 1F15404-CALD | 601CALD.D | 06/02/11 08:13 |
| Cal Standard | 1F15404-CALE | 601CALE.D | 06/02/11 08:44 |
| Cal Standard | 1F15404-CALF | 601CALF.D | 06/02/11 09:17 |
| Cal Standard | 1F15404-CALG | 601CALG.D | 06/02/11 09:50 |
| Cal Standard | 1F15404-CALH | 601CALH.D | 06/02/11 10:26 |
| Cal Standard | 1F15404-CALI | 601CALI.D | 06/02/11 11:07 |
| Initial Cal Check | 1F15404-ICV4 | 601ICV4.D | 06/02/11 13:27 |

# ANALYSIS SEQUENCE SUMMARY

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15708 | Instrument: | MS-VOA4 |
| Calibration: | 1154004 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1F15708-TUN1 | 0605TU1E.D | 06/05/11 16:48 |
| Calibration Check | 1F15708-CCV1 | 0605CCVE.D | 06/05/11 17:14 |
| LCS | 1F05004-BS1 | 0605LCSE.D | 06/05/11 17:40 |
| Blank | 1F05004-BLK1 | 0605BLKE.D | 06/05/11 18:56 |
| GW8050-TB | 1105225-06 | 0522506.D | 06/05/11 19:22 |
| GW0065 | 1105225-01 | 0522501.D | 06/05/11 21:57 |
| GW0066 | 1105225-03 | 0522503.D | 06/05/11 22:23 |
| GW8013-AB | 1105225-05 | 0522505.D | 06/05/11 22:49 |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW8260B

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Sequence: 1E15001

SDG: Kirtland_014
Project: Kirtland AFB 2011
Instrument: MS-VOA5
Calibration: 1110001

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E15001-CCV1 )** | | | Lab File ID: 0528CC1.D | | | Analyzed: 05/28/11 10:35 | | | |
| Fluorobenzene | 1126511 | 7.913 | 1328259 | 7.92 | 85 | 50 - 200 | -0.0070 | +/-0.50 | |
| Chlorobenzene-d5 | 461698 | 11.046 | 600438 | 11.052 | 77 | 50 - 200 | -0.0060 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 423155 | 13.449 | 522137 | 13.456 | 81 | 50 - 200 | -0.0070 | +/-0.50 | |
| **LCS (1E28001-BS1 )** | | | Lab File ID: 0528LS1.D | | | Analyzed: 05/28/11 11:10 | | | |
| Fluorobenzene | 1168370 | 7.917 | 1126511 | 7.913 | 104 | 50 - 200 | 0.0040 | +/-0.50 | |
| Chlorobenzene-d5 | 474398 | 11.049 | 461698 | 11.046 | 103 | 50 - 200 | 0.0030 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 413452 | 13.452 | 423155 | 13.449 | 98 | 50 - 200 | 0.0030 | +/-0.50 | |
| **Blank (1E28001-BLK1 )** | | | Lab File ID: 0528BL1.D | | | Analyzed: 05/28/11 12:26 | | | |
| Fluorobenzene | 1139259 | 7.907 | 1126511 | 7.913 | 101 | 50 - 200 | -0.0060 | +/-0.50 | |
| Chlorobenzene-d5 | 451673 | 11.039 | 461698 | 11.046 | 98 | 50 - 200 | -0.0070 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 381512 | 13.442 | 423155 | 13.449 | 90 | 50 - 200 | -0.0070 | +/-0.50 | |
| **GW8048-TB (1105208-05 )** | | | Lab File ID: 0520805.D | | | Analyzed: 05/28/11 13:17 | | | |
| Fluorobenzene | 1092337 | 7.909 | 1126511 | 7.913 | 97 | 50 - 200 | -0.0040 | +/-0.50 | |
| Chlorobenzene-d5 | 427980 | 11.042 | 461698 | 11.046 | 93 | 50 - 200 | -0.0040 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 360157 | 13.445 | 423155 | 13.449 | 85 | 50 - 200 | -0.0040 | +/-0.50 | |
| **GW8012-RB (1105208-03 )** | | | Lab File ID: 0520803.D | | | Analyzed: 05/28/11 13:43 | | | |
| Fluorobenzene | 1114578 | 7.903 | 1126511 | 7.913 | 99 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 | 444354 | 11.035 | 461698 | 11.046 | 96 | 50 - 200 | -0.0110 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 374661 | 13.439 | 423155 | 13.449 | 89 | 50 - 200 | -0.0100 | +/-0.50 | |
| **GW8049-TB (1105217-03 )** | | | Lab File ID: 0521703.D | | | Analyzed: 05/28/11 15:01 | | | |
| Fluorobenzene | 1087903 | 7.903 | 1126511 | 7.913 | 97 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chlorobenzene-d5 | 425565 | 11.035 | 461698 | 11.046 | 92 | 50 - 200 | -0.0110 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 356516 | 13.439 | 423155 | 13.449 | 84 | 50 - 200 | -0.0100 | +/-0.50 | |
| **GW0102 (1105208-01 )** | | | Lab File ID: 0520801.D | | | Analyzed: 05/28/11 16:47 | | | |
| Fluorobenzene | 1067272 | 7.907 | 1126511 | 7.913 | 95 | 50 - 200 | -0.0060 | +/-0.50 | |
| Chlorobenzene-d5 | 416564 | 11.039 | 461698 | 11.046 | 90 | 50 - 200 | -0.0070 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 360878 | 13.443 | 423155 | 13.449 | 85 | 50 - 200 | -0.0060 | +/-0.50 | |
| **GW0064 (1105217-01 )** | | | Lab File ID: 0521701.D | | | Analyzed: 05/28/11 18:06 | | | |
| Fluorobenzene | 1113618 | 7.907 | 1126511 | 7.913 | 99 | 50 - 200 | -0.0060 | +/-0.50 | |
| Chlorobenzene-d5 | 437316 | 11.039 | 461698 | 11.046 | 95 | 50 - 200 | -0.0070 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 384004 | 13.442 | 423155 | 13.449 | 91 | 50 - 200 | -0.0070 | +/-0.50 | |
| **LCS Dup (1E28001-BSD1 )** | | | Lab File ID: 0528LSD1.D | | | Analyzed: 05/28/11 22:25 | | | |
| Fluorobenzene | 1507429 | 7.899 | 1126511 | 7.913 | 134 | 50 - 200 | -0.0140 | +/-0.50 | |
| Chlorobenzene-d5 | 640151 | 11.041 | 461698 | 11.046 | 139 | 50 - 200 | -0.0050 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 540115 | 13.445 | 423155 | 13.449 | 128 | 50 - 200 | -0.0040 | +/-0.50 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15708 | Instrument: | MS-VOA4 |
| | | Calibration: | 1154004 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F15708-CCV1 )** | | | Lab File ID: 0605CCVE.D | | | Analyzed: 06/05/11 17:14 | | | |
| Fluorobenzene | 1069872 | 7.999 | 915142 | 7.963 | 117 | 50 - 200 | 0.0360 | +/-0.50 | |
| Chlorobenzene-d5 | 410882 | 11.116 | 341298 | 11.1 | 120 | 50 - 200 | 0.0160 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 567885 | 13.513 | 488604 | 13.507 | 116 | 50 - 200 | 0.0060 | +/-0.50 | |
| **LCS (1F05004-BS1 )** | | | Lab File ID: 0605LCSE.D | | | Analyzed: 06/05/11 17:40 | | | |
| Fluorobenzene | 1041568 | 7.999 | 1069872 | 7.999 | 97 | 50 - 200 | 0.0000 | +/-0.50 | |
| Chlorobenzene-d5 | 416754 | 11.116 | 410882 | 11.116 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 556495 | 13.513 | 567885 | 13.513 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| **Blank (1F05004-BLK1 )** | | | Lab File ID: 0605BLKE.D | | | Analyzed: 06/05/11 18:56 | | | |
| Fluorobenzene | 1014536 | 7.998 | 1069872 | 7.999 | 95 | 50 - 200 | -0.0010 | +/-0.50 | |
| Chlorobenzene-d5 | 433241 | 11.115 | 410882 | 11.116 | 105 | 50 - 200 | -0.0010 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 529643 | 13.512 | 567885 | 13.513 | 93 | 50 - 200 | -0.0010 | +/-0.50 | |
| **GW8050-TB (1105225-06 )** | | | Lab File ID: 0522506.D | | | Analyzed: 06/05/11 19:22 | | | |
| Fluorobenzene | 1002996 | 7.998 | 1069872 | 7.999 | 94 | 50 - 200 | -0.0010 | +/-0.50 | |
| Chlorobenzene-d5 | 416844 | 11.116 | 410882 | 11.116 | 101 | 50 - 200 | 0.0000 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 521141 | 13.513 | 567885 | 13.513 | 92 | 50 - 200 | 0.0000 | +/-0.50 | |
| **GW0065 (1105225-01 )** | | | Lab File ID: 0522501.D | | | Analyzed: 06/05/11 21:57 | | | |
| Fluorobenzene | 980383 | 8.002 | 1069872 | 7.999 | 92 | 50 - 200 | 0.0030 | +/-0.50 | |
| Chlorobenzene-d5 | 412149 | 11.119 | 410882 | 11.116 | 100 | 50 - 200 | 0.0030 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 503600 | 13.516 | 567885 | 13.513 | 89 | 50 - 200 | 0.0030 | +/-0.50 | |
| **GW0066 (1105225-03 )** | | | Lab File ID: 0522503.D | | | Analyzed: 06/05/11 22:23 | | | |
| Fluorobenzene | 1005438 | 7.998 | 1069872 | 7.999 | 94 | 50 - 200 | -0.0010 | +/-0.50 | |
| Chlorobenzene-d5 | 421593 | 11.115 | 410882 | 11.116 | 103 | 50 - 200 | -0.0010 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 504984 | 13.522 | 567885 | 13.513 | 89 | 50 - 200 | 0.0090 | +/-0.50 | |
| **GW8013-AB (1105225-05 )** | | | Lab File ID: 0522505.D | | | Analyzed: 06/05/11 22:49 | | | |
| Fluorobenzene | 963811 | 8.003 | 1069872 | 7.999 | 90 | 50 - 200 | 0.0040 | +/-0.50 | |
| Chlorobenzene-d5 | 422473 | 11.12 | 410882 | 11.116 | 103 | 50 - 200 | 0.0040 | +/-0.50 | |
| 1,4-Dichlorobenzene-d4 | 503648 | 13.517 | 567885 | 13.513 | 89 | 50 - 200 | 0.0040 | +/-0.50 | |

# INITIAL CALIBRATION DATA

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1110001 | Instrument: | MS-VOA5 |
| Matrix: | Water | Calibration Dates: | 4/15/11 9:53 4/15/11 17:45 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Acetone | | | | | | | | | | | | |
| Acrolein | 2.501 | 7.345248E-02 | 5.002 | 0.0629605 | 10 | 7.600379E-02 | 25.01 | 4.266429E-02 | 50.02 | 4.401047E-02 | 250.1 | 4.491028E-02 |
| Acrylonitrile | 2.499 | 9.808561E-02 | 4.998 | 0.109848 | 9.996 | 8.699726E-02 | 24.99 | 8.799322E-02 | 49.98 | 8.802525E-02 | 249.9 | 9.420532E-02 |
| Benzene | 0.5 | 0.8000888 | 1 | 0.9156609 | 2 | 0.8803617 | 5 | 0.7934592 | 10 | 0.7359414 | 50 | 0.800176 |
| Bromobenzene | 0.5 | 0.641056 | 1 | 0.6621863 | 2 | 0.5914626 | 5 | 0.6467631 | 10 | 0.579489 | 50 | 0.6402908 |
| Bromochloromethane | 0.5 | 0.1093716 | 1 | 0.1692393 | 2 | 0.140701 | 5 | 0.1313986 | 10 | 0.112671 | 50 | 0.1315389 |
| Tert-Amyl Methyl Ether | 0.5 | 0.6306069 | 1 | 0.7326989 | 2 | 0.6863854 | 5 | 0.6084636 | 10 | 0.594319 | 50 | 0.6639212 |
| Bromodichloromethane | 0.5 | 0.3849176 | 1 | 0.3212413 | 2 | 0.3108098 | 5 | 0.3016333 | 10 | 0.2722413 | 50 | 0.3183873 |
| Bromoform | 0.5 | 0.3945924 | 1 | 0.3386649 | 2 | 0.3466746 | 5 | 0.3226988 | 10 | 0.33363 | 50 | 0.3812498 |
| Bromomethane | 0.5 | 0.1684676 | 1 | 0.1779699 | 2 | 0.192281 | 5 | 0.1780457 | 10 | 0.1785955 | 50 | 0.2262205 |
| Bromofluorobenzene | | | | | | | | | | | | |
| n-Butylbenzene | 0.5 | 1.615764 | 1 | 1.620222 | 2 | 1.568309 | 5 | 1.533788 | 10 | 1.313584 | 50 | 1.538153 |
| 2-Butanone | | | | | | | | | | | | |
| sec-Butylbenzene | 0.5 | 2.182433 | 1 | 2.042219 | 2 | 2.12414 | 5 | 1.9027 | 10 | 1.740465 | 50 | 1.975233 |
| tert-Butylbenzene | 0.5 | 1.42206 | 1 | 1.934084 | 2 | 1.652871 | 5 | 1.639224 | 10 | 1.426676 | 50 | 1.647677 |
| Carbon disulfide | 0.5 | 0.6700777 | 1 | 0.7146108 | 2 | 0.6935102 | 5 | 0.6335915 | 10 | 0.6337523 | 50 | 0.6850653 |
| Carbon tetrachloride | 0.5 | 0.2142449 | 1 | 0.2502996 | 2 | 0.2321267 | 5 | 0.2296175 | 10 | 0.2145385 | 50 | 0.245885 |
| Chlorobenzene | 0.5 | 1.326671 | 1 | 1.439744 | 2 | 1.348718 | 5 | 1.242116 | 10 | 1.218162 | 50 | 1.309918 |
| Chloroethane | 0.5 | 0.2639473 | 1 | 0.3176148 | 2 | 0.2371905 | 5 | 0.2382983 | 10 | 0.229075 | 50 | 0.2546896 |
| Chloroform | 0.5 | 0.4713124 | 1 | 0.525224 | 2 | 0.4449954 | 5 | 0.3898242 | 10 | 0.3843343 | 50 | 0.4034271 |
| 2-Chloroethyl vinyl ether | 0.9975 | 0.1757648 | 1.995 | 0.1714589 | 3.99 | 0.1786886 | 9.975 | 0.1651317 | 19.95 | 0.1499097 | 99.75 | 0.1703667 |
| Chloromethane | 0.5 | 0.4048956 | 1 | 0.522269 | 2 | 0.5269472 | 5 | 0.4844209 | 10 | 0.4433077 | 50 | 0.4808374 |
| 1-Chlorohexane | 0.501 | 1.585962 | 1.002 | 1.589005 | 2.004 | 1.398023 | 5.01 | 1.274661 | 10.02 | 1.22227 | 50.1 | 1.31726 |
| 2-Chlorotoluene | 0.5 | 1.32624 | 1 | 1.808458 | 2 | 1.659932 | 5 | 1.543797 | 10 | 1.385015 | 50 | 1.54863 |
| 4-Chlorotoluene | 0.5 | 1.73978 | 1 | 1.803072 | 2 | 1.855684 | 5 | 1.677465 | 10 | 1.535848 | 50 | 1.79964 |
| Cyclohexane | 0.5 | 0.4396916 | 1 | 0.4634382 | 2 | 0.409737 | 5 | 0.3895298 | 10 | 0.3643557 | 50 | 0.4100495 |
| Dibromochloromethane | 0.5 | 0.5283043 | 1 | 0.5578137 | 2 | 0.5173084 | 5 | 0.5282558 | 10 | 0.5005973 | 50 | 0.5522381 |
| 1,2-Dibromo-3-chloropropane | 0.5 | | 1 | 9.348104E-02 | 2 | 9.474229E-02 | 5 | 0.1156024 | 10 | 0.1023672 | 50 | 0.1237073 |
| 1,2-Dibromoethane (EDB) | 0.5 | 0.5843429 | 1 | 0.6618649 | 2 | 0.6056568 | 5 | 0.540378 | 10 | 0.5211705 | 50 | 0.5524816 |
| Dibromomethane | 0.5 | 0.1536054 | 1 | 0.1796265 | 2 | 0.153499 | 5 | 0.1450265 | 10 | 0.1479124 | 50 | 0.1641915 |
| 1,2-Dichlorobenzene | 0.5 | 0.8575686 | 1 | 1.041613 | 2 | 1.049727 | 5 | 0.9857437 | 10 | 0.9044381 | 50 | 1.03308 |

# INITIAL CALIBRATION DATA

## SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Calibration: 1110001

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 4/15/11 9:53 4/15/11 17:45

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,3-Dichlorobenzene | 0.5 | 1.273057 | 1 | 1.210968 | 2 | 1.111015 | 5 | 1.008536 | 10 | 0.9391991 | 50 | 1.051088 |
| 1,4-Dichlorobenzene | 0.5 | 1.532551 | 1 | 1.16052 | 2 | 1.202197 | 5 | 1.083727 | 10 | 0.9748769 | 50 | 1.079088 |
| Dichlorodifluoromethane | 0.5 | 0.2840134 | 1 | 0.2858936 | 2 | 0.2909534 | 5 | 0.3119691 | 10 | 0.2727878 | 50 | 0.3162249 |
| 1,1-Dichloroethane | 0.5 | 0.4287103 | 1 | 0.5320965 | 2 | 0.4751234 | 5 | 0.4325725 | 10 | 0.4120782 | 50 | 0.4661043 |
| 1,2-Dichloroethane | 0.5 | 0.3562957 | 1 | 0.31363 | 2 | 0.3396192 | 5 | 0.3170589 | 10 | 0.2989102 | 50 | 0.3387723 |
| 1,1-Dichloroethene | 0.5 | 0.2393828 | 1 | 0.2659251 | 2 | 0.2648033 | 5 | 0.1920973 | 10 | 0.1939775 | 50 | 0.2009782 |
| cis-1,2-Dichloroethene | 0.5 | 0.249482 | 1 | 0.3033548 | 2 | 0.3005381 | 5 | 0.247724 | 10 | 0.2281777 | 50 | 0.2555682 |
| trans-1,2-Dichloroethene | 0.5 | 0.2998018 | 1 | 0.2666415 | 2 | 0.2699336 | 5 | 0.2006577 | 10 | 0.2123392 | 50 | 0.230136 |
| 1,2-Dichloroethene (total) | 1 | 0.2746419 | 2 | 0.2849981 | 4 | 0.2852358 | 10 | 0.2241909 | 20 | 0.2202585 | 100 | 0.2428521 |
| 1,2-Dichloropropane | 0.5 | 0.2971116 | 1 | 0.3268379 | 2 | 0.3157074 | 5 | 0.2696402 | 10 | 0.2481496 | 50 | 0.2695601 |
| 1,3-Dichloropropane | 0.5 | 0.843535 | 1 | 0.909842 | 2 | 0.8361608 | 5 | 0.8171525 | 10 | 0.764916 | 50 | 0.8162331 |
| 2,2-Dichloropropane | 0.5 | 0.3501656 | 1 | 0.3412545 | 2 | 0.3056573 | 5 | 0.2780712 | 10 | 0.2715509 | 50 | 0.3022778 |
| 1,1-Dichloropropene | 0.5 | 0.2968029 | 1 | 0.3418814 | 2 | 0.3254472 | 5 | 0.2892188 | 10 | 0.2793071 | 50 | 0.3077439 |
| cis-1,3-Dichloropropene | 0.5 | 0.3369793 | 1 | 0.4209045 | 2 | 0.3752986 | 5 | 0.3546505 | 10 | 0.3451507 | 50 | 0.3709639 |
| trans-1,3-Dichloropropene | 0.5 | 0.6572671 | 1 | 0.7202759 | 2 | 0.7544529 | 5 | 0.7045884 | 10 | 0.6688263 | 50 | 0.7769461 |
| 1,3-Dichloropropene (total) | 1 | 0.3058216 | 2 | 0.3600701 | 4 | 0.3468991 | 10 | 0.3256349 | 20 | 0.3108605 | 100 | 0.3508639 |
| Diisopropyl Ether | 0.5 | 1.095436 | 1 | 1.089445 | 2 | 1.036587 | 5 | 1.039403 | 10 | 1.009037 | 50 | 1.099811 |
| Ethylbenzene | 0.5 | 2.026046 | 1 | 2.21121 | 2 | 2.244356 | 5 | 2.0568 | 10 | 1.979842 | 50 | 2.099205 |
| Ethyl tert-Butyl Ether | 0.5 | 0.8180381 | 1 | 0.8773582 | 2 | 0.8584222 | 5 | 0.7778061 | 10 | 0.7427239 | 50 | 0.8236289 |
| Ethyl Methacrylate | 0.5 | 0.7708219 | 1 | 0.7903798 | 2 | 0.7030081 | 5 | 0.7054255 | 10 | 0.6633499 | 50 | 0.7145584 |
| Hexachlorobutadiene | 0.5 | 0.3004126 | 1 | 0.2670639 | 2 | 0.2546861 | 5 | 0.2139476 | 10 | 0.1996979 | 50 | 0.2170609 |
| 2-Hexanone | | | | | | | | | | | | |
| Iodomethane | 0.5 | ~~0.1155017~~ | 1 | 0.1466517 | 2 | 0.1505738 | 5 | 0.1804679 | 10 | 0.1858682 | 50 | 0.2715026 |
| Isopropylbenzene | 0.5 | 1.553991 | 1 | 1.879496 | 2 | 1.64715 | 5 | 1.463981 | 10 | 1.484014 | 50 | 1.604791 |
| p-Isopropyltoluene | 0.5 | 1.89864 | 1 | 1.776951 | 2 | 1.742258 | 5 | 1.607387 | 10 | 1.523654 | 50 | 1.666623 |
| Methylene chloride | 0.5 | ~~0.3900775~~ | 1 | 0.2936392 | 2 | 0.2698228 | 5 | 0.2477597 | 10 | 0.2252182 | 50 | 0.2518085 |
| Methyl Acetate | 0.5 | ~~0.4609926~~ | 1 | 0.4005555 | 2 | 0.2358498 | 5 | 0.2255224 | 10 | 0.2031954 | 50 | 0.215042 |
| Methylcyclohexane | 0.5 | 0.3449617 | 1 | 0.2959674 | 2 | 0.3342673 | 5 | 0.2715628 | 10 | 0.2594567 | 50 | 0.2933012 |
| Naphthalene | 0.5 | 1.330595 | 1 | 1.403953 | 2 | 1.438523 | 5 | 1.267743 | 10 | 1.210153 | 50 | 1.336267 |
| Methyl Methacrylate | 0.5 | 0.3571778 | 1 | 0.3326583 | 2 | 0.2536673 | 5 | 0.2420409 | 10 | 0.2434765 | 50 | 0.2725396 |
| 4-Methyl-2-pentanone | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1110001 | Instrument: | MS-VOA5 |
| Matrix: | Water | Calibration Dates: | 4/15/11 9:53 4/15/11 17:45 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl t-Butyl Ether | 0.5 | 0.58849 | 1 | 0.3847061 | 2 | 0.61701 | 5 | 0.5249432 | 10 | 0.5220101 | 50 | 0.575102 |
| n-Propylbenzene | 0.5 | 2.658898 | 1 | 2.631022 | 2 | 2.742525 | 5 | 2.498391 | 10 | 2.252019 | 50 | 2.51794 |
| Styrene | 0.5 | 1.191692 | 1 | 1.431338 | 2 | 1.394782 | 5 | 1.292819 | 10 | 1.286717 | 50 | 1.356195 |
| 1,1,2,2-Tetrachloroethane | 0.5 | 0.6565294 | 1 | 0.8292243 | 2 | 0.7688837 | 5 | 0.6768636 | 10 | 0.6541766 | 50 | 0.723185 |
| 1,1,1,2-Tetrachloroethane | 0.5 | 0.4367006 | 1 | 0.4756397 | 2 | 0.5285685 | 5 | 0.4857648 | 10 | 0.4354952 | 50 | 0.5080245 |
| tert-Butyl alcohol | 2.5 | 1.891953E-02 | 5 | 2.545306E-02 | 10 | 2.534346E-02 | 25 | 2.000688E-02 | 50 | 1.962376E-02 | 250 | 2.099059E-02 |
| Tetrachloroethene | 0.5 | 0.364093 | 1 | 0.5506471 | 2 | 0.4872814 | 5 | 0.4530117 | 10 | 0.4530936 | 50 | 0.4932279 |
| Toluene | 0.5 | 1.194858 | 1 | 1.156849 | 2 | 1.245383 | 5 | 1.085715 | 10 | 1.014703 | 50 | 1.112732 |
| 1,2,3-Trichlorobenzene | 0.5 | 0.4865515 | 1 | 0.6485175 | 2 | 0.5326165 | 5 | 0.4876621 | 10 | 0.4486489 | 50 | 0.5188974 |
| 1,2,4-Trichlorobenzene | 0.5 | 0.7493696 | 1 | 0.6890607 | 2 | 0.6505441 | 5 | 0.5479476 | 10 | 0.5055653 | 50 | 0.5773303 |
| 1,1,2-Trichloroethane | 0.5 | 0.5303094 | 1 | 0.5252135 | 2 | 0.4770975 | 5 | 0.4418115 | 10 | 0.4350982 | 50 | 0.4271284 |
| 1,1,1-Trichloroethane | 0.5 | 0.330761 | 1 | 0.3376056 | 2 | 0.3149539 | 5 | 0.2880055 | 10 | 0.2771033 | 50 | 0.3098753 |
| Tetrahydrofuran | 0.5 | ~~0.1634841~~ | 1 | 0.1109906 | 2 | 0.130662 | 5 | 7.513845E-02 | 10 | 7.189065E-02 | 50 | 7.579246E-02 |
| Trichloroethene | 0.5 | 0.2354577 | 1 | 0.2523815 | 2 | 0.2614126 | 5 | 0.2117919 | 10 | 0.2188451 | 50 | 0.2396014 |
| Trichlorofluoromethane | 0.5 | 0.4371778 | 1 | 0.4162929 | 2 | 0.4261584 | 5 | 0.3891685 | 10 | 0.3896686 | 50 | 0.3943387 |
| 1,2,3-Trichloropropane | 0.5 | 0.1683271 | 1 | 0.1842854 | 2 | 0.2015794 | 5 | 0.1413224 | 10 | 0.1597234 | 50 | 0.1514929 |
| 1,3,5-Trimethylbenzene | 0.5 | 1.681783 | 1 | 1.781468 | 2 | 1.842237 | 5 | 1.535102 | 10 | 1.452974 | 50 | 1.666816 |
| 1,2,4-Trimethylbenzene | 0.5 | 1.815771 | 1 | 1.840546 | 2 | 1.734166 | 5 | 1.554856 | 10 | 1.452915 | 50 | 1.671327 |
| 1,1,2-Trichloro-1,2,2-trifluoroethan | 0.5 | 0.1947962 | 1 | 0.245106 | 2 | 0.2140875 | 5 | 0.1963128 | 10 | 0.1816022 | 50 | 0.207954 |
| Vinyl chloride | 0.5 | 0.4777512 | 1 | 0.3889818 | 2 | 0.3273641 | 5 | 0.3402598 | 10 | 0.3620777 | 50 | 0.3030401 |
| m,p-Xylene | 1 | 1.670396 | 2 | 1.787353 | 4 | 1.678962 | 10 | 1.568847 | 20 | 1.459675 | 100 | 1.572657 |
| o-Xylene | 0.5 | 1.74923 | 1 | 1.94044 | 2 | 1.807285 | 5 | 1.558785 | 10 | 1.560928 | 50 | 1.627801 |
| Vinyl acetate | 0.9995 | 0.4135478 | 1.999 | 0.3447625 | 3.998 | 0.4064887 | 9.995 | 0.3548725 | 19.99 | 0.3401282 | 99.95 | 0.3820547 |
| Xylenes (total) | 1.5 | 1.696674 | 3 | 1.838382 | 6 | 1.721736 | 15 | 1.565493 | 30 | 1.493426 | 150 | 1.591039 |
| Dibromofluoromethane | | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | | | | | | | | | | | | |
| Toluene-d8 | | | | | | | | | | | | |
| tert-Amyl alcohol | 2.5 | 1.766705E-02 | 5 | 1.906405E-02 | 10 | 1.790397E-02 | 25 | 0.0169066 | 50 | 0.0166562 | 250 | 1.650561E-02 |
| tert-Amyl ethyl ether | 0.5 | 0.6824261 | 1 | 0.6596976 | 2 | 0.6734211 | 5 | 0.6479509 | 10 | 0.6062625 | 50 | 0.6795288 |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1110001 | Instrument: | MS-VOA5 |
| Matrix: | Water | Calibration Dates: | 4/15/11 9:53 4/15/11 17:45 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Acetone | | | | | | | 1 | | 2 | ~~0.2395382~~ | 4 | 0.1062259 |
| Acrolein | 500.2 | 4.761912E-02 | 750.3 | 4.441414E-02 | 1000 | 4.446742E-02 | | | | | | |
| Acrylonitrile | 499.8 | 9.624532E-02 | 749.7 | 0.0967836 | 999.6 | 9.945679E-02 | | | | | | |
| Benzene | 100 | 0.8082567 | 150 | 0.8163695 | 200 | 0.7988039 | | | | | | |
| Bromobenzene | 100 | 0.6227843 | 150 | 0.6086506 | 200 | 0.6133366 | | | | | | |
| Bromochloromethane | 100 | 0.1302925 | 150 | 0.134319 | 200 | 0.130993 | | | | | | |
| Tert-Amyl Methyl Ether | 100 | 0.6658783 | 150 | 0.687089 | 200 | 0.681037 | | | | | | |
| Bromodichloromethane | 100 | 0.3180744 | 150 | 0.3272917 | 200 | 0.325512 | | | | | | |
| Bromoform | 100 | 0.3779496 | 150 | 0.3790748 | 200 | 0.3705986 | | | | | | |
| Bromomethane | 100 | 0.2381992 | 150 | 0.2519488 | 200 | 0.2510808 | | | | | | |
| Bromofluorobenzene | | | | | | | 30 | 0.8695019 | 30 | 0.8691996 | 40 | 0.8060909 |
| n-Butylbenzene | 100 | 1.474875 | 150 | 1.431947 | 200 | 1.444853 | | | | | | |
| 2-Butanone | | | | | | | 1 | 0.1415871 | 2 | 0.1638124 | 4 | 0.150175 |
| sec-Butylbenzene | 100 | 1.901739 | 150 | 1.885204 | 200 | 1.850669 | | | | | | |
| tert-Butylbenzene | 100 | 1.602518 | 150 | 1.609183 | 200 | 1.551959 | | | | | | |
| Carbon disulfide | 100 | 0.6887554 | 150 | 0.6911361 | 200 | 0.68595 | | | | | | |
| Carbon tetrachloride | 100 | 0.2509112 | 150 | 0.2571727 | 200 | 0.2633611 | | | | | | |
| Chlorobenzene | 100 | 1.235874 | 150 | 1.215821 | 200 | 1.168307 | | | | | | |
| Chloroethane | 100 | 0.2458709 | 150 | 0.2418009 | 200 | 0.2428498 | | | | | | |
| Chloroform | 100 | 0.4073919 | 150 | 0.4212198 | 200 | 0.4175302 | | | | | | |
| 2-Chloroethyl vinyl ether | 199.5 | 0.175057 | 299.2 | 0.1795702 | 399 | 0.17956 | | | | | | |
| Chloromethane | 100 | 0.4652296 | 150 | 0.4745201 | 200 | 0.4687825 | | | | | | |
| 1-Chlorohexane | 100.2 | 1.256774 | 150.3 | 1.25052 | 200.4 | 1.210453 | | | | | | |
| 2-Chlorotoluene | 100 | 1.52764 | 150 | 1.514417 | 200 | 1.503625 | | | | | | |
| 4-Chlorotoluene | 100 | 1.720962 | 150 | 1.745691 | 200 | 1.735362 | | | | | | |
| Cyclohexane | 100 | 0.4088501 | 150 | 0.4185832 | 200 | 0.4205054 | | | | | | |
| Dibromochloromethane | 100 | 0.5342505 | 150 | 0.5344027 | 200 | 0.5202787 | | | | | | |
| 1,2-Dibromo-3-chloropropane | 100 | 0.1245736 | 150 | 0.1227042 | 200 | 0.1233507 | | | | | | |
| 1,2-Dibromoethane (EDB) | 100 | 0.5329544 | 150 | 0.5193847 | 200 | 0.5009687 | | | | | | |
| Dibromomethane | 100 | 0.1620901 | 150 | 0.1675086 | 200 | 0.1653088 | | | | | | |
| 1,2-Dichlorobenzene | 100 | 0.9798451 | 150 | 0.9607292 | 200 | 0.9510329 | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1110001 | Instrument: | MS-VOA5 |
| Matrix: | Water | Calibration Dates: | 4/15/11 9:53 4/15/11 17:45 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,3-Dichlorobenzene | 100 | 1.028373 | 150 | 0.998828 | 200 | 1.002863 | | | | | | |
| 1,4-Dichlorobenzene | 100 | 1.0591 | 150 | 1.030866 | 200 | 1.009536 | | | | | | |
| Dichlorodifluoromethane | 100 | 0.3117621 | 150 | 0.3095106 | 200 | 0.3036366 | | | | | | |
| 1,1-Dichloroethane | 100 | 0.4650846 | 150 | 0.4714799 | 200 | 0.4701173 | | | | | | |
| 1,2-Dichloroethane | 100 | 0.3454874 | 150 | 0.3557143 | 200 | 0.3525558 | | | | | | |
| 1,1-Dichloroethene | 100 | 0.204577 | 150 | 0.2000217 | 200 | 0.2103732 | | | | | | |
| cis-1,2-Dichloroethene | 100 | 0.2594392 | 150 | 0.2625341 | 200 | 0.2612869 | | | | | | |
| trans-1,2-Dichloroethene | 100 | 0.2320617 | 150 | 0.2404701 | 200 | 0.2408501 | | | | | | |
| 1,2-Dichloroethene (total) | 200 | 0.2457505 | 300 | 0.2515021 | 400 | 0.2510685 | | | | | | |
| 1,2-Dichloropropane | 100 | 0.2768431 | 150 | 0.2841096 | 200 | 0.2821266 | | | | | | |
| 1,3-Dichloropropane | 100 | 0.7927853 | 150 | 0.7731411 | 200 | 0.7493176 | | | | | | |
| 2,2-Dichloropropane | 100 | 0.305663 | 150 | 0.3168261 | 200 | 0.3142077 | | | | | | |
| 1,1-Dichloropropene | 100 | 0.3115563 | 150 | 0.3233728 | 200 | 0.3222422 | | | | | | |
| cis-1,3-Dichloropropene | 100 | 0.3828268 | 150 | 0.3965628 | 200 | 0.395178 | | | | | | |
| trans-1,3-Dichloropropene | 100 | 0.7696532 | 150 | 0.7817741 | 200 | 0.7646546 | | | | | | |
| 1,3-Dichloropropene (total) | 200 | 0.3653738 | 300 | 0.3800619 | 400 | 0.3801002 | | | | | | |
| Diisopropyl Ether | 100 | 1.11285 | 150 | 1.134986 | 200 | 1.107778 | | | | | | |
| Ethylbenzene | 100 | 1.937883 | 150 | 1.922859 | 200 | 1.8281 | | | | | | |
| Ethyl tert-Butyl Ether | 100 | 0.8342713 | 150 | 0.8474832 | 200 | 0.8437941 | | | | | | |
| Ethyl Methacrylate | 100 | 0.6893992 | 150 | 0.6995502 | 200 | 0.6764212 | | | | | | |
| Hexachlorobutadiene | 100 | 0.2183398 | 150 | 0.2151024 | 200 | 0.2166238 | | | | | | |
| 2-Hexanone | | | | | | | 1 | 0.5026459 | 2 | 0.5797565 | 4 | 0.4901297 |
| Iodomethane | 100 | 0.2889175 | 150 | 0.3081212 | 200 | 0.3008402 | | | | | | |
| Isopropylbenzene | 100 | 1.506733 | 150 | 1.473016 | 200 | 1.422801 | | | | | | |
| p-Isopropyltoluene | 100 | 1.637658 | 150 | 1.625244 | 200 | 1.615128 | | | | | | |
| Methylene chloride | 100 | 0.2516857 | 150 | 0.2554455 | 200 | 0.2533425 | | | | | | |
| Methyl Acetate | 100 | 0.2201898 | 150 | 0.2211768 | 200 | 0.2256047 | | | | | | |
| Methylcyclohexane | 100 | 0.2949703 | 150 | 0.3038449 | 200 | 0.3052717 | | | | | | |
| Naphthalene | 100 | 1.347997 | 150 | 1.313537 | 200 | 1.294839 | | | | | | |
| Methyl Methacrylate | 100 | 0.2694595 | 150 | 0.2856965 | 200 | 0.2875679 | | | | | | |
| 4-Methyl-2-pentanone | | | | | | | 1 | 0.2715508 | 2 | 0.2845776 | 4 | 0.2933364 |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1110001 | Instrument: | MS-VOA5 | |
| Matrix: | Water | Calibration Dates: | 4/15/11 9:53 | 4/15/11 17:45 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl t-Butyl Ether | 100 | 0.5988705 | 150 | 0.6159157 | 200 | 0.6139185 | | | | | | |
| n-Propylbenzene | 100 | 2.408552 | 150 | 2.369597 | 200 | 2.286507 | | | | | | |
| Styrene | 100 | 1.294683 | 150 | 1.308169 | 200 | 1.270967 | | | | | | |
| 1,1,2,2-Tetrachloroethane | 100 | 0.713353 | 150 | 0.6930676 | 200 | 0.6933867 | | | | | | |
| 1,1,1,2-Tetrachloroethane | 100 | 0.475352 | 150 | 0.4757034 | 200 | 0.4682421 | | | | | | |
| tert-Butyl alcohol | 500 | 2.167814E-02 | 750 | 2.229985E-02 | 1000 | 2.231197E-02 | | | | | | |
| Tetrachloroethene | 100 | 0.4520485 | 150 | 0.4602833 | 200 | 0.448791 | | | | | | |
| Toluene | 100 | 1.081687 | 150 | 1.095633 | 200 | 1.082227 | | | | | | |
| 1,2,3-Trichlorobenzene | 100 | 0.4923064 | 150 | 0.4935776 | 200 | 0.4830579 | | | | | | |
| 1,2,4-Trichlorobenzene | 100 | 0.5539334 | 150 | 0.560741 | 200 | 0.5458707 | | | | | | |
| 1,1,2-Trichloroethane | 100 | 0.4151994 | 150 | 0.4180961 | 200 | 0.3989418 | | | | | | |
| 1,1,1-Trichloroethane | 100 | 0.3158352 | 150 | 0.3216286 | 200 | 0.327623 | | | | | | |
| Tetrahydrofuran | 100 | 7.667164E-02 | 150 | 7.949791E-02 | 200 | 7.960101E-02 | | | | | | |
| Trichloroethene | 100 | 0.23727 | 150 | 0.2431529 | 200 | 0.2463272 | | | | | | |
| Trichlorofluoromethane | 100 | 0.3969179 | 150 | 0.3949105 | 200 | 0.3914032 | | | | | | |
| 1,2,3-Trichloropropane | 100 | 0.1423161 | 150 | 0.1506411 | 200 | 0.1443797 | | | | | | |
| 1,3,5-Trimethylbenzene | 100 | 1.583804 | 150 | 1.575997 | 200 | 1.565018 | | | | | | |
| 1,2,4-Trimethylbenzene | 100 | 1.633456 | 150 | 1.64197 | 200 | 1.585531 | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethan | 100 | 0.2067751 | 150 | 0.2062075 | 200 | 0.2127444 | | | | | | |
| Vinyl chloride | 100 | 0.2340032 | 150 | 0.2065956 | 200 | 0.1971065 | | | | | | |
| m,p-Xylene | 200 | 1.501925 | 300 | 1.462725 | 400 | 1.317357 | | | | | | |
| o-Xylene | 100 | 1.565988 | 150 | 1.553286 | 200 | 1.508714 | | | | | | |
| Vinyl acetate | 199.9 | 0.3826316 | 299.8 | 0.3832969 | 399.8 | 0.3787505 | | | | | | |
| Xylenes (total) | 300 | 1.523279 | 450 | 1.492912 | 600 | 1.381143 | | | | | | |
| Dibromofluoromethane | | | | | | | 30 | 0.305082 | 30 | 0.3121115 | 40 | 0.2808014 |
| 1,2-Dichloroethane-d4 | | | | | | | 30 | 0.060848 | 30 | 6.200351E-02 | 40 | 0.057634 |
| Toluene-d8 | | | | | | | 30 | 2.175583 | 30 | 2.133059 | 40 | 1.993034 |
| tert-Amyl alcohol | 500 | 1.750579E-02 | 750 | 1.752437E-02 | 1000 | 1.792482E-02 | | | | | | |
| tert-Amyl ethyl ether | 100 | 0.6929417 | 150 | 0.7127362 | 200 | 0.7089255 | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1110001 | | Instrument: | MS-VOA5 | |
| Matrix: | Water | | Calibration Dates: | 4/15/11 9:53 | 4/15/11 17:45 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Acetone | 10 | 0.1058109 | 20 | 9.662517E-02 | 100 | 9.160077E-02 | 200 | 8.873568E-02 | 300 | 8.776138E-02 | 400 | 0.0912852 |
| Acrolein | | | | | | | | | | | | |
| Acrylonitrile | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | |
| Bromobenzene | | | | | | | | | | | | |
| Bromochloromethane | | | | | | | | | | | | |
| Tert-Amyl Methyl Ether | | | | | | | | | | | | |
| Bromodichloromethane | | | | | | | | | | | | |
| Bromoform | | | | | | | | | | | | |
| Bromomethane | | | | | | | | | | | | |
| Bromofluorobenzene | 50 | 0.8179282 | 60 | 0.8024138 | 70 | 0.7653987 | 30 | 0.9016312 | 30 | 0.8719414 | 30 | 0.8837117 |
| n-Butylbenzene | | | | | | | | | | | | |
| 2-Butanone | 10 | 0.1154252 | 20 | 0.1283318 | 100 | 0.140829 | 200 | 0.1341546 | 300 | 0.1343933 | 400 | 0.1349522 |
| sec-Butylbenzene | | | | | | | | | | | | |
| tert-Butylbenzene | | | | | | | | | | | | |
| Carbon disulfide | | | | | | | | | | | | |
| Carbon tetrachloride | | | | | | | | | | | | |
| Chlorobenzene | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | |
| 2-Chloroethyl vinyl ether | | | | | | | | | | | | |
| Chloromethane | | | | | | | | | | | | |
| 1-Chlorohexane | | | | | | | | | | | | |
| 2-Chlorotoluene | | | | | | | | | | | | |
| 4-Chlorotoluene | | | | | | | | | | | | |
| Cyclohexane | | | | | | | | | | | | |
| Dibromochloromethane | | | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | | | | | | | | | | | |
| 1,2-Dibromoethane (EDB) | | | | | | | | | | | | |
| Dibromomethane | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1110001 | | Instrument: | MS-VOA5 | |
| Matrix: | Water | | Calibration Dates: | 4/15/11 9:53 | 4/15/11 17:45 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,3-Dichlorobenzene | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | |
| Dichlorodifluoromethane | | | | | | | | | | | | |
| 1,1-Dichloroethane | | | | | | | | | | | | |
| 1,2-Dichloroethane | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | | | | | | | | | | | |
| trans-1,2-Dichloroethene | | | | | | | | | | | | |
| 1,2-Dichloroethene (total) | | | | | | | | | | | | |
| 1,2-Dichloropropane | | | | | | | | | | | | |
| 1,3-Dichloropropane | | | | | | | | | | | | |
| 2,2-Dichloropropane | | | | | | | | | | | | |
| 1,1-Dichloropropene | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | | | | | | | | | | | | |
| 1,3-Dichloropropene (total) | | | | | | | | | | | | |
| Diisopropyl Ether | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | |
| Ethyl tert-Butyl Ether | | | | | | | | | | | | |
| Ethyl Methacrylate | | | | | | | | | | | | |
| Hexachlorobutadiene | | | | | | | | | | | | |
| 2-Hexanone | 10 | 0.4151944 | 20 | 0.4738867 | 100 | 0.4647011 | 200 | 0.4730331 | 300 | 0.4535798 | 400 | 0.4782568 |
| Iodomethane | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | |
| p-Isopropyltoluene | | | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | | |
| Methyl Acetate | | | | | | | | | | | | |
| Methylcyclohexane | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | |
| Methyl Methacrylate | | | | | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | 0.2591883 | 20 | 0.2753029 | 100 | 0.2847717 | 200 | 0.2842831 | 300 | 0.2727058 | 400 | 0.2794371 |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1110001 | Instrument: | MS-VOA5 | |
| Matrix: | Water | Calibration Dates: | 4/15/11 9:53 | 4/15/11 17:45 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl t-Butyl Ether | | | | | | | | | | | | |
| n-Propylbenzene | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | | | | | | | | | | |
| tert-Butyl alcohol | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | | | | | | | | | | | | |
| Tetrahydrofuran | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | |
| Trichlorofluoromethane | | | | | | | | | | | | |
| 1,2,3-Trichloropropane | | | | | | | | | | | | |
| 1,3,5-Trimethylbenzene | | | | | | | | | | | | |
| 1,2,4-Trimethylbenzene | | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethar | | | | | | | | | | | | |
| Vinyl chloride | | | | | | | | | | | | |
| m,p-Xylene | | | | | | | | | | | | |
| o-Xylene | | | | | | | | | | | | |
| Vinyl acetate | | | | | | | | | | | | |
| Xylenes (total) | | | | | | | | | | | | |
| Dibromofluoromethane | 50 | 0.2831616 | 60 | 0.2832524 | 70 | 0.2746393 | 30 | 0.3029928 | 30 | 0.2980317 | 30 | 0.2988701 |
| 1,2-Dichloroethane-d4 | 50 | 6.188906E-02 | 60 | 5.667148E-02 | 70 | 5.616298E-02 | 30 | 0.0631027 | 30 | 5.735518E-02 | 30 | 5.957207E-02 |
| Toluene-d8 | 50 | 1.973692 | 60 | 1.954738 | 70 | 1.847237 | 30 | 2.162138 | 30 | 2.08284 | 30 | 2.181926 |
| tert-Amyl alcohol | | | | | | | | | | | | |
| tert-Amyl ethyl ether | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1110001 | Instrument: | MS-VOA5 |
| Matrix: | Water | Calibration Dates: | 4/15/11 9:53 4/15/11 17:45 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Acetone | 0.095435 | 8.130072 | 3.761286 | 9.346288E-02 | | | 15 | |
| Acrolein | 5.338917E-02 | 25.4234 | 3.639333 | 0.1077746 | 0.9990652 | | 0.995 | |
| Acrylonitrile | 9.529337E-02 | 7.569294 | 4.589333 | 0.1474434 | | | 15 | |
| Benzene | 0.8165687 | 6.399931 | 7.650444 | 5.168866E-02 | | | 15 | |
| Bromobenzene | 0.622891 | 4.364366 | 12.40278 | 5.143733E-02 | | | 15 | |
| Bromochloromethane | 0.1322805 | 12.97677 | 6.738889 | 0.0928818 | | | 15 | |
| Tert-Amyl Methyl Ether | 0.6611555 | 6.555788 | 7.841111 | 7.572897E-02 | | | 15 | |
| Bromodichloromethane | 0.3200121 | 9.249059 | 8.636667 | 6.813749E-02 | | | 15 | |
| Bromoform | 0.3605704 | 7.045665 | 11.81067 | 5.905082E-02 | | | SPCC (0.1) | |
| Bromomethane | 0.2069788 | 16.64528 | 2.818556 | 0.1637358 | 0.9991868 | | 0.995 | |
| Bromofluorobenzene | 0.8430908 | 5.464727 | 12.24611 | 1.755882E-02 | | | 15 | |
| n-Butylbenzene | 1.504611 | 6.561854 | 13.83644 | 3.032147E-02 | | | 15 | |
| 2-Butanone | 0.1381845 | 9.827188 | 6.202444 | 5.654298E-02 | | | 15 | |
| sec-Butylbenzene | 1.956089 | 7.131853 | 13.29478 | 2.976972E-02 | | | 15 | |
| tert-Butylbenzene | 1.609584 | 9.357792 | 13.06044 | 5.049762E-02 | | | 15 | |
| Carbon disulfide | 0.6773833 | 4.033366 | 4.763333 | 4.957716E-02 | | | 15 | |
| Carbon tetrachloride | 0.2397952 | 7.491069 | 7.617778 | 6.986726E-02 | | | 15 | |
| Chlorobenzene | 1.27837 | 6.608143 | 11.08278 | 5.423621E-02 | | | SPCC (0.3) | |
| Chloroethane | 0.2523708 | 10.49478 | 2.951 | 0.1958913 | | | 15 | |
| Chloroform | 0.4294733 | 10.46046 | 6.715889 | 8.754408E-02 | | | CCC (20) | |
| 2-Chloroethyl vinyl ether | 0.1717231 | 5.52504 | 8.994556 | 6.848219E-02 | | | 15 | |
| Chloromethane | 0.4745789 | 7.851537 | 2.228667 | 0.1926709 | | | SPCC (0.1) | |
| 1-Chlorohexane | 1.344992 | 11.02804 | 11.049 | 3.869327E-02 | | | 15 | |
| 2-Chlorotoluene | 1.535306 | 9.158972 | 12.625 | 3.281746E-02 | | | 15 | |
| 4-Chlorotoluene | 1.734834 | 5.262659 | 12.68844 | 4.818632E-02 | | | 15 | |
| Cyclohexane | 0.4138601 | 6.775805 | 7.549889 | 5.761858E-02 | | | 15 | |
| Dibromochloromethane | 0.5303833 | 3.2862 | 10.31456 | 6.028785E-02 | | | 15 | |
| 1,2-Dibromo-3-chloropropane | 0.1125661 | 12.02491 | 14.44125 | 3.902792E-02 | | | 15 | |
| 1,2-Dibromoethane (EDB) | 0.5576892 | 9.147644 | 10.52789 | 5.679238E-02 | | | 15 | |
| Dibromomethane | 0.1598632 | 6.798654 | 8.573222 | 6.249779E-02 | | | 15 | |
| 1,2-Dichlorobenzene | 0.9737531 | 6.602409 | 13.79711 | 3.249335E-02 | | | 15 | |
| 1,3-Dichlorobenzene | 1.069325 | 10.20858 | 13.38444 | 4.478999E-02 | | | 15 | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1110001 | Instrument: | MS-VOA5 |
| Matrix: | Water | Calibration Dates: | 4/15/11 9:53 4/15/11 17:45 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | 1.125829 | 14.93571 | 13.47644 | 4.420105E-02 | | | 15 | |
| Dichlorodifluoromethane | 0.2985279 | 5.170388 | 2.017222 | 0.1785951 | 0.9997339 | | 0.995 | |
| 1,1-Dichloroethane | 0.4614852 | 7.557788 | 5.750445 | 9.968297E-02 | | | SPCC (0.1) | |
| 1,2-Dichloroethane | 0.3353382 | 6.162455 | 7.478667 | 8.089861E-02 | | | 15 | |
| 1,1-Dichloroethene | 0.2191262 | 13.53056 | 4.228111 | 0.1783801 | | | CCC (20) | |
| cis-1,2-Dichloroethene | 0.2631228 | 9.248231 | 6.459889 | 8.951479E-02 | | | 15 | |
| trans-1,2-Dichloroethene | 0.2436546 | 12.59655 | 5.375111 | 0.1345106 | | | 15 | |
| 1,2-Dichloroethene (total) | 0.2533887 | 9.456715 | 0 | 0 | | | 15 | |
| 1,2-Dichloropropane | 0.2855651 | 8.528436 | 8.460444 | 7.290993E-02 | | | CCC (20) | |
| 1,3-Dichloropropane | 0.8114537 | 6.040153 | 10.05411 | 0.0399961 | | | 15 | |
| 2,2-Dichloropropane | 0.3095193 | 8.274472 | 6.569333 | 9.334919E-02 | | | 15 | |
| 1,1-Dichloropropene | 0.3108414 | 6.366392 | 7.497444 | 8.152097E-02 | | | 15 | |
| cis-1,3-Dichloropropene | 0.3753906 | 7.176617 | 9.211445 | 6.630273E-02 | | | 15 | |
| trans-1,3-Dichloropropene | 0.7331598 | 6.458765 | 9.686222 | 5.472616E-02 | | | 15 | |
| 1,3-Dichloropropene (total) | 0.3472984 | 7.996073 | 9.686222 | 5.472616E-02 | | | 15 | |
| Diisopropyl Ether | 1.080593 | 3.893299 | 6.121667 | 6.412666E-02 | | | 15 | |
| Ethylbenzene | 2.034033 | 6.673525 | 11.22944 | 0.0629414 | | | CCC (20) | |
| Ethyl tert-Butyl Ether | 0.8248362 | 5.044401 | 6.587778 | 7.160754E-02 | | | 15 | |
| Ethyl Methacrylate | 0.712546 | 5.877163 | 9.872444 | 5.863743E-02 | | | 15 | |
| Hexachlorobutadiene | 0.2336594 | 14.11394 | 15.80222 | 3.541708E-02 | | | 15 | |
| 2-Hexanone | 0.4812427 | 9.22694 | 9.992778 | 3.236776E-02 | | | 15 | |
| Iodomethane | 0.2291179 | 30.40252 | 4.4235 | 0.1630534 | 0.9990179 | | 0.995 | |
| Isopropylbenzene | 1.559553 | 8.952109 | 12.13022 | 3.579421E-02 | | | 15 | |
| p-Isopropyltoluene | 1.67706 | 6.663178 | 13.43278 | 2.871329E-02 | | | 15 | |
| Methylene chloride | 0.2560903 | 7.621563 | 4.710375 | 0.1147551 | | | 15 | |
| Methyl Acetate | 0.243392 | 26.37392 | 4.575 | 9.409387E-02 | 0.999715 | | 0.995 | |
| Methylcyclohexane | 0.3004004 | 8.944592 | 8.791 | 4.837696E-02 | | | 15 | |
| Naphthalene | 1.327067 | 5.143918 | 15.67311 | 3.798954E-02 | | | 15 | |
| Methyl Methacrylate | 0.2826983 | 13.92008 | 7.548778 | 7.251518E-02 | | | 15 | |
| 4-Methyl-2-pentanone | 0.2783504 | 3.582551 | 9.140111 | 2.964067E-02 | | | 15 | |
| Methyl t-Butyl Ether | 0.5601073 | 13.42515 | 5.375111 | 7.721725E-02 | | | 15 | |
| n-Propylbenzene | 2.48505 | 6.85256 | 12.53956 | 5.596903E-02 | | | 15 | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1110001 | | Instrument: | MS-VOA5 | |
| Matrix: | Water | | Calibration Dates: | 4/15/11 9:53 | 4/15/11 17:45 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Styrene | 1.314151 | 5.413242 | 11.70344 | 5.177519E-02 | | | 15 | |
| 1,1,2,2-Tetrachloroethane | 0.7120744 | 7.923079 | 12.05467 | 5.038292E-02 | | | SPCC (0.3) | |
| 1,1,1,2-Tetrachloroethane | 0.4766101 | 6.262437 | 11.12456 | 4.672365E-02 | | | 15 | |
| tert-Butyl alcohol | 2.184747E-02 | 10.65008 | 4.374778 | 0.1799545 | | | 15 | |
| Tetrachloroethene | 0.4624975 | 10.6729 | 10.424 | 5.774833E-02 | | | 15 | |
| Toluene | 1.118865 | 6.198212 | 9.688333 | 5.751295E-02 | | | CCC (20) | |
| 1,2,3-Trichlorobenzene | 0.510204 | 11.15195 | 15.95856 | 3.955662E-02 | | | 15 | |
| 1,2,4-Trichlorobenzene | 0.5978181 | 13.4198 | 15.521 | 2.557265E-02 | | | 15 | |
| 1,1,2-Trichloroethane | 0.4520995 | 10.62213 | 9.842667 | 6.054729E-02 | | | 15 | |
| 1,1,1-Trichloroethane | 0.3137102 | 6.314808 | 7.277333 | 7.972291E-02 | | | 15 | |
| Tetrahydrofuran | 8.753059E-02 | 24.39609 | 6.928 | 8.088625E-02 | 0.9995802 | | 0.995 | |
| Trichloroethene | 0.2384711 | 6.483154 | 8.412333 | 8.104842E-02 | | | 15 | |
| Trichlorofluoromethane | 0.4040041 | 4.421798 | 3.443333 | 0.0711888 | | | 15 | |
| 1,2,3-Trichloropropane | 0.1604519 | 12.94579 | 12.18167 | 0.049631 | | | 15 | |
| 1,3,5-Trimethylbenzene | 1.631689 | 7.556347 | 12.71789 | 0.0493266 | | | 15 | |
| 1,2,4-Trimethylbenzene | 1.658949 | 7.474238 | 13.09133 | 5.295763E-02 | | | 15 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.2072873 | 8.432636 | 4.302556 | 0.1663512 | | | 15 | |
| Vinyl chloride | 0.3152422 | 29.09972 | 2.374222 | 0.1915386 | | 0.9981236 | CCC (20) | * |
| m,p-Xylene | 1.557766 | 9.078421 | 11.34 | 6.848237E-02 | | | 15 | |
| o-Xylene | 1.652495 | 8.873298 | 11.73289 | 5.401407E-02 | | | 15 | |
| Vinyl acetate | 0.3762815 | 6.768409 | 5.822778 | 0.1039803 | | | 15 | |
| Xylenes (total) | 1.589343 | 8.838143 | 0 | 0 | | | 15 | |
| Dibromofluoromethane | 0.2932159 | 4.427291 | 6.893333 | 0.0409069 | | | 15 | |
| 1,2-Dichloroethane-d4 | 0.059471 | 4.368149 | 7.391111 | 4.109608E-02 | | | 15 | |
| Toluene-d8 | 2.056027 | 5.771716 | 9.617222 | 3.111463E-02 | | | 15 | |
| tert-Amyl alcohol | 1.751761E-02 | 4.453294 | 7.088 | 8.142149E-02 | | | 15 | |
| tert-Amyl ethyl ether | 0.6737656 | 4.880926 | 8.727444 | 6.940179E-02 | | | 15 | |

# INITIAL CALIBRATION DATA

## SW8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | | Instrument: | MS-VOA4 | |
| Matrix: | Water | | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Acetone | | | | | | | | | | | | |
| Acrolein | 2.501 | ~~5.568948E-02~~ | 5.002 | 3.585282E-02 | 10 | 2.987789E-02 | 25.01 | 1.777999E-02 | 50.02 | 1.273603E-02 | 250.1 | 1.211425E-02 |
| Acrylonitrile | 2.499 | 0.124854 | 4.998 | 0.134431 | 9.996 | 0.1302964 | 24.99 | 0.1242613 | 49.98 | 0.1252671 | 249.9 | 0.1304118 |
| Benzene | 0.5 | 1.08056 | 1 | 0.9719515 | 2 | 0.9334702 | 5 | 0.9247691 | 10 | 0.9081825 | 50 | 0.8875279 |
| Bromobenzene | 0.5 | 0.705512 | 1 | 0.7342649 | 2 | 0.7065945 | 5 | 0.7045195 | 10 | 0.6736183 | 50 | 0.6824926 |
| Bromochloromethane | 0.5 | 0.1621672 | 1 | 0.1624302 | 2 | 0.1520382 | 5 | 0.1451715 | 10 | 0.1435562 | 50 | 0.1385933 |
| Tert-Amyl Methyl Ether | 0.5 | 0.8006564 | 1 | 0.8201087 | 2 | 0.7770061 | 5 | 0.772233 | 10 | 0.7589769 | 50 | 0.7360608 |
| Bromodichloromethane | 0.5 | 0.3485986 | 1 | 0.3709666 | 2 | 0.3427021 | 5 | 0.331761 | 10 | 0.3143367 | 50 | 0.3167253 |
| Bromoform | 0.5 | 0.6739485 | 1 | 0.7085094 | 2 | 0.6980391 | 5 | 0.6988144 | 10 | 0.7139334 | 50 | 0.7781807 |
| Bromomethane | 0.5 | 0.2278535 | 1 | 0.1640012 | 2 | 0.1444606 | 5 | 0.1366239 | 10 | 0.1470018 | 50 | 0.1617592 |
| Bromofluorobenzene | | | | | | | | | | | | |
| n-Butylbenzene | 0.5 | 1.391575 | 1 | 1.09733 | 2 | 1.069643 | 5 | 0.9938672 | 10 | 0.9714506 | 50 | 0.9633661 |
| 2-Butanone | | | | | | | | | | | | |
| sec-Butylbenzene | 0.5 | 1.672491 | 1 | 1.520738 | 2 | 1.452101 | 5 | 1.346056 | 10 | 1.33476 | 50 | 1.333908 |
| tert-Butylbenzene | 0.5 | 1.363982 | 1 | 1.125831 | 2 | 1.086495 | 5 | 1.038697 | 10 | 1.022863 | 50 | 1.041584 |
| Carbon disulfide | 0.5 | 1.004502 | 1 | 0.8525537 | 2 | 0.7881881 | 5 | 0.7818405 | 10 | 0.7843687 | 50 | 0.7681532 |
| Carbon tetrachloride | 0.5 | 0.3327212 | 1 | 0.3062814 | 2 | 0.2799354 | 5 | 0.2805783 | 10 | 0.2876827 | 50 | 0.293355 |
| Chlorobenzene | 0.5 | 1.63174 | 1 | 1.53322 | 2 | 1.459515 | 5 | 1.435774 | 10 | 1.44176 | 50 | 1.550469 |
| Chloroethane | 0.5 | 0.2454595 | 1 | 0.171549 | 2 | 0.1635555 | 5 | 0.1334101 | 10 | 0.155297 | 50 | 0.1437858 |
| Chloroform | 0.5 | 0.5807416 | 1 | 0.5374268 | 2 | 0.4775231 | 5 | 0.4450467 | 10 | 0.4256098 | 50 | 0.4235655 |
| 2-Chloroethyl vinyl ether | 0.9975 | 0.2008904 | 1.995 | 0.2146398 | 3.99 | 0.2169399 | 9.975 | 0.2018437 | 19.95 | 0.1928054 | 99.75 | 0.1969345 |
| Chloromethane | 0.5 | 0.3917493 | 1 | 0.2785494 | 2 | 0.2946045 | 5 | 0.2796278 | 10 | 0.280346 | 50 | 0.2796243 |
| 1-Chlorohexane | 0.4992 | 1.760833 | 0.9984 | 1.454763 | 1.997 | 1.361809 | 4.992 | 1.266139 | 9.984 | 1.296945 | 49.92 | 1.324646 |
| 2-Chlorotoluene | 0.5 | 1.56224 | 1 | 1.266946 | 2 | 1.258994 | 5 | 1.236761 | 10 | 1.187206 | 50 | 1.161849 |
| 4-Chlorotoluene | 0.5 | 1.639671 | 1 | 1.511217 | 2 | 1.448345 | 5 | 1.386386 | 10 | 1.332319 | 50 | 1.319355 |
| Cyclohexane | 0.5 | 0.3926456 | 1 | 0.4150918 | 2 | 0.3994001 | 5 | 0.371572 | 10 | 0.3799964 | 50 | 0.3644676 |
| Dibromochloromethane | 0.5 | 0.650917 | 1 | 0.6933306 | 2 | 0.6566589 | 5 | 0.6566225 | 10 | 0.6402316 | 50 | 0.7020267 |
| 1,2-Dibromo-3-chloropropane | 0.5 | | 1 | 0.1742184 | 2 | 0.1640094 | 5 | 0.172407 | 10 | 0.1685599 | 50 | 0.1767754 |
| 1,2-Dibromoethane (EDB) | 0.5 | 0.6324918 | 1 | 0.7347348 | 2 | 0.6809326 | 5 | 0.6604094 | 10 | 0.6808511 | 50 | 0.6956214 |
| Dibromomethane | 0.5 | 0.1994919 | 1 | 0.2255785 | 2 | 0.2041259 | 5 | 0.19632 | 10 | 0.1930743 | 50 | 0.1926447 |
| 1,2-Dichlorobenzene | 0.5 | 0.9651559 | 1 | 1.040392 | 2 | 0.9990785 | 5 | 0.9581145 | 10 | 0.9449221 | 50 | 0.9693253 |

# INITIAL CALIBRATION DATA

## SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Calibration: 1154004

Instrument: MS-VOA4

Matrix: Water

Calibration Dates: 6/1/11 9:44 6/2/11 11:07

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,3-Dichlorobenzene | 0.5 | 1.077231 | 1 | 1.062398 | 2 | 1.050645 | 5 | 1.009996 | 10 | 0.9490391 | 50 | 0.9795653 |
| 1,4-Dichlorobenzene | 0.5 | 1.213374 | 1 | 1.079234 | 2 | 1.089525 | 5 | 0.9704661 | 10 | 0.9644655 | 50 | 1.023404 |
| Dichlorodifluoromethane | 0.5 | 0.2489807 | 1 | 0.2558378 | 2 | 0.239298 | 5 | 0.2577666 | 10 | 0.2533815 | 50 | 0.2521754 |
| 1,1-Dichloroethane | 0.5 | 0.5123663 | 1 | 0.5136565 | 2 | 0.4759808 | 5 | 0.4668122 | 10 | 0.4620641 | 50 | 0.4654421 |
| 1,2-Dichloroethane | 0.5 | 0.3503272 | 1 | 0.3964103 | 2 | 0.3514533 | 5 | 0.3384486 | 10 | 0.3453712 | 50 | 0.3511849 |
| 1,1-Dichloroethene | 0.5 | 0.2933478 | 1 | 0.2516712 | 2 | 0.2260372 | 5 | 0.2278092 | 10 | 0.2196439 | 50 | 0.2183092 |
| cis-1,2-Dichloroethene | 0.5 | 0.3713904 | 1 | 0.284731 | 2 | 0.3085694 | 5 | 0.2802774 | 10 | 0.2801232 | 50 | 0.2842319 |
| trans-1,2-Dichloroethene | 0.5 | 0.3634517 | 1 | 0.308433 | 2 | 0.2587785 | 5 | 0.2535065 | 10 | 0.2525243 | 50 | 0.2537653 |
| 1,2-Dichloroethene (total) | 1 | 0.367421 | 2 | 0.296582 | 4 | 0.283674 | 10 | 0.2668919 | 20 | 0.2663238 | 100 | 0.2689986 |
| 1,2-Dichloropropane | 0.5 | 0.2770863 | 1 | 0.2797789 | 2 | 0.284311 | 5 | 0.2794295 | 10 | 0.2674982 | 50 | 0.2606778 |
| 1,3-Dichloropropane | 0.5 | 0.8138845 | 1 | 0.9923516 | 2 | 0.9146815 | 5 | 0.9336486 | 10 | 0.9422092 | 50 | 0.9579963 |
| 2,2-Dichloropropane | 0.5 | 0.4452075 | 1 | 0.3900238 | 2 | 0.3358119 | 5 | 0.3117187 | 10 | 0.3166248 | 50 | 0.3031632 |
| 1,1-Dichloropropene | 0.5 | 0.3891244 | 1 | 0.347811 | 2 | 0.3116373 | 5 | 0.310946 | 10 | 0.3130476 | 50 | 0.3182402 |
| cis-1,3-Dichloropropene | 0.5 | 0.4094193 | 1 | 0.4500301 | 2 | 0.4109844 | 5 | 0.396777 | 10 | 0.4076324 | 50 | 0.4011491 |
| trans-1,3-Dichloropropene | 0.5 | 0.8248443 | 1 | 0.884161 | 2 | 0.8648668 | 5 | 0.8333862 | 10 | 0.8513797 | 50 | 0.8719308 |
| 1,3-Dichloropropene (total) | 1 | 0.3709422 | 2 | 0.4040605 | 4 | 0.3885701 | 10 | 0.3737055 | 20 | 0.3801229 | 100 | 0.3731731 |
| Diisopropyl Ether | 0.5 | 1.172431 | 1 | 1.23964 | 2 | 1.209416 | 5 | 1.203392 | 10 | 1.204272 | 50 | 1.202896 |
| Ethylbenzene | 0.5 | 2.922614 | 1 | 2.65476 | 2 | 2.393679 | 5 | 2.262886 | 10 | 2.324657 | 50 | 2.378517 |
| Ethyl tert-Butyl Ether | 0.5 | 0.8716566 | 1 | 0.9477373 | 2 | 0.9144927 | 5 | 0.8689707 | 10 | 0.8915415 | 50 | 0.8734095 |
| Ethyl Methacrylate | 0.5 | 1.087244 | 1 | 1.004832 | 2 | 0.8978918 | 5 | 0.8817377 | 10 | 0.8571731 | 50 | 0.9000604 |
| Hexachlorobutadiene | 0.5 | ~~0.1948545~~ | 1 | 0.1572569 | 2 | 0.1309677 | 5 | 0.1288282 | 10 | 0.1275904 | 50 | 0.1254285 |
| 2-Hexanone | | | | | | | | | | | | |
| Iodomethane | 0.5 | 0.3686374 | 1 | 0.3765335 | 2 | 0.3606403 | 5 | 0.3864789 | 10 | 0.4018885 | 50 | 0.4287394 |
| Isopropylbenzene | 0.5 | 2.272809 | 1 | 1.976439 | 2 | 1.869912 | 5 | 1.764564 | 10 | 1.759089 | 50 | 1.801335 |
| p-Isopropyltoluene | 0.5 | 1.252028 | 1 | 1.084404 | 2 | 1.058535 | 5 | 1.034042 | 10 | 0.9754861 | 50 | 1.017222 |
| Methylene chloride | 0.5 | 0.3338096 | 1 | 0.2958306 | 2 | 0.294001 | 5 | 0.2727624 | 10 | 0.2633675 | 50 | 0.2653206 |
| Methyl Acetate | 0.5 | 0.5081409 | 1 | 0.4734588 | 2 | 0.4085535 | 5 | 0.3141462 | 10 | 0.3462958 | 50 | 0.3247245 |
| Methylcyclohexane | 0.5 | 0.3065363 | 1 | 0.321855 | 2 | 0.259667 | 5 | 0.2458205 | 10 | 0.2474959 | 50 | 0.2441423 |
| Naphthalene | 0.5 | 1.155756 | 1 | 1.219655 | 2 | 1.199254 | 5 | 1.27896 | 10 | 1.203561 | 50 | 1.252348 |
| Methyl Methacrylate | 0.5 | 0.4048097 | 1 | 0.3682344 | 2 | 0.3482848 | 5 | 0.3460046 | 10 | 0.3364179 | 50 | 0.3257833 |
| 4-Methyl-2-pentanone | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1154004 | Instrument: | MS-VOA4 |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 6/2/11 11:07 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl t-Butyl Ether | 0.5 | 0.7393876 | 1 | 0.7793986 | 2 | 0.7247341 | 5 | 0.7121814 | 10 | 0.7286984 | 50 | 0.7215806 |
| n-Propylbenzene | 0.5 | 2.308716 | 1 | 1.974728 | 2 | 1.781887 | 5 | 1.857191 | 10 | 1.756166 | 50 | 1.741161 |
| Styrene | 0.5 | 1.689875 | 1 | 1.631292 | 2 | 1.573677 | 5 | 1.521929 | 10 | 1.552219 | 50 | 1.609894 |
| 1,1,2,2-Tetrachloroethane | 0.5 | 0.6329429 | 1 | 0.6090394 | 2 | 0.6521561 | 5 | 0.6453142 | 10 | 0.6179003 | 50 | 0.6069466 |
| 1,1,1,2-Tetrachloroethane | 0.5 | 0.5938943 | 1 | 0.5781409 | 2 | 0.5265784 | 5 | 0.5402212 | 10 | 0.5299112 | 50 | 0.5747226 |
| tert-Butyl alcohol | 2.5 | 3.541685E-02 | 5 | 3.834665E-02 | 10 | 3.544374E-02 | 25 | 3.912314E-02 | 50 | 3.697134E-02 | 250 | 3.576739E-02 |
| Tetrachloroethene | 0.5 | 1.016085 | 1 | 0.8774992 | 2 | 0.8226946 | 5 | 0.7708135 | 10 | 0.7923856 | 50 | 0.8307157 |
| Toluene | 0.5 | 1.575511 | 1 | 1.442317 | 2 | 1.361707 | 5 | 1.320705 | 10 | 1.341731 | 50 | 1.341295 |
| 1,2,3-Trichlorobenzene | 0.5 | 0.5754469 | 1 | 0.5614967 | 2 | 0.5343798 | 5 | 0.5356452 | 10 | 0.5188969 | 50 | 0.5209851 |
| 1,2,4-Trichlorobenzene | 0.5 | 0.6777972 | 1 | 0.6056345 | 2 | 0.5973705 | 5 | 0.5811193 | 10 | 0.5543059 | 50 | 0.5754435 |
| 1,1,2-Trichloroethane | 0.5 | 0.504151 | 1 | 0.5423023 | 2 | 0.5233313 | 5 | 0.5023363 | 10 | 0.4953052 | 50 | 0.5035184 |
| 1,1,1-Trichloroethane | 0.5 | 0.4332354 | 1 | 0.3887601 | 2 | 0.3569353 | 5 | 0.3563574 | 10 | 0.34066 | 50 | 0.342344 |
| Tetrahydrofuran | 0.5 | ~~0.1943701~~ | 1 | 0.136884 | 2 | 0.1230355 | 5 | 0.1151867 | 10 | 0.1100987 | 50 | 0.1126348 |
| Trichloroethene | 0.5 | 0.3304164 | 1 | 0.292996 | 2 | 0.2656185 | 5 | 0.2553733 | 10 | 0.2511171 | 50 | 0.2435681 |
| Trichlorofluoromethane | 0.5 | 0.3886763 | 1 | 0.4202831 | 2 | 0.375259 | 5 | 0.3817675 | 10 | 0.3781875 | 50 | 0.3853459 |
| 1,2,3-Trichloropropane | 0.5 | 0.2514401 | 1 | 0.227428 | 2 | 0.2239285 | 5 | 0.2083587 | 10 | 0.2077013 | 50 | 0.2068384 |
| 1,3,5-Trimethylbenzene | 0.5 | 1.481162 | 1 | 1.285231 | 2 | 1.291184 | 5 | 1.248661 | 10 | 1.231514 | 50 | 1.229488 |
| 1,2,4-Trimethylbenzene | 0.5 | 1.581689 | 1 | 1.445074 | 2 | 1.373078 | 5 | 1.258666 | 10 | 1.260697 | 50 | 1.27432 |
| 1,1,2-Trichloro-1,2,2-trifluoroethan | 0.5 | 0.2703 | 1 | 0.2629074 | 2 | 0.236951 | 5 | 0.2321581 | 10 | 0.2312126 | 50 | 0.2387872 |
| Vinyl chloride | 0.5 | 0.3096734 | 1 | 0.2409131 | 2 | 0.2087362 | 5 | 0.2281921 | 10 | 0.2278378 | 50 | 0.2013283 |
| m,p-Xylene | 1 | 2.298938 | 2 | 2.094665 | 4 | 1.896383 | 10 | 1.76315 | 20 | 1.767213 | 100 | 1.774028 |
| o-Xylene | 0.5 | 2.266614 | 1 | 2.152934 | 2 | 1.940119 | 5 | 1.849322 | 10 | 1.799195 | 50 | 1.845254 |
| Vinyl acetate | 1.001 | 0.4756544 | 2.002 | 0.4748453 | 4.004 | 0.4065627 | 10.01 | 0.3915407 | 20.02 | 0.3978746 | 100.1 | 0.4077153 |
| Xylenes (total) | 1.5 | 2.288163 | 3 | 2.114088 | 6 | 1.910962 | 15 | 1.791874 | 30 | 1.777873 | 150 | 1.79777 |
| Dibromofluoromethane | | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | | | | | | | | | | | | |
| Toluene-d8 | | | | | | | | | | | | |
| tert-Amyl alcohol | 2.5 | 2.977013E-02 | 5 | 2.902296E-02 | 10 | 2.755431E-02 | 25 | 3.010924E-02 | 50 | 3.044453E-02 | 250 | 2.943999E-02 |
| tert-Amyl ethyl ether | 0.5 | 0.7011026 | 1 | 0.7621857 | 2 | 0.7088412 | 5 | 0.7054528 | 10 | 0.7085848 | 50 | 0.6993899 |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1154004 | Instrument: | MS-VOA4 |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 6/2/11 11:07 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Acetone | | | | | | | 1 | ~~0.2500121~~ | 2 | 0.1535402 | 4 | 0.146459 |
| Acrolein | 500.2 | 1.182615E-02 | 750.3 | 1.193273E-02 | 1000 | 1.131899E-02 | | | | | | |
| Acrylonitrile | 499.8 | 0.1274407 | 749.7 | 0.1285044 | 999.6 | 0.1289924 | | | | | | |
| Benzene | 100 | 0.8663655 | 150 | 0.8541987 | 200 | 0.8320284 | | | | | | |
| Bromobenzene | 100 | 0.6734834 | 150 | 0.694701 | 200 | 0.6814758 | | | | | | |
| Bromochloromethane | 100 | 0.137736 | 150 | 0.1381979 | 200 | 0.1384461 | | | | | | |
| Tert-Amyl Methyl Ether | 100 | 0.7050594 | 150 | 0.7150821 | 200 | 0.6908219 | | | | | | |
| Bromodichloromethane | 100 | 0.3145718 | 150 | 0.3205611 | 200 | 0.3109374 | | | | | | |
| Bromoform | 100 | 0.8355836 | 150 | 0.8634516 | 200 | 0.9170762 | | | | | | |
| Bromomethane | 100 | 0.1654497 | 150 | 0.1688087 | 200 | 0.1694875 | | | | | | |
| Bromofluorobenzene | | | | | | | 30 | 0.9013374 | 35 | 0.8645549 | 40 | 0.8770451 |
| n-Butylbenzene | 100 | 0.9409694 | 150 | 0.915554 | 200 | 0.8868169 | | | | | | |
| 2-Butanone | | | | | | | 1 | 0.2119675 | 2 | 0.218398 | 4 | 0.1873632 |
| sec-Butylbenzene | 100 | 1.278015 | 150 | 1.293468 | 200 | 1.225762 | | | | | | |
| tert-Butylbenzene | 100 | 1.002928 | 150 | 1.001931 | 200 | 0.9661548 | | | | | | |
| Carbon disulfide | 100 | 0.7742379 | 150 | 0.7750027 | 200 | 0.7734551 | | | | | | |
| Carbon tetrachloride | 100 | 0.2915436 | 150 | 0.2936441 | 200 | 0.2911891 | | | | | | |
| Chlorobenzene | 100 | 1.538669 | 150 | 1.554042 | 200 | 1.57159 | | | | | | |
| Chloroethane | 100 | 0.1445435 | 150 | 0.1416332 | 200 | 0.1390003 | | | | | | |
| Chloroform | 100 | 0.4103734 | 150 | 0.4156437 | 200 | 0.4103148 | | | | | | |
| 2-Chloroethyl vinyl ether | 199.5 | 0.1770332 | 299.2 | 0.1765873 | 399 | 0.1764969 | | | | | | |
| Chloromethane | 100 | 0.2783358 | 150 | 0.2920192 | 200 | 0.2842337 | | | | | | |
| 1-Chlorohexane | 99.84 | 1.281823 | 149.8 | 1.274569 | 199.7 | 1.245502 | | | | | | |
| 2-Chlorotoluene | 100 | 1.085399 | 150 | 1.095589 | 200 | 1.037859 | | | | | | |
| 4-Chlorotoluene | 100 | 1.25964 | 150 | 1.226645 | 200 | 1.162101 | | | | | | |
| Cyclohexane | 100 | 0.360921 | 150 | 0.3644257 | 200 | 0.3538782 | | | | | | |
| Dibromochloromethane | 100 | 0.7175703 | 150 | 0.7405133 | 200 | 0.7852495 | | | | | | |
| 1,2-Dibromo-3-chloropropane | 100 | 0.1854054 | 150 | 0.1909515 | 200 | 0.1904689 | | | | | | |
| 1,2-Dibromoethane (EDB) | 100 | 0.7266723 | 150 | 0.7329176 | 200 | 0.771876 | | | | | | |
| Dibromomethane | 100 | 0.1887107 | 150 | 0.1906417 | 200 | 0.1872932 | | | | | | |
| 1,2-Dichlorobenzene | 100 | 0.9517585 | 150 | 0.9520534 | 200 | 0.9281757 | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1154004 | Instrument: | MS-VOA4 |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 6/2/11 11:07 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,3-Dichlorobenzene | 100 | 0.9586107 | 150 | 0.9347412 | 200 | 0.9542279 | | | | | | |
| 1,4-Dichlorobenzene | 100 | 0.9755907 | 150 | 1.000959 | 200 | 0.9572245 | | | | | | |
| Dichlorodifluoromethane | 100 | 0.2498779 | 150 | 0.2494813 | 200 | 0.2430046 | | | | | | |
| 1,1-Dichloroethane | 100 | 0.4491172 | 150 | 0.463654 | 200 | 0.4572872 | | | | | | |
| 1,2-Dichloroethane | 100 | 0.3362652 | 150 | 0.3342031 | 200 | 0.3275413 | | | | | | |
| 1,1-Dichloroethene | 100 | 0.2206959 | 150 | 0.2232522 | 200 | 0.2202121 | | | | | | |
| cis-1,2-Dichloroethene | 100 | 0.2730589 | 150 | 0.2751732 | 200 | 0.2702823 | | | | | | |
| trans-1,2-Dichloroethene | 100 | 0.2474318 | 150 | 0.2483054 | 200 | 0.2346298 | | | | | | |
| 1,2-Dichloroethene (total) | 200 | 0.2602453 | 300 | 0.2617393 | 400 | 0.252456 | | | | | | |
| 1,2-Dichloropropane | 100 | 0.2598495 | 150 | 0.2581914 | 200 | 0.2471885 | | | | | | |
| 1,3-Dichloropropane | 100 | 0.969425 | 150 | 0.9667796 | 200 | 1.013905 | | | | | | |
| 2,2-Dichloropropane | 100 | 0.2878806 | 150 | 0.2808302 | 200 | 0.2590654 | | | | | | |
| 1,1-Dichloropropene | 100 | 0.2997784 | 150 | 0.3030345 | 200 | 0.287569 | | | | | | |
| cis-1,3-Dichloropropene | 100 | 0.3831297 | 150 | 0.3884408 | 200 | 0.3717913 | | | | | | |
| trans-1,3-Dichloropropene | 100 | 0.8507647 | 150 | 0.8699281 | 200 | 0.8473118 | | | | | | |
| 1,3-Dichloropropene (total) | 200 | 0.3502093 | 300 | 0.3568494 | 400 | 0.3360862 | | | | | | |
| Diisopropyl Ether | 100 | 1.122709 | 150 | 1.099738 | 200 | 1.07913 | | | | | | |
| Ethylbenzene | 100 | 2.403512 | 150 | 2.368522 | 200 | 2.411038 | | | | | | |
| Ethyl tert-Butyl Ether | 100 | 0.8397192 | 150 | 0.8518846 | 200 | 0.8103197 | | | | | | |
| Ethyl Methacrylate | 100 | 0.9400471 | 150 | 0.9860916 | 200 | 0.9839426 | | | | | | |
| Hexachlorobutadiene | 100 | 0.1266756 | 150 | 0.1329273 | 200 | 0.1319729 | | | | | | |
| 2-Hexanone | | | | | | | 1 | 0.6929512 | 2 | 0.6237533 | 4 | 0.5694412 |
| Iodomethane | 100 | 0.4291777 | 150 | 0.4412324 | 200 | 0.4380503 | | | | | | |
| Isopropylbenzene | 100 | 1.88096 | 150 | 1.866754 | 200 | 1.901504 | | | | | | |
| p-Isopropyltoluene | 100 | 0.9441253 | 150 | 0.925419 | 200 | 0.9205864 | | | | | | |
| Methylene chloride | 100 | 0.2540317 | 150 | 0.2600047 | 200 | 0.2593153 | | | | | | |
| Methyl Acetate | 100 | 0.3229863 | 150 | 0.3260598 | 200 | 0.3270577 | | | | | | |
| Methylcyclohexane | 100 | 0.2368718 | 150 | 0.2400342 | 200 | 0.23364 | | | | | | |
| Naphthalene | 100 | 1.230488 | 150 | 1.274143 | 200 | 1.24185 | | | | | | |
| Methyl Methacrylate | 100 | 0.3190475 | 150 | 0.3193761 | 200 | 0.3228442 | | | | | | |
| 4-Methyl-2-pentanone | | | | | | | 1 | 0.4120025 | 2 | 0.3609113 | 4 | 0.3731231 |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Calibration: 1154004
Instrument: MS-VOA4
Matrix: Water
Calibration Dates: 6/1/11 9:44 6/2/11 11:07

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl t-Butyl Ether | 100 | 0.701956 | 150 | 0.6980854 | 200 | 0.6663964 | | | | | | |
| n-Propylbenzene | 100 | 1.673974 | 150 | 1.638983 | 200 | 1.554685 | | | | | | |
| Styrene | 100 | 1.615324 | 150 | 1.636518 | 200 | 1.640504 | | | | | | |
| 1,1,2,2-Tetrachloroethane | 100 | 0.6082103 | 150 | 0.6031619 | 200 | 0.5906547 | | | | | | |
| 1,1,1,2-Tetrachloroethane | 100 | 0.5827804 | 150 | 0.598032 | 200 | 0.6234202 | | | | | | |
| tert-Butyl alcohol | 500 | 3.623077E-02 | 750 | 3.518849E-02 | 1000 | 3.880913E-02 | | | | | | |
| Tetrachloroethene | 100 | 0.8913067 | 150 | 0.8966587 | 200 | 0.933639 | | | | | | |
| Toluene | 100 | 1.325724 | 150 | 1.354814 | 200 | 1.316697 | | | | | | |
| 1,2,3-Trichlorobenzene | 100 | 0.5336542 | 150 | 0.5647198 | 200 | 0.5510497 | | | | | | |
| 1,2,4-Trichlorobenzene | 100 | 0.5856847 | 150 | 0.5962185 | 200 | 0.5916147 | | | | | | |
| 1,1,2-Trichloroethane | 100 | 0.5098079 | 150 | 0.5321256 | 200 | 0.5412997 | | | | | | |
| 1,1,1-Trichloroethane | 100 | 0.3396696 | 150 | 0.3462364 | 200 | 0.3388549 | | | | | | |
| Tetrahydrofuran | 100 | 0.1095702 | 150 | 0.1145656 | 200 | 0.1194973 | | | | | | |
| Trichloroethene | 100 | 0.2415281 | 150 | 0.2471 | 200 | 0.2328769 | | | | | | |
| Trichlorofluoromethane | 100 | 0.3707795 | 150 | 0.3806026 | 200 | 0.3846733 | | | | | | |
| 1,2,3-Trichloropropane | 100 | 0.2253608 | 150 | 0.2252519 | 200 | 0.240882 | | | | | | |
| 1,3,5-Trimethylbenzene | 100 | 1.196748 | 150 | 1.166915 | 200 | 1.107202 | | | | | | |
| 1,2,4-Trimethylbenzene | 100 | 1.206052 | 150 | 1.179058 | 200 | 1.126665 | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethar | 100 | 0.2361683 | 150 | 0.2417745 | 200 | 0.2431232 | | | | | | |
| Vinyl chloride | 100 | 0.1752253 | 150 | 0.162141 | 200 | 0.1517728 | | | | | | |
| m,p-Xylene | 200 | 1.644332 | 300 | 1.648055 | 400 | 1.628426 | | | | | | |
| o-Xylene | 100 | 1.894396 | 150 | 1.896493 | 200 | 1.869895 | | | | | | |
| Vinyl acetate | 200.2 | 0.3975312 | 300.3 | 0.3971849 | 400.4 | 0.403404 | | | | | | |
| Xylenes (total) | 300 | 1.727687 | 450 | 1.730868 | 600 | 1.708915 | | | | | | |
| Dibromofluoromethane | | | | | | | 30 | 0.3023525 | 35 | 0.3024719 | 40 | 0.2881281 |
| 1,2-Dichloroethane-d4 | | | | | | | 30 | 6.269874E-02 | 35 | 6.236723E-02 | 40 | 6.131002E-02 |
| Toluene-d8 | | | | | | | 30 | 2.222372 | 35 | 2.113746 | 40 | 2.082663 |
| tert-Amyl alcohol | 500 | 2.928503E-02 | 750 | 3.037335E-02 | 1000 | 3.276653E-02 | | | | | | |
| tert-Amyl ethyl ether | 100 | 0.6641228 | 150 | 0.6715771 | 200 | 0.6458142 | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | Instrument: | MS-VOA4 | |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Acetone | 10 | 0.122563 | 20 | 9.826041E-02 | 100 | 0.1142677 | 200 | 0.1165648 | 300 | 0.11942 | 400 | 0.1245592 |
| Acrolein | | | | | | | | | | | | |
| Acrylonitrile | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | |
| Bromobenzene | | | | | | | | | | | | |
| Bromochloromethane | | | | | | | | | | | | |
| Tert-Amyl Methyl Ether | | | | | | | | | | | | |
| Bromodichloromethane | | | | | | | | | | | | |
| Bromoform | | | | | | | | | | | | |
| Bromomethane | | | | | | | | | | | | |
| Bromofluorobenzene | 50 | 0.8131432 | 60 | 0.7848842 | 70 | 0.7942891 | 30 | 0.9340145 | 30 | 0.9359507 | 30 | 0.9566691 |
| n-Butylbenzene | | | | | | | | | | | | |
| 2-Butanone | 10 | 0.1688955 | 20 | 0.1733884 | 100 | 0.197541 | 200 | 0.1967783 | 300 | 0.2061603 | 400 | 0.2054493 |
| sec-Butylbenzene | | | | | | | | | | | | |
| tert-Butylbenzene | | | | | | | | | | | | |
| Carbon disulfide | | | | | | | | | | | | |
| Carbon tetrachloride | | | | | | | | | | | | |
| Chlorobenzene | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | |
| 2-Chloroethyl vinyl ether | | | | | | | | | | | | |
| Chloromethane | | | | | | | | | | | | |
| 1-Chlorohexane | | | | | | | | | | | | |
| 2-Chlorotoluene | | | | | | | | | | | | |
| 4-Chlorotoluene | | | | | | | | | | | | |
| Cyclohexane | | | | | | | | | | | | |
| Dibromochloromethane | | | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | | | | | | | | | | | |
| 1,2-Dibromoethane (EDB) | | | | | | | | | | | | |
| Dibromomethane | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | Instrument: | MS-VOA4 | |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,3-Dichlorobenzene | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | |
| Dichlorodifluoromethane | | | | | | | | | | | | |
| 1,1-Dichloroethane | | | | | | | | | | | | |
| 1,2-Dichloroethane | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | | | | | | | | | | | |
| trans-1,2-Dichloroethene | | | | | | | | | | | | |
| 1,2-Dichloroethene (total) | | | | | | | | | | | | |
| 1,2-Dichloropropane | | | | | | | | | | | | |
| 1,3-Dichloropropane | | | | | | | | | | | | |
| 2,2-Dichloropropane | | | | | | | | | | | | |
| 1,1-Dichloropropene | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | | | | | | | | | | | | |
| 1,3-Dichloropropene (total) | | | | | | | | | | | | |
| Diisopropyl Ether | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | |
| Ethyl tert-Butyl Ether | | | | | | | | | | | | |
| Ethyl Methacrylate | | | | | | | | | | | | |
| Hexachlorobutadiene | | | | | | | | | | | | |
| 2-Hexanone | 10 | 0.5404148 | 20 | 0.5833559 | 100 | 0.660758 | 200 | 0.6314121 | 300 | 0.6384493 | 400 | 0.6324422 |
| Iodomethane | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | |
| p-Isopropyltoluene | | | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | | |
| Methyl Acetate | | | | | | | | | | | | |
| Methylcyclohexane | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | |
| Methyl Methacrylate | | | | | | | | | | | | |
| 4-Methyl-2-pentanone | 10 | 0.322393 | 20 | 0.3290897 | 100 | 0.3757151 | 200 | 0.3739015 | 300 | 0.3754728 | 400 | 0.3608556 |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | Instrument: | MS-VOA4 | |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl t-Butyl Ether | | | | | | | | | | | | |
| n-Propylbenzene | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | | | | | | | | | | |
| tert-Butyl alcohol | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | | | | | | | | | | | | |
| Tetrahydrofuran | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | |
| Trichlorofluoromethane | | | | | | | | | | | | |
| 1,2,3-Trichloropropane | | | | | | | | | | | | |
| 1,3,5-Trimethylbenzene | | | | | | | | | | | | |
| 1,2,4-Trimethylbenzene | | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethar | | | | | | | | | | | | |
| Vinyl chloride | | | | | | | | | | | | |
| m,p-Xylene | | | | | | | | | | | | |
| o-Xylene | | | | | | | | | | | | |
| Vinyl acetate | | | | | | | | | | | | |
| Xylenes (total) | | | | | | | | | | | | |
| Dibromofluoromethane | 50 | 0.2882012 | 60 | 0.2846933 | 70 | 0.2805484 | 30 | 0.3038395 | 30 | 0.2995113 | 30 | 0.3103738 |
| 1,2-Dichloroethane-d4 | 50 | 6.131786E-02 | 60 | 6.119294E-02 | 70 | 0.0597071 | 30 | 6.339035E-02 | 30 | 6.405888E-02 | 30 | 6.592331E-02 |
| Toluene-d8 | 50 | 2.080724 | 60 | 1.984905 | 70 | 2.019518 | 30 | 2.171069 | 30 | 2.226519 | 30 | 2.274844 |
| tert-Amyl alcohol | | | | | | | | | | | | |
| tert-Amyl ethyl ether | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1154004 | Instrument: | MS-VOA4 |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 6/2/11 11:07 |

| Compound | Level 19 | | Level 20 | | Level 21 | | Level 22 | | Level 23 | | Level 24 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Acetone | | | | | | | | | | | | |
| Acrolein | | | | | | | | | | | | |
| Acrylonitrile | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | |
| Bromobenzene | | | | | | | | | | | | |
| Bromochloromethane | | | | | | | | | | | | |
| Tert-Amyl Methyl Ether | | | | | | | | | | | | |
| Bromodichloromethane | | | | | | | | | | | | |
| Bromoform | | | | | | | | | | | | |
| Bromomethane | | | | | | | | | | | | |
| Bromofluorobenzene | | | | | | | | | | | | |
| n-Butylbenzene | | | | | | | | | | | | |
| 2-Butanone | | | | | | | | | | | | |
| sec-Butylbenzene | | | | | | | | | | | | |
| tert-Butylbenzene | | | | | | | | | | | | |
| Carbon disulfide | | | | | | | | | | | | |
| Carbon tetrachloride | | | | | | | | | | | | |
| Chlorobenzene | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | |
| 2-Chloroethyl vinyl ether | | | | | | | | | | | | |
| Chloromethane | | | | | | | | | | | | |
| 1-Chlorohexane | | | | | | | | | | | | |
| 2-Chlorotoluene | | | | | | | | | | | | |
| 4-Chlorotoluene | | | | | | | | | | | | |
| Cyclohexane | | | | | | | | | | | | |
| Dibromochloromethane | | | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | | | | | | | | | | | |
| 1,2-Dibromoethane (EDB) | | | | | | | | | | | | |
| Dibromomethane | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | Instrument: | MS-VOA4 | |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 19 | | Level 20 | | Level 21 | | Level 22 | | Level 23 | | Level 24 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,3-Dichlorobenzene | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | |
| Dichlorodifluoromethane | | | | | | | | | | | | |
| 1,1-Dichloroethane | | | | | | | | | | | | |
| 1,2-Dichloroethane | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | | | | | | | | | | | |
| trans-1,2-Dichloroethene | | | | | | | | | | | | |
| 1,2-Dichloroethene (total) | | | | | | | | | | | | |
| 1,2-Dichloropropane | | | | | | | | | | | | |
| 1,3-Dichloropropane | | | | | | | | | | | | |
| 2,2-Dichloropropane | | | | | | | | | | | | |
| 1,1-Dichloropropene | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | | | | | | | | | | | | |
| 1,3-Dichloropropene (total) | | | | | | | | | | | | |
| Diisopropyl Ether | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | |
| Ethyl tert-Butyl Ether | | | | | | | | | | | | |
| Ethyl Methacrylate | | | | | | | | | | | | |
| Hexachlorobutadiene | | | | | | | | | | | | |
| 2-Hexanone | | | | | | | | | | | | |
| Iodomethane | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | |
| p-Isopropyltoluene | | | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | | |
| Methyl Acetate | | | | | | | | | | | | |
| Methylcyclohexane | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | |
| Methyl Methacrylate | | | | | | | | | | | | |
| 4-Methyl-2-pentanone | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | Instrument: | MS-VOA4 | |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 19 | | Level 20 | | Level 21 | | Level 22 | | Level 23 | | Level 24 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl t-Butyl Ether | | | | | | | | | | | | |
| n-Propylbenzene | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | | | | | | | | | | |
| tert-Butyl alcohol | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | | | | | | | | | | | | |
| Tetrahydrofuran | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | |
| Trichlorofluoromethane | | | | | | | | | | | | |
| 1,2,3-Trichloropropane | | | | | | | | | | | | |
| 1,3,5-Trimethylbenzene | | | | | | | | | | | | |
| 1,2,4-Trimethylbenzene | | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethan | | | | | | | | | | | | |
| Vinyl chloride | | | | | | | | | | | | |
| m,p-Xylene | | | | | | | | | | | | |
| o-Xylene | | | | | | | | | | | | |
| Vinyl acetate | | | | | | | | | | | | |
| Xylenes (total) | | | | | | | | | | | | |
| Dibromofluoromethane | | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | | | | | | | | | | | | |
| Toluene-d8 | | | | | | | | | | | | |
| tert-Amyl alcohol | | | | | | | | | | | | |
| tert-Amyl ethyl ether | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | Instrument: | MS-VOA4 | |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 25 | | Level 26 | | Level 27 | | Level 28 | | Level 29 | | Level 30 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Acetone | | | | | | | | | | | | |
| Acrolein | | | | | | | | | | | | |
| Acrylonitrile | | | | | | | | | | | | |
| Benzene | | | | | | | | | | | | |
| Bromobenzene | | | | | | | | | | | | |
| Bromochloromethane | | | | | | | | | | | | |
| Tert-Amyl Methyl Ether | | | | | | | | | | | | |
| Bromodichloromethane | | | | | | | | | | | | |
| Bromoform | | | | | | | | | | | | |
| Bromomethane | | | | | | | | | | | | |
| Bromofluorobenzene | | | | | | | | | | | | |
| n-Butylbenzene | | | | | | | | | | | | |
| 2-Butanone | | | | | | | | | | | | |
| sec-Butylbenzene | | | | | | | | | | | | |
| tert-Butylbenzene | | | | | | | | | | | | |
| Carbon disulfide | | | | | | | | | | | | |
| Carbon tetrachloride | | | | | | | | | | | | |
| Chlorobenzene | | | | | | | | | | | | |
| Chloroethane | | | | | | | | | | | | |
| Chloroform | | | | | | | | | | | | |
| 2-Chloroethyl vinyl ether | | | | | | | | | | | | |
| Chloromethane | | | | | | | | | | | | |
| 1-Chlorohexane | | | | | | | | | | | | |
| 2-Chlorotoluene | | | | | | | | | | | | |
| 4-Chlorotoluene | | | | | | | | | | | | |
| Cyclohexane | | | | | | | | | | | | |
| Dibromochloromethane | | | | | | | | | | | | |
| 1,2-Dibromo-3-chloropropane | | | | | | | | | | | | |
| 1,2-Dibromoethane (EDB) | | | | | | | | | | | | |
| Dibromomethane | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | Instrument: | MS-VOA4 | |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 25 | | Level 26 | | Level 27 | | Level 28 | | Level 29 | | Level 30 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,3-Dichlorobenzene | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | |
| Dichlorodifluoromethane | | | | | | | | | | | | |
| 1,1-Dichloroethane | | | | | | | | | | | | |
| 1,2-Dichloroethane | | | | | | | | | | | | |
| 1,1-Dichloroethene | | | | | | | | | | | | |
| cis-1,2-Dichloroethene | | | | | | | | | | | | |
| trans-1,2-Dichloroethene | | | | | | | | | | | | |
| 1,2-Dichloroethene (total) | | | | | | | | | | | | |
| 1,2-Dichloropropane | | | | | | | | | | | | |
| 1,3-Dichloropropane | | | | | | | | | | | | |
| 2,2-Dichloropropane | | | | | | | | | | | | |
| 1,1-Dichloropropene | | | | | | | | | | | | |
| cis-1,3-Dichloropropene | | | | | | | | | | | | |
| trans-1,3-Dichloropropene | | | | | | | | | | | | |
| 1,3-Dichloropropene (total) | | | | | | | | | | | | |
| Diisopropyl Ether | | | | | | | | | | | | |
| Ethylbenzene | | | | | | | | | | | | |
| Ethyl tert-Butyl Ether | | | | | | | | | | | | |
| Ethyl Methacrylate | | | | | | | | | | | | |
| Hexachlorobutadiene | | | | | | | | | | | | |
| 2-Hexanone | | | | | | | | | | | | |
| Iodomethane | | | | | | | | | | | | |
| Isopropylbenzene | | | | | | | | | | | | |
| p-Isopropyltoluene | | | | | | | | | | | | |
| Methylene chloride | | | | | | | | | | | | |
| Methyl Acetate | | | | | | | | | | | | |
| Methylcyclohexane | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | |
| Methyl Methacrylate | | | | | | | | | | | | |
| 4-Methyl-2-pentanone | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | Instrument: | MS-VOA4 | |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Level 25 | | Level 26 | | Level 27 | | Level 28 | | Level 29 | | Level 30 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Methyl t-Butyl Ether | | | | | | | | | | | | |
| n-Propylbenzene | | | | | | | | | | | | |
| Styrene | | | | | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | | | | | | | | | | | | |
| 1,1,1,2-Tetrachloroethane | | | | | | | | | | | | |
| tert-Butyl alcohol | | | | | | | | | | | | |
| Tetrachloroethene | | | | | | | | | | | | |
| Toluene | | | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | | | | | | | | | | | | |
| Tetrahydrofuran | | | | | | | | | | | | |
| Trichloroethene | | | | | | | | | | | | |
| Trichlorofluoromethane | | | | | | | | | | | | |
| 1,2,3-Trichloropropane | | | | | | | | | | | | |
| 1,3,5-Trimethylbenzene | | | | | | | | | | | | |
| 1,2,4-Trimethylbenzene | | | | | | | | | | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethar | | | | | | | | | | | | |
| Vinyl chloride | | | | | | | | | | | | |
| m,p-Xylene | | | | | | | | | | | | |
| o-Xylene | | | | | | | | | | | | |
| Vinyl acetate | | | | | | | | | | | | |
| Xylenes (total) | | | | | | | | | | | | |
| Dibromofluoromethane | | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | | | | | | | | | | | | |
| Toluene-d8 | | | | | | | | | | | | |
| tert-Amyl alcohol | | | | | | | | | | | | |
| tert-Amyl ethyl ether | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | | Instrument: | MS-VOA4 | |
| Matrix: | Water | | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Acetone | 0.1244543 | 14.28107 | 3.82725 | 0.8950139 | | | 15 | |
| Acrolein | 1.792986E-02 | 53.40119 | 3.67625 | 0.4270338 | 0.9990445 | | 0.995 | |
| Acrylonitrile | 0.1282732 | 2.536204 | 4.642111 | 0.4498204 | | | 15 | |
| Benzene | 0.9176726 | 8.152253 | 7.707778 | 0.116721 | | | 15 | |
| Bromobenzene | 0.6951847 | 2.848266 | 12.46144 | 2.242013E-02 | | | 15 | |
| Bromochloromethane | 0.1464818 | 6.883919 | 6.799 | 0.2192656 | | | 15 | |
| Tert-Amyl Methyl Ether | 0.7528895 | 5.873801 | 7.896111 | 0.1089927 | | | 15 | |
| Bromodichloromethane | 0.330129 | 6.152664 | 8.695222 | 0.1011366 | | | 15 | |
| Bromoform | 0.7652819 | 11.40365 | 11.86844 | 2.969539E-02 | | | SPCC (0.1) | |
| Bromomethane | 0.1650496 | 15.95529 | 2.843111 | 0.4712877 | 0.9998357 | | 0.995 | |
| Bromofluorobenzene | 0.8735431 | 7.365354 | 12.305 | 3.107365E-02 | | | 15 | |
| n-Butylbenzene | 1.025619 | 14.92164 | 13.89178 | 1.912957E-02 | | | 15 | |
| 2-Butanone | 0.1962157 | 8.589126 | 6.272222 | 0.3614664 | | | 15 | |
| sec-Butylbenzene | 1.384144 | 10.134 | 13.35056 | 1.598984E-02 | | | 15 | |
| tert-Butylbenzene | 1.072274 | 11.11774 | 13.11689 | 2.878984E-02 | | | 15 | |
| Carbon disulfide | 0.8113669 | 9.461018 | 4.814 | 0.3730948 | | | 15 | |
| Carbon tetrachloride | 0.2952145 | 5.447797 | 7.674778 | 0.1495982 | | | 15 | |
| Chlorobenzene | 1.524087 | 4.307618 | 11.13956 | 2.226072E-02 | | | SPCC (0.3) | |
| Chloroethane | 0.1598038 | 21.51661 | 2.979333 | 0.6053679 | 0.9996905 | | 0.995 | |
| Chloroform | 0.4584717 | 13.46594 | 6.772889 | 0.2136271 | | | CCC (20) | |
| 2-Chloroethyl vinyl ether | 0.1949079 | 8.03336 | 9.053778 | 6.618116E-02 | | | 15 | |
| Chloromethane | 0.2954544 | 12.38932 | 2.261222 | 0.5076517 | | | SPCC (0.1) | |
| 1-Chlorohexane | 1.363003 | 11.89042 | 11.10344 | 3.719483E-02 | | | 15 | |
| 2-Chlorotoluene | 1.210316 | 12.7838 | 12.67956 | 8.98948E-03 | | | 15 | |
| 4-Chlorotoluene | 1.365075 | 10.9514 | 12.74422 | 0.030885 | | | 15 | |
| Cyclohexane | 0.3780443 | 5.400411 | 7.605667 | 0.1520593 | | | 15 | |
| Dibromochloromethane | 0.69368 | 6.960055 | 10.37122 | 4.033945E-02 | | | 15 | |
| 1,2-Dibromo-3-chloropropane | 0.1778495 | 5.66198 | 14.4965 | 3.015333E-02 | | | 15 | |
| 1,2-Dibromoethane (EDB) | 0.7018341 | 6.172114 | 10.585 | 4.948073E-02 | | | 15 | |
| Dibromomethane | 0.1975423 | 5.960937 | 8.630555 | 8.446097E-02 | | | 15 | |
| 1,2-Dichlorobenzene | 0.967664 | 3.456474 | 13.85244 | 1.923404E-02 | | | 15 | |
| 1,3-Dichlorobenzene | 0.9973838 | 5.43904 | 13.44122 | 2.985968E-02 | | | 15 | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1154004 | Instrument: | MS-VOA4 |
| Matrix: | Water | Calibration Dates: | 6/1/11 9:44 6/2/11 11:07 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | 1.030471 | 8.1607 | 13.53344 | 2.397469E-02 | | | 15 | |
| Dichlorodifluoromethane | 0.2499782 | 2.346923 | 2.038889 | 0.286493 | | | 15 | |
| 1,1-Dichloroethane | 0.4740423 | 4.902873 | 5.809444 | 0.334428 | | | SPCC (0.1) | |
| 1,2-Dichloroethane | 0.3479117 | 5.762695 | 7.535556 | 0.1710418 | | | 15 | |
| 1,1-Dichloroethene | 0.2334421 | 10.56729 | 4.274889 | 0.5602396 | | | CCC (20) | |
| cis-1,2-Dichloroethene | 0.291982 | 10.88614 | 6.518444 | 0.2268032 | | | 15 | |
| trans-1,2-Dichloroethene | 0.2689807 | 15.21488 | 5.434556 | 0.3579971 | 0.9987237 | | 0.995 | |
| 1,2-Dichloroethene (total) | 0.2804813 | 12.5364 | 0 | 0 | | | 15 | |
| 1,2-Dichloropropane | 0.2682235 | 4.692176 | 8.517778 | 0.1036952 | | | CCC (20) | |
| 1,3-Dichloropropane | 0.9449868 | 6.087852 | 10.11033 | 5.556447E-02 | | | 15 | |
| 2,2-Dichloropropane | 0.3255918 | 17.9059 | 6.626 | 0.2122837 | 0.9964458 | | 0.995 | |
| 1,1-Dichloropropene | 0.320132 | 9.566496 | 7.554222 | 0.1614125 | | | 15 | |
| cis-1,3-Dichloropropene | 0.4021505 | 5.528688 | 9.269667 | 6.175645E-02 | | | 15 | |
| trans-1,3-Dichloropropene | 0.855397 | 2.234392 | 9.743222 | 5.773969E-02 | | | 15 | |
| 1,3-Dichloropropene (total) | 0.3704132 | 5.52061 | 9.743222 | 5.773969E-02 | | | 15 | |
| Diisopropyl Ether | 1.170403 | 4.796312 | 6.175444 | 0.2919304 | | | 15 | |
| Ethylbenzene | 2.457798 | 8.31427 | 11.28644 | 0.034209 | | | CCC (20) | |
| Ethyl tert-Butyl Ether | 0.8744146 | 4.633722 | 6.640111 | 0.2447499 | | | 15 | |
| Ethyl Methacrylate | 0.94878 | 7.71542 | 9.930556 | 5.396223E-02 | | | 15 | |
| Hexachlorobutadiene | 0.1327059 | 7.731467 | 15.85675 | 2.139758E-02 | | | 15 | |
| 2-Hexanone | 0.6192198 | 7.628299 | 10.05267 | 6.176052E-02 | | | 15 | |
| Iodomethane | 0.4034865 | 7.830375 | 4.473111 | 0.5032445 | | | 15 | |
| Isopropylbenzene | 1.899263 | 8.223105 | 12.18644 | 1.720134E-02 | | | 15 | |
| p-Isopropyltoluene | 1.023539 | 10.13738 | 13.48744 | 2.251504E-02 | | | 15 | |
| Methylene chloride | 0.2776048 | 9.304155 | 4.762444 | 0.4486539 | | | 15 | |
| Methyl Acetate | 0.3723804 | 19.67395 | 4.626667 | 0.5107637 | 0.9999539 | | 0.995 | |
| Methylcyclohexane | 0.2595626 | 12.35499 | 8.846555 | 6.617263E-02 | | | 15 | |
| Naphthalene | 1.228446 | 3.182494 | 15.72889 | 1.804321E-02 | | | 15 | |
| Methyl Methacrylate | 0.3434225 | 8.216907 | 8.650334 | 8.458415E-02 | | | 15 | |
| 4-Methyl-2-pentanone | 0.3648294 | 7.327708 | 9.202111 | 0.0844747 | | | 15 | |
| Methyl t-Butyl Ether | 0.7191576 | 4.324744 | 5.425667 | 0.330039 | | | 15 | |
| n-Propylbenzene | 1.809721 | 12.34725 | 12.59622 | 2.961812E-02 | | | 15 | |

# INITIAL CALIBRATION DATA (Continued)

## SW8260B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1154004 | | Instrument: | MS-VOA4 | |
| Matrix: | Water | | Calibration Dates: | 6/1/11 9:44 | 6/2/11 11:07 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Styrene | 1.607915 | 3.176596 | 11.761 | 1.905337E-02 | | | 15 | |
| 1,1,2,2-Tetrachloroethane | 0.6184807 | 3.333349 | 12.11078 | 3.088946E-02 | | | SPCC (0.3) | |
| 1,1,1,2-Tetrachloroethane | 0.5719668 | 5.800895 | 11.18111 | 3.153766E-02 | | | 15 | |
| tert-Butyl alcohol | 3.681083E-02 | 4.251475 | 4.421778 | 0.5052918 | | | 15 | |
| Tetrachloroethene | 0.8701998 | 8.737997 | 10.48189 | 3.819876E-02 | | | 15 | |
| Toluene | 1.375611 | 6.100282 | 9.744222 | 5.955191E-02 | | | CCC (20) | |
| 1,2,3-Trichlorobenzene | 0.5440305 | 3.678169 | 16.01711 | 0.0263107 | | | 15 | |
| 1,2,4-Trichlorobenzene | 0.5961321 | 5.717414 | 15.57878 | 1.910641E-02 | | | 15 | |
| 1,1,2-Trichloroethane | 0.5171309 | 3.475128 | 9.898667 | 3.675949E-02 | | | 15 | |
| 1,1,1-Trichloroethane | 0.3603392 | 8.747165 | 7.336111 | 0.1430505 | | | 15 | |
| Tetrahydrofuran | 0.1176841 | 7.636741 | 6.980875 | 0.2257993 | | | 15 | |
| Trichloroethene | 0.2622883 | 11.78614 | 8.471667 | 0.1076816 | | | 15 | |
| Trichlorofluoromethane | 0.3850639 | 3.709107 | 3.483333 | 0.5719007 | | | 15 | |
| 1,2,3-Trichloropropane | 0.2241322 | 6.799072 | 12.23556 | 2.044686E-02 | | | 15 | |
| 1,3,5-Trimethylbenzene | 1.248678 | 8.363577 | 12.775 | 0.0284411 | | | 15 | |
| 1,2,4-Trimethylbenzene | 1.300589 | 10.97993 | 13.14878 | 2.745792E-02 | | | 15 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.2437091 | 5.61128 | 4.355889 | 0.5540275 | | | 15 | |
| Vinyl chloride | 0.2117578 | 22.6961 | 2.400444 | 0.5586778 | | 0.9999339 | CCC (20) | * |
| m,p-Xylene | 1.835021 | 12.39518 | 11.39711 | 2.659833E-02 | | | 15 | |
| o-Xylene | 1.946025 | 8.076146 | 11.79067 | 2.659442E-02 | | | 15 | |
| Vinyl acetate | 0.4169237 | 8.0234 | 5.879444 | 0.3065762 | | | 15 | |
| Xylenes (total) | 1.872022 | 10.70777 | 0 | 0 | | | 15 | |
| Dibromofluoromethane | 0.2955689 | 3.488133 | 6.962778 | 0.2358843 | | | 15 | |
| 1,2-Dichloroethane-d4 | 6.244071E-02 | 2.957918 | 7.460444 | 0.1948803 | | | 15 | |
| Toluene-d8 | 2.130707 | 4.655061 | 9.681111 | 7.584852E-02 | | | 15 | |
| tert-Amyl alcohol | 0.0298629 | 4.683176 | 7.143111 | 0.2273236 | | | 15 | |
| tert-Amyl ethyl ether | 0.6963412 | 4.806273 | 8.781889 | 8.453099E-02 | | | 15 | |

# INITIAL CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA5 | Calibration: | 1110001 |
| Lab File ID: | 0415ICV2.D | Calibration Date: | 04/15/11 09:53 |
| Sequence: | 1D10810 | Injection Date: | 04/15/11 |
| Lab Sample ID: | 1D10810-ICV2 | Injection Time: | 14:01 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Benzene | A | 100.0 | 101.0 | 0.8165687 | 0.824451 | | 1.0 | 20 |
| Bromobenzene | A | 100.0 | 103.1 | 0.622891 | 0.6420056 | | 3.1 | 20 |
| Bromochloromethane | A | 100.0 | 104.8 | 0.1322805 | 0.1386195 | | 4.8 | 20 |
| Bromodichloromethane | A | 100.0 | 107.1 | 0.3200121 | 0.3427536 | | 7.1 | 20 |
| Bromoform | A | 100.0 | 108.2 | 0.3605704 | 0.3900612 | 0.1 | 8.2 | 20 |
| Bromomethane | L | 100.0 | 96.76 | 0.2069788 | 0.2391732 | | -3.2 | 20 |
| n-Butylbenzene | A | 100.0 | 100.1 | 1.504611 | 1.505666 | | 0.07 | 20 |
| sec-Butylbenzene | A | 100.0 | 99.74 | 1.956089 | 1.950953 | | -0.3 | 20 |
| tert-Butylbenzene | A | 100.0 | 101.4 | 1.609584 | 1.63259 | | 1.4 | 20 |
| Carbon disulfide | A | 100.0 | 106.3 | 0.6773833 | 0.7200851 | | 6.3 | 20 |
| Carbon tetrachloride | A | 100.0 | 107.2 | 0.2397952 | 0.2570399 | | 7.2 | 20 |
| Chlorobenzene | A | 100.0 | 101.7 | 1.27837 | 1.300708 | 0.3 | 1.7 | 20 |
| Chloroethane | A | 100.0 | 93.79 | 0.2523708 | 0.2366934 | | -6.2 | 20 |
| Chloroform | A | 100.0 | 98.98 | 0.4294733 | 0.4250874 | | -1.0 | 20 |
| Chloromethane | A | 100.0 | 109.4 | 0.4745789 | 0.5191108 | 0.1 | 9.4 | 20 |
| 2-Chlorotoluene | A | 100.0 | 100.5 | 1.535306 | 1.542716 | | 0.5 | 20 |
| 4-Chlorotoluene | A | 100.0 | 103.1 | 1.734834 | 1.787788 | | 3.1 | 20 |
| Dibromochloromethane | A | 100.0 | 106.8 | 0.5303833 | 0.5662585 | | 6.8 | 20 |
| 1,2-Dibromo-3-chloropropane | A | 100.0 | 109.5 | 0.1125661 | 0.1232466 | | 9.5 | 20 |
| 1,2-Dibromoethane (EDB) | A | 100.0 | 99.56 | 0.5576892 | 0.5552454 | | -0.4 | 20 |
| Dibromomethane | A | 100.0 | 107.9 | 0.1598632 | 0.172451 | | 7.9 | 20 |
| 1,2-Dichlorobenzene | A | 100.0 | 102.7 | 0.9737531 | 1.0004 | | 2.7 | 20 |
| 1,3-Dichlorobenzene | A | 100.0 | 97.34 | 1.069325 | 1.040926 | | -2.7 | 20 |
| 1,4-Dichlorobenzene | A | 100.0 | 95.30 | 1.125829 | 1.072881 | | -4.7 | 20 |
| Dichlorodifluoromethane | L | 100.0 | 118.6 | 0.2985279 | 0.3640635 | | 18.6 | 20 |
| 1,1-Dichloroethane | A | 100.0 | 102.7 | 0.4614852 | 0.4740397 | 0.1 | 2.7 | 20 |
| 1,2-Dichloroethane | A | 100.0 | 104.8 | 0.3353382 | 0.351463 | | 4.8 | 20 |
| 1,1-Dichloroethene | A | 100.0 | 99.74 | 0.2191262 | 0.2185616 | | -0.3 | 20 |
| cis-1,2-Dichloroethene | A | 100.0 | 98.50 | 0.2631228 | 0.2591797 | | -1.5 | 20 |

# INITIAL CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA5 | Calibration: | 1110001 |
| Lab File ID: | 0415ICV2.D | Calibration Date: | 04/15/11 09:53 |
| Sequence: | 1D10810 | Injection Date: | 04/15/11 |
| Lab Sample ID: | 1D10810-ICV2 | Injection Time: | 14:01 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| trans-1,2-Dichloroethene | A | 100.0 | 99.02 | 0.2436546 | 0.241263 | | -1.0 | 20 |
| 1,2-Dichloropropane | A | 100.0 | 100.1 | 0.2855651 | 0.2858466 | | 0.1 | 20 |
| 1,3-Dichloropropane | A | 100.0 | 98.50 | 0.8114537 | 0.7992979 | | -1.5 | 20 |
| 2,2-Dichloropropane | A | 100.0 | 96.05 | 0.3095193 | 0.2972889 | | -4.0 | 20 |
| 1,1-Dichloropropene | A | 100.0 | 103.4 | 0.3108414 | 0.3214466 | | 3.4 | 20 |
| cis-1,3-Dichloropropene | A | 100.0 | 100.3 | 0.3753906 | 0.3764082 | | 0.3 | 20 |
| trans-1,3-Dichloropropene | A | 100.0 | 117.0 | 0.7331598 | 0.8574418 | | 17.0 | 20 |
| Ethylbenzene | A | 100.0 | 99.98 | 2.034033 | 2.033602 | | -0.02 | 20 |
| Hexachlorobutadiene | A | 100.0 | 96.78 | 0.2336594 | 0.2261327 | | -3.2 | 20 |
| Isopropylbenzene | A | 100.0 | 106.1 | 1.559553 | 1.654837 | | 6.1 | 20 |
| p-Isopropyltoluene | A | 100.0 | 103.3 | 1.67706 | 1.733075 | | 3.3 | 20 |
| Methylene chloride | A | 100.0 | 101.1 | 0.2560903 | 0.2589239 | | 1.1 | 20 |
| Naphthalene | A | 100.0 | 100.6 | 1.327067 | 1.334716 | | 0.6 | 20 |
| Methyl t-Butyl Ether | A | 100.0 | 107.3 | 0.5601073 | 0.6009371 | | 7.3 | 20 |
| n-Propylbenzene | A | 100.0 | 99.75 | 2.48505 | 2.47879 | | -0.3 | 20 |
| Styrene | A | 100.0 | 103.7 | 1.314151 | 1.362554 | | 3.7 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 100.0 | 99.25 | 0.7120744 | 0.7067488 | 0.3 | -0.7 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 100.0 | 105.4 | 0.4766101 | 0.50231 | | 5.4 | 20 |
| Tetrachloroethene | A | 100.0 | 105.7 | 0.4624975 | 0.488637 | | 5.7 | 20 |
| Toluene | A | 100.0 | 100.4 | 1.118865 | 1.123341 | | 0.4 | 20 |
| 1,2,3-Trichlorobenzene | A | 100.0 | 100.2 | 0.510204 | 0.5110584 | | 0.2 | 20 |
| 1,2,4-Trichlorobenzene | A | 100.0 | 94.82 | 0.5978181 | 0.5668317 | | -5.2 | 20 |
| 1,1,2-Trichloroethane | A | 100.0 | 93.72 | 0.4520995 | 0.4236851 | | -6.3 | 20 |
| 1,1,1-Trichloroethane | A | 100.0 | 101.5 | 0.3137102 | 0.3183372 | | 1.5 | 20 |
| Trichloroethene | A | 100.0 | 104.8 | 0.2384711 | 0.2498765 | | 4.8 | 20 |
| Trichlorofluoromethane | A | 100.0 | 102.4 | 0.4040041 | 0.4136587 | | 2.4 | 20 |
| 1,2,3-Trichloropropane | A | 100.0 | 97.79 | 0.1604519 | 0.1569078 | | -2.2 | 20 |
| 1,3,5-Trimethylbenzene | A | 100.0 | 97.87 | 1.631689 | 1.597009 | | -2.1 | 20 |
| 1,2,4-Trimethylbenzene | A | 100.0 | 100.5 | 1.658949 | 1.66648 | | 0.5 | 20 |

# INITIAL CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA5 | Calibration: | 1110001 |
| Lab File ID: | 0415ICV2.D | Calibration Date: | 04/15/11 09:53 |
| Sequence: | 1D10810 | Injection Date: | 04/15/11 |
| Lab Sample ID: | 1D10810-ICV2 | Injection Time: | 14:01 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Vinyl chloride | Q | 100.0 | 102.4 | 0.3152422 | 0.2413318 | | 2.4 | 20 |
| m,p-Xylene | A | 200.0 | 201.0 | 1.557766 | 1.565944 | | 0.5 | 20 |
| o-Xylene | A | 100.0 | 97.88 | 1.652495 | 1.617519 | | -2.1 | 20 |
| Bromofluorobenzene | A | 30.00 | 29.40 | 0.8430908 | 0.8261078 | | -2.0 | 20 |
| Dibromofluoromethane | A | 30.00 | 31.09 | 0.2932159 | 0.3038724 | | 3.6 | 20 |
| 1,2-Dichloroethane-d4 | A | 30.00 | 31.37 | 0.059471 | 6.218618E-02 | | 4.6 | 20 |
| Toluene-d8 | A | 30.00 | 29.51 | 2.056027 | 2.022546 | | -1.6 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA5 | Calibration: | 1110001 |
| Lab File ID: | 0415ICV4.D | Calibration Date: | 04/15/11 09:53 |
| Sequence: | 1D10810 | Injection Date: | 04/15/11 |
| Lab Sample ID: | 1D10810-ICV4 | Injection Time: | 18:35 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Acetone | A | 200.0 | 193.8 | 0.095435 | 9.246636E-02 | | -3.1 | 20 |
| 2-Butanone | A | 200.0 | 193.5 | 0.1381845 | 0.1336721 | | -3.3 | 20 |
| 2-Hexanone | A | 200.0 | 191.1 | 0.4812427 | 0.4599205 | | -4.4 | 20 |
| 4-Methyl-2-pentanone | A | 200.0 | 202.1 | 0.2783504 | 0.2812516 | | 1.0 | 20 |
| Bromofluorobenzene | A | 30.00 | 30.34 | 0.8430908 | 0.8527844 | | 1.1 | 20 |
| Dibromofluoromethane | A | 30.00 | 30.47 | 0.2932159 | 0.2978434 | | 1.6 | 20 |
| 1,2-Dichloroethane-d4 | A | 30.00 | 30.34 | 0.059471 | 6.014053E-02 | | 1.1 | 20 |
| Toluene-d8 | A | 30.00 | 30.96 | 2.056027 | 2.121687 | | 3.2 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA4 | Calibration: | 1154004 |
| Lab File ID: | 0601ICV2.D | Calibration Date: | 06/01/11 09:44 |
| Sequence: | 1F15404 | Injection Date: | 06/01/11 |
| Lab Sample ID: | 1F15404-ICV2 | Injection Time: | 16:25 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Benzene | A | 100.0 | 97.70 | 0.9176726 | 0.8965907 | | -2.3 | 20 |
| Bromobenzene | A | 100.0 | 93.32 | 0.6951847 | 0.6487312 | | -6.7 | 20 |
| Bromochloromethane | A | 100.0 | 95.80 | 0.1464818 | 0.1403296 | | -4.2 | 20 |
| Bromodichloromethane | A | 100.0 | 101.3 | 0.330129 | 0.334571 | | 1.3 | 20 |
| Bromoform | A | 100.0 | 107.0 | 0.7652819 | 0.8185113 | 0.1 | 7.0 | 20 |
| Bromomethane | L | 100.0 | 93.74 | 0.1650496 | 0.1574083 | | -6.3 | 20 |
| n-Butylbenzene | A | 100.0 | 89.17 | 1.025619 | 0.9145394 | | -10.8 | 20 |
| sec-Butylbenzene | A | 100.0 | 90.31 | 1.384144 | 1.250011 | | -9.7 | 20 |
| tert-Butylbenzene | A | 100.0 | 92.54 | 1.072274 | 0.9922483 | | -7.5 | 20 |
| Carbon disulfide | A | 100.0 | 99.56 | 0.8113669 | 0.8078019 | | -0.4 | 20 |
| Carbon tetrachloride | A | 100.0 | 102.2 | 0.2952145 | 0.3017524 | | 2.2 | 20 |
| Chlorobenzene | A | 100.0 | 98.94 | 1.524087 | 1.507937 | 0.3 | -1.1 | 20 |
| Chloroethane | L | 100.0 | 100.0 | 0.1598038 | 0.1410562 | | 0.002 | 20 |
| Chloroform | A | 100.0 | 92.81 | 0.4584717 | 0.4255207 | | -7.2 | 20 |
| Chloromethane | A | 100.0 | 102.7 | 0.2954544 | 0.3034532 | 0.1 | 2.7 | 20 |
| 2-Chlorotoluene | A | 100.0 | 88.19 | 1.210316 | 1.067388 | | -11.8 | 20 |
| 4-Chlorotoluene | A | 100.0 | 90.17 | 1.365075 | 1.230909 | | -9.8 | 20 |
| Dibromochloromethane | A | 100.0 | 106.1 | 0.69368 | 0.7362012 | | 6.1 | 20 |
| 1,2-Dibromo-3-chloropropane | A | 100.0 | 104.9 | 0.1778495 | 0.1865752 | | 4.9 | 20 |
| 1,2-Dibromoethane (EDB) | A | 100.0 | 102.2 | 0.7018341 | 0.7170393 | | 2.2 | 20 |
| Dibromomethane | A | 100.0 | 100.8 | 0.1975423 | 0.199048 | | 0.8 | 20 |
| 1,2-Dichlorobenzene | A | 100.0 | 94.91 | 0.967664 | 0.918418 | | -5.1 | 20 |
| 1,3-Dichlorobenzene | A | 100.0 | 94.15 | 0.9973838 | 0.9390164 | | -5.9 | 20 |
| 1,4-Dichlorobenzene | A | 100.0 | 94.63 | 1.030471 | 0.9751141 | | -5.4 | 20 |
| Dichlorodifluoromethane | A | 100.0 | 114.1 | 0.2499782 | 0.2852896 | | 14.1 | 20 |
| 1,1-Dichloroethane | A | 100.0 | 97.62 | 0.4740423 | 0.4627684 | 0.1 | -2.4 | 20 |
| 1,2-Dichloroethane | A | 100.0 | 97.52 | 0.3479117 | 0.3392946 | | -2.5 | 20 |
| 1,1-Dichloroethene | A | 100.0 | 101.9 | 0.2334421 | 0.237992 | | 1.9 | 20 |
| cis-1,2-Dichloroethene | A | 100.0 | 94.42 | 0.291982 | 0.2756958 | | -5.6 | 20 |

# INITIAL CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA4 | Calibration: | 1154004 |
| Lab File ID: | 0601ICV2.D | Calibration Date: | 06/01/11 09:44 |
| Sequence: | 1F15404 | Injection Date: | 06/01/11 |
| Lab Sample ID: | 1F15404-ICV2 | Injection Time: | 16:25 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| trans-1,2-Dichloroethene | L | 100.0 | 104.5 | 0.2689807 | 0.2527301 | | 4.5 | 20 |
| 1,2-Dichloropropane | A | 100.0 | 97.10 | 0.2682235 | 0.2604352 | | -2.9 | 20 |
| 1,3-Dichloropropane | A | 100.0 | 100.7 | 0.9449868 | 0.9519298 | | 0.7 | 20 |
| 2,2-Dichloropropane | L | 100.0 | 88.42 | 0.3255918 | 0.2423321 | | -11.6 | 20 |
| 1,1-Dichloropropene | A | 100.0 | 96.48 | 0.320132 | 0.3088693 | | -3.5 | 20 |
| cis-1,3-Dichloropropene | A | 100.0 | 94.42 | 0.4021505 | 0.3797114 | | -5.6 | 20 |
| trans-1,3-Dichloropropene | A | 100.0 | 107.0 | 0.855397 | 0.9149766 | | 7.0 | 20 |
| Ethylbenzene | A | 100.0 | 97.22 | 2.457798 | 2.389417 | | -2.8 | 20 |
| Hexachlorobutadiene | A | 100.0 | 101.6 | 0.1327059 | 0.1348139 | | 1.6 | 20 |
| Isopropylbenzene | A | 100.0 | 102.5 | 1.899263 | 1.945949 | | 2.5 | 20 |
| p-Isopropyltoluene | A | 100.0 | 98.86 | 1.023539 | 1.01192 | | -1.1 | 20 |
| Methylene chloride | A | 100.0 | 97.54 | 0.2776048 | 0.2707658 | | -2.5 | 20 |
| Naphthalene | A | 100.0 | 104.6 | 1.228446 | 1.285237 | | 4.6 | 20 |
| Methyl t-Butyl Ether | A | 100.0 | 94.09 | 0.7191576 | 0.676666 | | -5.9 | 20 |
| n-Propylbenzene | A | 100.0 | 88.59 | 1.809721 | 1.603163 | | -11.4 | 20 |
| Styrene | A | 100.0 | 100.0 | 1.607915 | 1.608437 | | 0.03 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 100.0 | 95.50 | 0.6184807 | 0.5906658 | 0.3 | -4.5 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 100.0 | 100.0 | 0.5719668 | 0.5720161 | | 0.009 | 20 |
| Tetrachloroethene | A | 100.0 | 100.5 | 0.8701998 | 0.8748161 | | 0.5 | 20 |
| Toluene | A | 100.0 | 96.58 | 1.375611 | 1.328506 | | -3.4 | 20 |
| 1,2,3-Trichlorobenzene | A | 100.0 | 104.8 | 0.5440305 | 0.5703365 | | 4.8 | 20 |
| 1,2,4-Trichlorobenzene | A | 100.0 | 97.03 | 0.5961321 | 0.5784477 | | -3.0 | 20 |
| 1,1,2-Trichloroethane | A | 100.0 | 96.35 | 0.5171309 | 0.4982638 | | -3.6 | 20 |
| 1,1,1-Trichloroethane | A | 100.0 | 96.26 | 0.3603392 | 0.346852 | | -3.7 | 20 |
| Trichloroethene | A | 100.0 | 93.51 | 0.2622883 | 0.2452597 | | -6.5 | 20 |
| Trichlorofluoromethane | A | 100.0 | 102.0 | 0.3850639 | 0.3926879 | | 2.0 | 20 |
| 1,2,3-Trichloropropane | A | 100.0 | 99.14 | 0.2241322 | 0.2221958 | | -0.9 | 20 |
| 1,3,5-Trimethylbenzene | A | 100.0 | 90.18 | 1.248678 | 1.126032 | | -9.8 | 20 |
| 1,2,4-Trimethylbenzene | A | 100.0 | 91.53 | 1.300589 | 1.190459 | | -8.5 | 20 |

# INITIAL CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA4 | Calibration: | 1154004 |
| Lab File ID: | 0601ICV2.D | Calibration Date: | 06/01/11 09:44 |
| Sequence: | 1F15404 | Injection Date: | 06/01/11 |
| Lab Sample ID: | 1F15404-ICV2 | Injection Time: | 16:25 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Vinyl chloride | Q | 100.0 | 98.98 | 0.2117578 | 0.1751651 | | -1.0 | 20 |
| m,p-Xylene | A | 200.0 | 180.9 | 1.835021 | 1.659619 | | -9.6 | 20 |
| o-Xylene | A | 100.0 | 96.71 | 1.946025 | 1.882044 | | -3.3 | 20 |
| Bromofluorobenzene | A | 30.00 | 33.84 | 0.8735431 | 0.9854771 | | 12.8 | 20 |
| Dibromofluoromethane | A | 30.00 | 31.71 | 0.2955689 | 0.3124241 | | 5.7 | 20 |
| 1,2-Dichloroethane-d4 | A | 30.00 | 31.24 | 6.244071E-02 | 0.065017 | | 4.1 | 20 |
| Toluene-d8 | A | 30.00 | 34.16 | 2.130707 | 2.425819 | | 13.9 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA4 | Calibration: | 1154004 |
| Lab File ID: | 601ICV4.D | Calibration Date: | 06/01/11 09:44 |
| Sequence: | 1F15404 | Injection Date: | 06/02/11 |
| Lab Sample ID: | 1F15404-ICV4 | Injection Time: | 13:27 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Acetone | A | 200.0 | 208.0 | 0.1244543 | 0.1294575 | | 4.0 | 20 |
| 2-Butanone | A | 200.0 | 229.8 | 0.1962157 | 0.2254106 | | 14.9 | 20 |
| 2-Hexanone | A | 200.0 | 231.9 | 0.6192198 | 0.7178454 | | 15.9 | 20 |
| 4-Methyl-2-pentanone | A | 200.0 | 230.4 | 0.3648294 | 0.4201922 | | 15.2 | 20 |
| Bromofluorobenzene | A | 30.00 | 32.76 | 0.8735431 | 0.9537777 | | 9.2 | 20 |
| Dibromofluoromethane | A | 30.00 | 31.98 | 0.2955689 | 0.3150766 | | 6.6 | 20 |
| 1,2-Dichloroethane-d4 | A | 30.00 | 30.34 | 6.244071E-02 | 6.314808E-02 | | 1.1 | 20 |
| Toluene-d8 | A | 30.00 | 31.82 | 2.130707 | 2.260165 | | 6.1 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA5 | Calibration: | 1110001 |
| Lab File ID: | 0528CC1.D | Calibration Date: | 04/15/11 09:53 |
| Sequence: | 1E15001 | Injection Date: | 05/28/11 |
| Lab Sample ID: | 1E15001-CCV1 | Injection Time: | 10:35 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Acetone | A | 200.0 | 201.8 | 0.095435 | 9.629893E-02 | | 0.9 | 20 |
| Benzene | A | 100.0 | 104.6 | 0.8165687 | 0.8537709 | | 4.6 | 20 |
| Bromobenzene | A | 100.0 | 100.9 | 0.622891 | 0.6286349 | | 0.9 | 20 |
| Bromochloromethane | A | 100.0 | 93.07 | 0.1322805 | 0.1231093 | | -6.9 | 20 |
| Bromodichloromethane | A | 100.0 | 91.02 | 0.3200121 | 0.291293 | | -9.0 | 20 |
| Bromoform | A | 100.0 | 98.08 | 0.3605704 | 0.3536559 | 0.1 | -1.9 | 20 |
| Bromomethane | L | 100.0 | 25.43 | 0.2069788 | 5.941753E-02 | | -74.6 | 20 * |
| n-Butylbenzene | A | 100.0 | 100.7 | 1.504611 | 1.515168 | | 0.7 | 20 |
| 2-Butanone | A | 200.0 | 221.0 | 0.1381845 | 0.1526711 | | 10.5 | 20 |
| sec-Butylbenzene | A | 100.0 | 100.1 | 1.956089 | 1.958487 | | 0.1 | 20 |
| tert-Butylbenzene | A | 100.0 | 101.9 | 1.609584 | 1.640321 | | 1.9 | 20 |
| Carbon disulfide | A | 100.0 | 118.3 | 0.6773833 | 0.8015826 | | 18.3 | 20 |
| Carbon tetrachloride | A | 100.0 | 89.38 | 0.2397952 | 0.2143305 | | -10.6 | 20 |
| Chlorobenzene | A | 100.0 | 102.0 | 1.27837 | 1.303875 | 0.3 | 2.0 | 20 |
| Chloroethane | A | 100.0 | 93.36 | 0.2523708 | 0.2356238 | | -6.6 | 20 |
| Chloroform | A | 100.0 | 92.44 | 0.4294733 | 0.3970198 | | -7.6 | 20 |
| Chloromethane | A | 100.0 | 83.00 | 0.4745789 | 0.3939077 | 0.1 | -17.0 | 20 |
| 2-Chlorotoluene | A | 100.0 | 97.40 | 1.535306 | 1.495315 | | -2.6 | 20 |
| 4-Chlorotoluene | A | 100.0 | 98.29 | 1.734834 | 1.705113 | | -1.7 | 20 |
| Dibromochloromethane | A | 100.0 | 99.42 | 0.5303833 | 0.5273116 | | -0.6 | 20 |
| 1,2-Dibromo-3-chloropropane | A | 100.0 | 98.04 | 0.1125661 | 0.1103652 | | -2.0 | 20 |
| 1,2-Dibromoethane (EDB) | A | 100.0 | 101.7 | 0.5576892 | 0.5674326 | | 1.7 | 20 |
| Dibromomethane | A | 100.0 | 99.30 | 0.1598632 | 0.158751 | | -0.7 | 20 |
| 1,2-Dichlorobenzene | A | 100.0 | 100.2 | 0.9737531 | 0.9761274 | | 0.2 | 20 |
| 1,3-Dichlorobenzene | A | 100.0 | 93.30 | 1.069325 | 0.9976557 | | -6.7 | 20 |
| 1,4-Dichlorobenzene | A | 100.0 | 92.54 | 1.125829 | 1.041821 | | -7.5 | 20 |
| Dichlorodifluoromethane | L | 100.0 | 98.25 | 0.2985279 | 0.3017174 | | -1.8 | 20 |
| 1,1-Dichloroethane | A | 100.0 | 103.2 | 0.4614852 | 0.4761 | 0.1 | 3.2 | 20 |
| 1,2-Dichloroethane | A | 100.0 | 89.85 | 0.3353382 | 0.3013094 | | -10.1 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA5 | Calibration: | 1110001 |
| Lab File ID: | 0528CC1.D | Calibration Date: | 04/15/11 09:53 |
| Sequence: | 1E15001 | Injection Date: | 05/28/11 |
| Lab Sample ID: | 1E15001-CCV1 | Injection Time: | 10:35 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 1,1-Dichloroethene | A | 100.0 | 95.37 | 0.2191262 | 0.2089801 | | -4.6 | 20 |
| cis-1,2-Dichloroethene | A | 100.0 | 98.78 | 0.2631228 | 0.2599269 | | -1.2 | 20 |
| trans-1,2-Dichloroethene | A | 100.0 | 99.00 | 0.2436546 | 0.2412088 | | -1.0 | 20 |
| 1,2-Dichloropropane | A | 100.0 | 100.9 | 0.2855651 | 0.2882022 | | 0.9 | 20 |
| 1,3-Dichloropropane | A | 100.0 | 103.9 | 0.8114537 | 0.842977 | | 3.9 | 20 |
| 2,2-Dichloropropane | A | 100.0 | 90.15 | 0.3095193 | 0.2790465 | | -9.8 | 20 |
| 1,1-Dichloropropene | A | 100.0 | 97.70 | 0.3108414 | 0.3036934 | | -2.3 | 20 |
| cis-1,3-Dichloropropene | A | 100.0 | 98.67 | 0.3753906 | 0.3703953 | | -1.3 | 20 |
| trans-1,3-Dichloropropene | A | 100.0 | 101.2 | 0.7331598 | 0.7418291 | | 1.2 | 20 |
| Ethylbenzene | A | 100.0 | 105.0 | 2.034033 | 2.136782 | | 5.1 | 20 |
| Hexachlorobutadiene | A | 100.0 | 86.24 | 0.2336594 | 0.2015212 | | -13.8 | 20 |
| 2-Hexanone | A | 200.0 | 198.9 | 0.4812427 | 0.4785505 | | -0.6 | 20 |
| Isopropylbenzene | A | 100.0 | 105.4 | 1.559553 | 1.643443 | | 5.4 | 20 |
| p-Isopropyltoluene | A | 100.0 | 98.73 | 1.67706 | 1.655815 | | -1.3 | 20 |
| Methylene chloride | A | 100.0 | 101.5 | 0.2560903 | 0.2598443 | | 1.5 | 20 |
| Naphthalene | A | 100.0 | 102.4 | 1.327067 | 1.359186 | | 2.4 | 20 |
| 4-Methyl-2-pentanone | A | 200.0 | 201.6 | 0.2783504 | 0.2806087 | | 0.8 | 20 |
| Methyl t-Butyl Ether | A | 100.0 | 102.5 | 0.5601073 | 0.5739584 | | 2.5 | 20 |
| n-Propylbenzene | A | 100.0 | 101.8 | 2.48505 | 2.528716 | | 1.8 | 20 |
| Styrene | A | 100.0 | 107.1 | 1.314151 | 1.407696 | | 7.1 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 100.0 | 105.0 | 0.7120744 | 0.7476714 | 0.3 | 5.0 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 100.0 | 99.22 | 0.4766101 | 0.4728773 | | -0.8 | 20 |
| Tetrachloroethene | A | 100.0 | 102.8 | 0.4624975 | 0.4754653 | | 2.8 | 20 |
| Toluene | A | 100.0 | 104.5 | 1.118865 | 1.168786 | | 4.5 | 20 |
| 1,2,3-Trichlorobenzene | A | 100.0 | 92.74 | 0.510204 | 0.4731656 | | -7.3 | 20 |
| 1,2,4-Trichlorobenzene | A | 100.0 | 88.13 | 0.5978181 | 0.5268764 | | -11.9 | 20 |
| 1,1,2-Trichloroethane | A | 100.0 | 102.3 | 0.4520995 | 0.4625758 | | 2.3 | 20 |
| 1,1,1-Trichloroethane | A | 100.0 | 81.66 | 0.3137102 | 0.2561709 | | -18.3 | 20 |
| Trichloroethene | A | 100.0 | 97.30 | 0.2384711 | 0.2320252 | | -2.7 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA5 | Calibration: | 1110001 |
| Lab File ID: | 0528CC1.D | Calibration Date: | 04/15/11 09:53 |
| Sequence: | 1E15001 | Injection Date: | 05/28/11 |
| Lab Sample ID: | 1E15001-CCV1 | Injection Time: | 10:35 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Trichlorofluoromethane | A | 100.0 | 87.40 | 0.4040041 | 0.3531007 | | -12.6 | 20 |
| 1,2,3-Trichloropropane | A | 100.0 | 91.68 | 0.1604519 | 0.1471111 | | -8.3 | 20 |
| 1,3,5-Trimethylbenzene | A | 100.0 | 99.74 | 1.631689 | 1.627533 | | -0.3 | 20 |
| 1,2,4-Trimethylbenzene | A | 100.0 | 99.96 | 1.658949 | 1.658228 | | -0.04 | 20 |
| Vinyl chloride | Q | 100.0 | 81.23 | 0.3152422 | 0.2027131 | | -18.8 | 20 |
| m,p-Xylene | A | 200.0 | 205.5 | 1.557766 | 1.600387 | | 2.7 | 20 |
| o-Xylene | A | 100.0 | 100.7 | 1.652495 | 1.664064 | | 0.7 | 20 |
| Bromofluorobenzene | A | 30.00 | 29.66 | 0.8430908 | 0.8335189 | | -1.1 | 20 |
| Dibromofluoromethane | A | 30.00 | 29.35 | 0.2932159 | 0.2868476 | | -2.2 | 20 |
| 1,2-Dichloroethane-d4 | A | 30.00 | 30.78 | 0.059471 | 6.101139E-02 | | 2.6 | 20 |
| Toluene-d8 | A | 30.00 | 31.16 | 2.056027 | 2.135664 | | 3.9 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA4 | Calibration: | 1154004 |
| Lab File ID: | 0605CCVE.D | Calibration Date: | 06/01/11 09:44 |
| Sequence: | 1F15708 | Injection Date: | 06/05/11 |
| Lab Sample ID: | 1F15708-CCV1 | Injection Time: | 17:14 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Acetone | A | 200.0 | 198.4 | 0.1244543 | 0.1234694 | | -0.8 | 20 |
| Benzene | A | 100.0 | 98.33 | 0.9176726 | 0.9023204 | | -1.7 | 20 |
| Bromobenzene | A | 100.0 | 96.07 | 0.6951847 | 0.6678877 | | -3.9 | 20 |
| Bromochloromethane | A | 100.0 | 96.04 | 0.1464818 | 0.1406877 | | -4.0 | 20 |
| Bromodichloromethane | A | 100.0 | 96.97 | 0.330129 | 0.3201246 | | -3.0 | 20 |
| Bromoform | A | 100.0 | 98.90 | 0.7652819 | 0.7568596 | 0.1 | -1.1 | 20 |
| Bromomethane | L | 100.0 | 65.94 | 0.1650496 | 0.1103022 | | -34.1 | 20 * |
| n-Butylbenzene | A | 100.0 | 91.51 | 1.025619 | 0.9385118 | | -8.5 | 20 |
| 2-Butanone | A | 200.0 | 197.0 | 0.1962157 | 0.1932294 | | -1.5 | 20 |
| sec-Butylbenzene | A | 100.0 | 90.48 | 1.384144 | 1.252349 | | -9.5 | 20 |
| tert-Butylbenzene | A | 100.0 | 91.21 | 1.072274 | 0.9780681 | | -8.8 | 20 |
| Carbon disulfide | A | 100.0 | 98.20 | 0.8113669 | 0.7967935 | | -1.8 | 20 |
| Carbon tetrachloride | A | 100.0 | 93.19 | 0.2952145 | 0.2751043 | | -6.8 | 20 |
| Chlorobenzene | A | 100.0 | 96.79 | 1.524087 | 1.475239 | 0.3 | -3.2 | 20 |
| Chloroethane | L | 100.0 | 116.2 | 0.1598038 | 0.1637391 | | 16.2 | 20 |
| Chloroform | A | 100.0 | 94.64 | 0.4584717 | 0.4338794 | | -5.4 | 20 |
| Chloromethane | A | 100.0 | 89.86 | 0.2954544 | 0.2654931 | 0.1 | -10.1 | 20 |
| 2-Chlorotoluene | A | 100.0 | 92.10 | 1.210316 | 1.114772 | | -7.9 | 20 |
| 4-Chlorotoluene | A | 100.0 | 92.00 | 1.365075 | 1.255909 | | -8.0 | 20 |
| Dibromochloromethane | A | 100.0 | 98.53 | 0.69368 | 0.6834612 | | -1.5 | 20 |
| 1,2-Dibromo-3-chloropropane | A | 100.0 | 90.90 | 0.1778495 | 0.1616672 | | -9.1 | 20 |
| 1,2-Dibromoethane (EDB) | A | 100.0 | 98.66 | 0.7018341 | 0.6924711 | | -1.3 | 20 |
| Dibromomethane | A | 100.0 | 96.32 | 0.1975423 | 0.1902657 | | -3.7 | 20 |
| 1,2-Dichlorobenzene | A | 100.0 | 97.15 | 0.967664 | 0.9401014 | | -2.8 | 20 |
| 1,3-Dichlorobenzene | A | 100.0 | 95.94 | 0.9973838 | 0.9568742 | | -4.1 | 20 |
| 1,4-Dichlorobenzene | A | 100.0 | 94.55 | 1.030471 | 0.9742899 | | -5.5 | 20 |
| Dichlorodifluoromethane | A | 100.0 | 100.0 | 0.2499782 | 0.2499961 | | 0.007 | 20 |
| 1,1-Dichloroethane | A | 100.0 | 100.6 | 0.4740423 | 0.4767043 | 0.1 | 0.6 | 20 |
| 1,2-Dichloroethane | A | 100.0 | 99.39 | 0.3479117 | 0.3457863 | | -0.6 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA4 | Calibration: | 1154004 |
| Lab File ID: | 0605CCVE.D | Calibration Date: | 06/01/11 09:44 |
| Sequence: | 1F15708 | Injection Date: | 06/05/11 |
| Lab Sample ID: | 1F15708-CCV1 | Injection Time: | 17:14 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 1,1-Dichloroethene | A | 100.0 | 94.09 | 0.2334421 | 0.2196476 | | -5.9 | 20 |
| cis-1,2-Dichloroethene | A | 100.0 | 94.13 | 0.291982 | 0.2748522 | | -5.9 | 20 |
| trans-1,2-Dichloroethene | L | 100.0 | 101.8 | 0.2689807 | 0.2462232 | | 1.8 | 20 |
| 1,2-Dichloropropane | A | 100.0 | 99.53 | 0.2682235 | 0.2669537 | | -0.5 | 20 |
| 1,3-Dichloropropane | A | 100.0 | 100.5 | 0.9449868 | 0.9493521 | | 0.5 | 20 |
| 2,2-Dichloropropane | L | 100.0 | 86.52 | 0.3255918 | 0.2372398 | | -13.5 | 20 |
| 1,1-Dichloropropene | A | 100.0 | 97.06 | 0.320132 | 0.310732 | | -2.9 | 20 |
| cis-1,3-Dichloropropene | A | 100.0 | 94.86 | 0.4021505 | 0.3814998 | | -5.1 | 20 |
| trans-1,3-Dichloropropene | A | 100.0 | 97.26 | 0.855397 | 0.831952 | | -2.7 | 20 |
| Ethylbenzene | A | 100.0 | 97.42 | 2.457798 | 2.394387 | | -2.6 | 20 |
| Hexachlorobutadiene | A | 100.0 | 95.26 | 0.1327059 | 0.1264117 | | -4.7 | 20 |
| 2-Hexanone | A | 200.0 | 215.7 | 0.6192198 | 0.6679297 | | 7.9 | 20 |
| Isopropylbenzene | A | 100.0 | 96.47 | 1.899263 | 1.832309 | | -3.5 | 20 |
| p-Isopropyltoluene | A | 100.0 | 93.04 | 1.023539 | 0.9523537 | | -7.0 | 20 |
| Methylene chloride | A | 100.0 | 98.58 | 0.2776048 | 0.2736672 | | -1.4 | 20 |
| Naphthalene | A | 100.0 | 85.47 | 1.228446 | 1.049933 | | -14.5 | 20 |
| 4-Methyl-2-pentanone | A | 200.0 | 195.8 | 0.3648294 | 0.3572101 | | -2.1 | 20 |
| Methyl t-Butyl Ether | A | 100.0 | 95.68 | 0.7191576 | 0.6880765 | | -4.3 | 20 |
| n-Propylbenzene | A | 100.0 | 91.00 | 1.809721 | 1.64683 | | -9.0 | 20 |
| Styrene | A | 100.0 | 99.34 | 1.607915 | 1.597362 | | -0.7 | 20 |
| 1,1,2,2-Tetrachloroethane | A | 100.0 | 93.53 | 0.6184807 | 0.5784701 | 0.3 | -6.5 | 20 |
| 1,1,1,2-Tetrachloroethane | A | 100.0 | 97.46 | 0.5719668 | 0.5574688 | | -2.5 | 20 |
| Tetrachloroethene | A | 100.0 | 97.03 | 0.8701998 | 0.8443271 | | -3.0 | 20 |
| Toluene | A | 100.0 | 97.15 | 1.375611 | 1.336378 | | -2.9 | 20 |
| 1,2,3-Trichlorobenzene | A | 100.0 | 94.09 | 0.5440305 | 0.5118962 | | -5.9 | 20 |
| 1,2,4-Trichlorobenzene | A | 100.0 | 95.00 | 0.5961321 | 0.5663583 | | -5.0 | 20 |
| 1,1,2-Trichloroethane | A | 100.0 | 99.69 | 0.5171309 | 0.5155429 | | -0.3 | 20 |
| 1,1,1-Trichloroethane | A | 100.0 | 95.19 | 0.3603392 | 0.3430193 | | -4.8 | 20 |
| Trichloroethene | A | 100.0 | 93.67 | 0.2622883 | 0.2456932 | | -6.3 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8260B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-VOA4 | Calibration: | 1154004 |
| Lab File ID: | 0605CCVE.D | Calibration Date: | 06/01/11 09:44 |
| Sequence: | 1F15708 | Injection Date: | 06/05/11 |
| Lab Sample ID: | 1F15708-CCV1 | Injection Time: | 17:14 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | | |
|---|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) | |
| Trichlorofluoromethane | A | 100.0 | 98.46 | 0.3850639 | 0.3791214 | | -1.5 | 20 | |
| 1,2,3-Trichloropropane | A | 100.0 | 93.56 | 0.2241322 | 0.2096945 | | -6.4 | 20 | |
| 1,3,5-Trimethylbenzene | A | 100.0 | 92.88 | 1.248678 | 1.159755 | | -7.1 | 20 | |
| 1,2,4-Trimethylbenzene | A | 100.0 | 92.46 | 1.300589 | 1.202471 | | -7.5 | 20 | |
| Vinyl chloride | Q | 100.0 | 77.95 | 0.2117578 | 0.1438739 | | -22.0 | 20 | * |
| m,p-Xylene | A | 200.0 | 187.3 | 1.835021 | 1.718378 | | -6.4 | 20 | |
| o-Xylene | A | 100.0 | 96.40 | 1.946025 | 1.875903 | | -3.6 | 20 | |
| Bromofluorobenzene | A | 30.00 | 34.40 | 0.8735431 | 1.001706 | | 14.7 | 20 | |
| Dibromofluoromethane | A | 30.00 | 30.31 | 0.2955689 | 0.2986217 | | 1.0 | 20 | |
| 1,2-Dichloroethane-d4 | A | 30.00 | 29.49 | 6.244071E-02 | 6.137931E-02 | | -1.7 | 20 | |
| Toluene-d8 | A | 30.00 | 34.32 | 2.130707 | 2.437778 | | 14.4 | 20 | |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E28001-BLK1 File ID: 0528BL1.D

Sampled: Prepared: Analyzed: 05/28/11 12:26

Solids: Preparation: 5030B Dilution:

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | | 2.50 | 5.00 | 10.0 | U |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Q, Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 0.250 | 0.500 | 1.00 | U |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E28001-BLK1 File ID: 0528BL1.D

Sampled: Prepared: Analyzed: 05/28/11 12:26

Solids: Preparation: 5030B Dilution:

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | 0.603 | 0.250 | 0.500 | 1.00 | J |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.437 | 0.250 | 0.500 | 1.00 | J |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 29.45 | 98.2 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 29.64 | 98.8 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 28.04 | 93.5 | 70 - 120 | |
| Toluene-d8 | 30.00 | 31.91 | 106 | 85 - 120 | |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E28001-BS1 File ID: 0528LS1.D

Sampled: Prepared: Analyzed: 05/28/11 11:10

Solids: Preparation: 5030B Dilution:

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 111 | 2.50 | 5.00 | 10.0 | |
| 71-43-2 | Benzene | 52.5 | 0.250 | 0.500 | 1.00 | |
| 108-86-1 | Bromobenzene | 51.4 | 0.250 | 0.500 | 1.00 | |
| 74-97-5 | Bromochloromethane | 47.3 | 0.250 | 0.500 | 1.00 | |
| 75-27-4 | Bromodichloromethane | 46.5 | 0.250 | 0.500 | 1.00 | |
| 75-25-2 | Bromoform | 44.5 | 0.250 | 0.500 | 1.00 | |
| 74-83-9 | Bromomethane | 14.7 | 0.500 | 1.00 | 2.00 | Y |
| 104-51-8 | n-Butylbenzene | 51.3 | 0.250 | 0.500 | 1.00 | |
| 78-93-3 | 2-Butanone | 111 | 2.50 | 5.00 | 10.0 | |
| 135-98-8 | sec-Butylbenzene | 51.1 | 0.250 | 0.500 | 1.00 | |
| 98-06-6 | tert-Butylbenzene | 50.5 | 0.250 | 0.500 | 1.00 | |
| 75-15-0 | Carbon disulfide | 58.7 | 0.250 | 0.500 | 1.00 | |
| 56-23-5 | Carbon tetrachloride | 44.2 | 0.250 | 0.500 | 1.00 | |
| 108-90-7 | Chlorobenzene | 52.1 | 0.250 | 0.500 | 1.00 | |
| 75-00-3 | Chloroethane | 46.0 | 0.500 | 1.00 | 2.00 | |
| 67-66-3 | Chloroform | 45.5 | 0.250 | 0.500 | 1.00 | |
| 74-87-3 | Chloromethane | 46.5 | 0.250 | 0.500 | 1.00 | |
| 95-49-8 | 2-Chlorotoluene | 50.5 | 0.250 | 0.500 | 1.00 | |
| 106-43-4 | 4-Chlorotoluene | 50.8 | 0.250 | 0.500 | 1.00 | |
| 124-48-1 | Dibromochloromethane | 47.6 | 0.250 | 0.500 | 1.00 | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 51.0 | 0.500 | 1.00 | 2.00 | |
| 106-93-4 | 1,2-Dibromoethane (EDB) | 50.2 | 0.250 | 0.500 | 1.00 | |
| 74-95-3 | Dibromomethane | 49.2 | 0.250 | 0.500 | 1.00 | |
| 95-50-1 | 1,2-Dichlorobenzene | 50.4 | 0.250 | 0.500 | 1.00 | |
| 541-73-1 | 1,3-Dichlorobenzene | 48.7 | 0.250 | 0.500 | 1.00 | |
| 106-46-7 | 1,4-Dichlorobenzene | 46.4 | 0.250 | 0.500 | 1.00 | |
| 75-71-8 | Dichlorodifluoromethane | 58.0 | 0.500 | 1.00 | 2.00 | |
| 75-34-3 | 1,1-Dichloroethane | 51.3 | 0.250 | 0.500 | 1.00 | |
| 107-06-2 | 1,2-Dichloroethane | 44.5 | 0.250 | 0.500 | 1.00 | |
| 75-35-4 | 1,1-Dichloroethene | 51.7 | 0.250 | 0.500 | 1.00 | |
| 156-59-2 | cis-1,2-Dichloroethene | 50.0 | 0.250 | 0.500 | 1.00 | |
| 156-60-5 | trans-1,2-Dichloroethene | 50.0 | 0.250 | 0.500 | 1.00 | |
| 78-87-5 | 1,2-Dichloropropane | 50.4 | 0.250 | 0.500 | 1.00 | |
| 142-28-9 | 1,3-Dichloropropane | 49.9 | 0.250 | 0.500 | 1.00 | |
| 594-20-7 | 2,2-Dichloropropane | 43.0 | 0.250 | 0.500 | 1.00 | |
| 563-58-6 | 1,1-Dichloropropene | 48.8 | 0.250 | 0.500 | 1.00 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 45.4 | 0.250 | 0.500 | 1.00 | |
| 10061-02-6 | trans-1,3-Dichloropropene | 54.2 | 0.250 | 0.500 | 1.00 | |
| 100-41-4 | Ethylbenzene | 51.9 | 0.250 | 0.500 | 1.00 | |
| 87-68-3 | Hexachlorobutadiene | 48.5 | 0.250 | 0.500 | 1.00 | |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E28001-BS1 File ID: 0528LS1.D

Sampled: Prepared: Analyzed: 05/28/11 11:10

Solids: Preparation: 5030B Dilution:

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 102 | 1.25 | 2.50 | 5.00 | |
| 98-82-8 | Isopropylbenzene | 53.5 | 0.250 | 0.500 | 1.00 | |
| 99-87-6 | p-Isopropyltoluene | 51.5 | 0.250 | 0.500 | 1.00 | |
| 75-09-2 | Methylene chloride | 51.8 | 0.500 | 1.00 | 2.00 | |
| 91-20-3 | Naphthalene | 58.1 | 0.250 | 0.500 | 1.00 | B |
| 108-10-1 | 4-Methyl-2-pentanone | 105 | 1.25 | 2.50 | 5.00 | |
| 1634-04-4 | Methyl t-Butyl Ether | 49.5 | 0.250 | 0.500 | 1.00 | |
| 103-65-1 | n-Propylbenzene | 53.0 | 0.250 | 0.500 | 1.00 | |
| 100-42-5 | Styrene | 51.7 | 0.250 | 0.500 | 1.00 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 54.2 | 0.250 | 0.500 | 1.00 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 47.5 | 0.250 | 0.500 | 1.00 | |
| 127-18-4 | Tetrachloroethene | 51.9 | 0.250 | 0.500 | 1.00 | |
| 108-88-3 | Toluene | 51.3 | 0.250 | 0.500 | 1.00 | |
| 87-61-6 | 1,2,3-Trichlorobenzene | 49.9 | 0.250 | 0.500 | 1.00 | B |
| 120-82-1 | 1,2,4-Trichlorobenzene | 48.1 | 0.250 | 0.500 | 1.00 | |
| 79-00-5 | 1,1,2-Trichloroethane | 50.5 | 0.250 | 0.500 | 1.00 | |
| 71-55-6 | 1,1,1-Trichloroethane | 43.6 | 0.250 | 0.500 | 1.00 | |
| 79-01-6 | Trichloroethene | 48.6 | 0.250 | 0.500 | 1.00 | |
| 75-69-4 | Trichlorofluoromethane | 47.0 | 0.500 | 1.00 | 2.00 | |
| 96-18-4 | 1,2,3-Trichloropropane | 46.0 | 0.500 | 1.00 | 2.00 | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 49.7 | 0.250 | 0.500 | 1.00 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 50.8 | 0.250 | 0.500 | 1.00 | |
| 75-01-4 | Vinyl chloride | 43.2 | 0.250 | 0.500 | 1.00 | |
| 108-38-3/106-42- | m,p-Xylene | 100 | 0.500 | 1.00 | 2.00 | |
| 95-47-6 | o-Xylene | 49.8 | 0.250 | 0.500 | 1.00 | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 29.21 | 97.4 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 30.54 | 102 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 29.68 | 98.9 | 70 - 120 | |
| Toluene-d8 | 30.00 | 31.19 | 104 | 85 - 120 | |

# ANALYSIS DATA SHEET

**LCS Dup**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E28001-BSD1 File ID: 0528LSD1.D

Sampled: Prepared: Analyzed: 05/28/11 22:25

Solids: Preparation: 5030B Dilution:

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 97.4 | 2.50 | 5.00 | 10.0 | |
| 71-43-2 | Benzene | 52.1 | 0.250 | 0.500 | 1.00 | |
| 108-86-1 | Bromobenzene | 50.1 | 0.250 | 0.500 | 1.00 | |
| 74-97-5 | Bromochloromethane | 47.3 | 0.250 | 0.500 | 1.00 | |
| 75-27-4 | Bromodichloromethane | 47.0 | 0.250 | 0.500 | 1.00 | |
| 75-25-2 | Bromoform | 45.3 | 0.250 | 0.500 | 1.00 | |
| 74-83-9 | Bromomethane | 6.87 | 0.500 | 1.00 | 2.00 | Y |
| 104-51-8 | n-Butylbenzene | 47.6 | 0.250 | 0.500 | 1.00 | |
| 78-93-3 | 2-Butanone | 113 | 2.50 | 5.00 | 10.0 | |
| 135-98-8 | sec-Butylbenzene | 48.3 | 0.250 | 0.500 | 1.00 | |
| 98-06-6 | tert-Butylbenzene | 50.4 | 0.250 | 0.500 | 1.00 | |
| 75-15-0 | Carbon disulfide | 55.3 | 0.250 | 0.500 | 1.00 | |
| 56-23-5 | Carbon tetrachloride | 47.2 | 0.250 | 0.500 | 1.00 | |
| 108-90-7 | Chlorobenzene | 49.4 | 0.250 | 0.500 | 1.00 | |
| 75-00-3 | Chloroethane | 41.6 | 0.500 | 1.00 | 2.00 | |
| 67-66-3 | Chloroform | 47.7 | 0.250 | 0.500 | 1.00 | |
| 74-87-3 | Chloromethane | 40.1 | 0.250 | 0.500 | 1.00 | |
| 95-49-8 | 2-Chlorotoluene | 50.9 | 0.250 | 0.500 | 1.00 | |
| 106-43-4 | 4-Chlorotoluene | 50.4 | 0.250 | 0.500 | 1.00 | |
| 124-48-1 | Dibromochloromethane | 45.5 | 0.250 | 0.500 | 1.00 | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 51.5 | 0.500 | 1.00 | 2.00 | |
| 106-93-4 | 1,2-Dibromoethane (EDB) | 48.9 | 0.250 | 0.500 | 1.00 | |
| 74-95-3 | Dibromomethane | 51.1 | 0.250 | 0.500 | 1.00 | |
| 95-50-1 | 1,2-Dichlorobenzene | 49.2 | 0.250 | 0.500 | 1.00 | |
| 541-73-1 | 1,3-Dichlorobenzene | 47.4 | 0.250 | 0.500 | 1.00 | |
| 106-46-7 | 1,4-Dichlorobenzene | 44.8 | 0.250 | 0.500 | 1.00 | |
| 75-71-8 | Dichlorodifluoromethane | 55.0 | 0.500 | 1.00 | 2.00 | |
| 75-34-3 | 1,1-Dichloroethane | 51.3 | 0.250 | 0.500 | 1.00 | |
| 107-06-2 | 1,2-Dichloroethane | 47.3 | 0.250 | 0.500 | 1.00 | |
| 75-35-4 | 1,1-Dichloroethene | 49.1 | 0.250 | 0.500 | 1.00 | |
| 156-59-2 | cis-1,2-Dichloroethene | 48.3 | 0.250 | 0.500 | 1.00 | |
| 156-60-5 | trans-1,2-Dichloroethene | 49.1 | 0.250 | 0.500 | 1.00 | |
| 78-87-5 | 1,2-Dichloropropane | 50.4 | 0.250 | 0.500 | 1.00 | |
| 142-28-9 | 1,3-Dichloropropane | 49.4 | 0.250 | 0.500 | 1.00 | |
| 594-20-7 | 2,2-Dichloropropane | 36.0 | 0.250 | 0.500 | 1.00 | |
| 563-58-6 | 1,1-Dichloropropene | 48.9 | 0.250 | 0.500 | 1.00 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 44.8 | 0.250 | 0.500 | 1.00 | |
| 10061-02-6 | trans-1,3-Dichloropropene | 51.3 | 0.250 | 0.500 | 1.00 | |
| 100-41-4 | Ethylbenzene | 50.4 | 0.250 | 0.500 | 1.00 | |
| 87-68-3 | Hexachlorobutadiene | 41.6 | 0.250 | 0.500 | 1.00 | |

# ANALYSIS DATA SHEET

**LCS Dup**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E28001-BSD1 File ID: 0528LSD1.D

Sampled: Prepared: Analyzed: 05/28/11 22:25

Solids: Preparation: 5030B Dilution:

Batch: 1E28001 Sequence: 1E15001 Calibration: 1110001 Instrument: MS-VOA5

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 101 | 1.25 | 2.50 | 5.00 | |
| 98-82-8 | Isopropylbenzene | 51.8 | 0.250 | 0.500 | 1.00 | |
| 99-87-6 | p-Isopropyltoluene | 49.4 | 0.250 | 0.500 | 1.00 | |
| 75-09-2 | Methylene chloride | 50.0 | 0.500 | 1.00 | 2.00 | |
| 91-20-3 | Naphthalene | 58.8 | 0.250 | 0.500 | 1.00 | B |
| 108-10-1 | 4-Methyl-2-pentanone | 110 | 1.25 | 2.50 | 5.00 | |
| 1634-04-4 | Methyl t-Butyl Ether | 50.9 | 0.250 | 0.500 | 1.00 | |
| 103-65-1 | n-Propylbenzene | 51.2 | 0.250 | 0.500 | 1.00 | |
| 100-42-5 | Styrene | 50.0 | 0.250 | 0.500 | 1.00 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 53.7 | 0.250 | 0.500 | 1.00 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 48.6 | 0.250 | 0.500 | 1.00 | |
| 127-18-4 | Tetrachloroethene | 48.6 | 0.250 | 0.500 | 1.00 | |
| 108-88-3 | Toluene | 49.5 | 0.250 | 0.500 | 1.00 | |
| 87-61-6 | 1,2,3-Trichlorobenzene | 46.8 | 0.250 | 0.500 | 1.00 | B |
| 120-82-1 | 1,2,4-Trichlorobenzene | 44.1 | 0.250 | 0.500 | 1.00 | |
| 79-00-5 | 1,1,2-Trichloroethane | 47.9 | 0.250 | 0.500 | 1.00 | |
| 71-55-6 | 1,1,1-Trichloroethane | 46.4 | 0.250 | 0.500 | 1.00 | |
| 79-01-6 | Trichloroethene | 50.9 | 0.250 | 0.500 | 1.00 | |
| 75-69-4 | Trichlorofluoromethane | 46.3 | 0.500 | 1.00 | 2.00 | |
| 96-18-4 | 1,2,3-Trichloropropane | 47.8 | 0.500 | 1.00 | 2.00 | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 50.2 | 0.250 | 0.500 | 1.00 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 49.7 | 0.250 | 0.500 | 1.00 | |
| 75-01-4 | Vinyl chloride | 32.8 | 0.250 | 0.500 | 1.00 | |
| 108-38-3/106-42- | m,p-Xylene | 97.9 | 0.500 | 1.00 | 2.00 | |
| 95-47-6 | o-Xylene | 47.4 | 0.250 | 0.500 | 1.00 | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 30.31 | 101 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 30.67 | 102 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 29.67 | 98.9 | 70 - 120 | |
| Toluene-d8 | 30.00 | 30.62 | 102 | 85 - 120 | |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1F05004-BLK1 File ID: 0605BLKE.D

Sampled: Prepared: Analyzed: 06/05/11 18:56

Solids: Preparation: 5030B Dilution:

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | | 2.50 | 5.00 | 10.0 | U |
| 71-43-2 | Benzene | | 0.250 | 0.500 | 1.00 | U |
| 108-86-1 | Bromobenzene | | 0.250 | 0.500 | 1.00 | U |
| 74-97-5 | Bromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-27-4 | Bromodichloromethane | | 0.250 | 0.500 | 1.00 | U |
| 75-25-2 | Bromoform | | 0.250 | 0.500 | 1.00 | U |
| 74-83-9 | Bromomethane | | 0.500 | 1.00 | 2.00 | Y, U |
| 104-51-8 | n-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 78-93-3 | 2-Butanone | | 2.50 | 5.00 | 10.0 | U |
| 135-98-8 | sec-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 98-06-6 | tert-Butylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-15-0 | Carbon disulfide | | 0.250 | 0.500 | 1.00 | U |
| 56-23-5 | Carbon tetrachloride | | 0.250 | 0.500 | 1.00 | U |
| 108-90-7 | Chlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-00-3 | Chloroethane | | 0.500 | 1.00 | 2.00 | U |
| 67-66-3 | Chloroform | | 0.250 | 0.500 | 1.00 | U |
| 74-87-3 | Chloromethane | | 0.250 | 0.500 | 1.00 | U |
| 95-49-8 | 2-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 106-43-4 | 4-Chlorotoluene | | 0.250 | 0.500 | 1.00 | U |
| 124-48-1 | Dibromochloromethane | | 0.250 | 0.500 | 1.00 | U |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | | 0.500 | 1.00 | 2.00 | U |
| 106-93-4 | 1,2-Dibromoethane (EDB) | | 0.250 | 0.500 | 1.00 | U |
| 74-95-3 | Dibromomethane | | 0.250 | 0.500 | 1.00 | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-71-8 | Dichlorodifluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 75-34-3 | 1,1-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 107-06-2 | 1,2-Dichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 75-35-4 | 1,1-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-59-2 | cis-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 156-60-5 | trans-1,2-Dichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 78-87-5 | 1,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 142-28-9 | 1,3-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 594-20-7 | 2,2-Dichloropropane | | 0.250 | 0.500 | 1.00 | U |
| 563-58-6 | 1,1-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | | 0.250 | 0.500 | 1.00 | U |
| 100-41-4 | Ethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 87-68-3 | Hexachlorobutadiene | 0.458 | 0.250 | 0.500 | 1.00 | J |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1F05004-BLK1 File ID: 0605BLKE.D

Sampled: Prepared: Analyzed: 06/05/11 18:56

Solids: Preparation: 5030B Dilution:

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | | 1.25 | 2.50 | 5.00 | U |
| 98-82-8 | Isopropylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 99-87-6 | p-Isopropyltoluene | | 0.250 | 0.500 | 1.00 | U |
| 75-09-2 | Methylene chloride | | 0.500 | 1.00 | 2.00 | U |
| 91-20-3 | Naphthalene | | 0.250 | 0.500 | 1.00 | U |
| 108-10-1 | 4-Methyl-2-pentanone | | 1.25 | 2.50 | 5.00 | U |
| 1634-04-4 | Methyl t-Butyl Ether | | 0.250 | 0.500 | 1.00 | U |
| 103-65-1 | n-Propylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 100-42-5 | Styrene | | 0.250 | 0.500 | 1.00 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | | 0.250 | 0.500 | 1.00 | U |
| 127-18-4 | Tetrachloroethene | | 0.250 | 0.500 | 1.00 | U |
| 108-88-3 | Toluene | | 0.250 | 0.500 | 1.00 | U |
| 87-61-6 | 1,2,3-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 0.250 | 0.500 | 1.00 | U |
| 79-00-5 | 1,1,2-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 71-55-6 | 1,1,1-Trichloroethane | | 0.250 | 0.500 | 1.00 | U |
| 79-01-6 | Trichloroethene | | 0.250 | 0.500 | 1.00 | U |
| 75-69-4 | Trichlorofluoromethane | | 0.500 | 1.00 | 2.00 | U |
| 96-18-4 | 1,2,3-Trichloropropane | | 0.500 | 1.00 | 2.00 | U |
| 108-67-8 | 1,3,5-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 95-63-6 | 1,2,4-Trimethylbenzene | | 0.250 | 0.500 | 1.00 | U |
| 75-01-4 | Vinyl chloride | | 0.250 | 0.500 | 1.00 | Y, U |
| 108-38-3/106-42- | m,p-Xylene | | 0.500 | 1.00 | 2.00 | U |
| 95-47-6 | o-Xylene | | 0.250 | 0.500 | 1.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 31.14 | 104 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 30.45 | 102 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 29.94 | 99.8 | 70 - 120 | |
| Toluene-d8 | 30.00 | 30.62 | 102 | 85 - 120 | |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1F05004-BS1 File ID: 0605LCSE.D

Sampled: Prepared: Analyzed: 06/05/11 17:40

Solids: Preparation: 5030B Dilution:

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 96.2 | 2.50 | 5.00 | 10.0 | |
| 71-43-2 | Benzene | 49.1 | 0.250 | 0.500 | 1.00 | |
| 108-86-1 | Bromobenzene | 48.9 | 0.250 | 0.500 | 1.00 | |
| 74-97-5 | Bromochloromethane | 48.9 | 0.250 | 0.500 | 1.00 | |
| 75-27-4 | Bromodichloromethane | 51.7 | 0.250 | 0.500 | 1.00 | |
| 75-25-2 | Bromoform | 45.4 | 0.250 | 0.500 | 1.00 | |
| 74-83-9 | Bromomethane | 30.1 | 0.500 | 1.00 | 2.00 | Y |
| 104-51-8 | n-Butylbenzene | 47.0 | 0.250 | 0.500 | 1.00 | |
| 78-93-3 | 2-Butanone | 100 | 2.50 | 5.00 | 10.0 | |
| 135-98-8 | sec-Butylbenzene | 47.0 | 0.250 | 0.500 | 1.00 | |
| 98-06-6 | tert-Butylbenzene | 47.4 | 0.250 | 0.500 | 1.00 | |
| 75-15-0 | Carbon disulfide | 47.4 | 0.250 | 0.500 | 1.00 | |
| 56-23-5 | Carbon tetrachloride | 45.7 | 0.250 | 0.500 | 1.00 | |
| 108-90-7 | Chlorobenzene | 47.5 | 0.250 | 0.500 | 1.00 | |
| 75-00-3 | Chloroethane | 53.7 | 0.500 | 1.00 | 2.00 | |
| 67-66-3 | Chloroform | 48.4 | 0.250 | 0.500 | 1.00 | |
| 74-87-3 | Chloromethane | 40.9 | 0.250 | 0.500 | 1.00 | |
| 95-49-8 | 2-Chlorotoluene | 47.0 | 0.250 | 0.500 | 1.00 | |
| 106-43-4 | 4-Chlorotoluene | 48.1 | 0.250 | 0.500 | 1.00 | |
| 124-48-1 | Dibromochloromethane | 47.2 | 0.250 | 0.500 | 1.00 | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 45.6 | 0.500 | 1.00 | 2.00 | |
| 106-93-4 | 1,2-Dibromoethane (EDB) | 48.2 | 0.250 | 0.500 | 1.00 | |
| 74-95-3 | Dibromomethane | 48.9 | 0.250 | 0.500 | 1.00 | |
| 95-50-1 | 1,2-Dichlorobenzene | 48.2 | 0.250 | 0.500 | 1.00 | |
| 541-73-1 | 1,3-Dichlorobenzene | 48.0 | 0.250 | 0.500 | 1.00 | |
| 106-46-7 | 1,4-Dichlorobenzene | 47.0 | 0.250 | 0.500 | 1.00 | |
| 75-71-8 | Dichlorodifluoromethane | 54.9 | 0.500 | 1.00 | 2.00 | |
| 75-34-3 | 1,1-Dichloroethane | 50.6 | 0.250 | 0.500 | 1.00 | |
| 107-06-2 | 1,2-Dichloroethane | 50.3 | 0.250 | 0.500 | 1.00 | |
| 75-35-4 | 1,1-Dichloroethene | 49.6 | 0.250 | 0.500 | 1.00 | |
| 156-59-2 | cis-1,2-Dichloroethene | 47.1 | 0.250 | 0.500 | 1.00 | |
| 156-60-5 | trans-1,2-Dichloroethene | 53.4 | 0.250 | 0.500 | 1.00 | |
| 78-87-5 | 1,2-Dichloropropane | 50.4 | 0.250 | 0.500 | 1.00 | |
| 142-28-9 | 1,3-Dichloropropane | 50.1 | 0.250 | 0.500 | 1.00 | |
| 594-20-7 | 2,2-Dichloropropane | 40.7 | 0.250 | 0.500 | 1.00 | |
| 563-58-6 | 1,1-Dichloropropene | 48.5 | 0.250 | 0.500 | 1.00 | |
| 10061-01-5 | cis-1,3-Dichloropropene | 47.1 | 0.250 | 0.500 | 1.00 | |
| 10061-02-6 | trans-1,3-Dichloropropene | 52.7 | 0.250 | 0.500 | 1.00 | |
| 100-41-4 | Ethylbenzene | 47.8 | 0.250 | 0.500 | 1.00 | |
| 87-68-3 | Hexachlorobutadiene | 54.5 | 0.250 | 0.500 | 1.00 | B |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1F05004-BS1 File ID: 0605LCSE.D

Sampled: Prepared: Analyzed: 06/05/11 17:40

Solids: Preparation: 5030B Dilution:

Batch: 1F05004 Sequence: 1F15708 Calibration: 1154004 Instrument: MS-VOA4

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 591-78-6 | 2-Hexanone | 106 | 1.25 | 2.50 | 5.00 | |
| 98-82-8 | Isopropylbenzene | 49.4 | 0.250 | 0.500 | 1.00 | |
| 99-87-6 | p-Isopropyltoluene | 50.1 | 0.250 | 0.500 | 1.00 | |
| 75-09-2 | Methylene chloride | 49.4 | 0.500 | 1.00 | 2.00 | |
| 91-20-3 | Naphthalene | 47.1 | 0.250 | 0.500 | 1.00 | |
| 108-10-1 | 4-Methyl-2-pentanone | 102 | 1.25 | 2.50 | 5.00 | |
| 1634-04-4 | Methyl t-Butyl Ether | 47.8 | 0.250 | 0.500 | 1.00 | |
| 103-65-1 | n-Propylbenzene | 48.1 | 0.250 | 0.500 | 1.00 | |
| 100-42-5 | Styrene | 49.2 | 0.250 | 0.500 | 1.00 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 45.9 | 0.250 | 0.500 | 1.00 | |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 46.8 | 0.250 | 0.500 | 1.00 | |
| 127-18-4 | Tetrachloroethene | 45.3 | 0.250 | 0.500 | 1.00 | |
| 108-88-3 | Toluene | 48.1 | 0.250 | 0.500 | 1.00 | |
| 87-61-6 | 1,2,3-Trichlorobenzene | 49.2 | 0.250 | 0.500 | 1.00 | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 49.0 | 0.250 | 0.500 | 1.00 | |
| 79-00-5 | 1,1,2-Trichloroethane | 48.5 | 0.250 | 0.500 | 1.00 | |
| 71-55-6 | 1,1,1-Trichloroethane | 46.1 | 0.250 | 0.500 | 1.00 | |
| 79-01-6 | Trichloroethene | 47.7 | 0.250 | 0.500 | 1.00 | |
| 75-69-4 | Trichlorofluoromethane | 47.7 | 0.500 | 1.00 | 2.00 | |
| 96-18-4 | 1,2,3-Trichloropropane | 45.0 | 0.500 | 1.00 | 2.00 | |
| 108-67-8 | 1,3,5-Trimethylbenzene | 47.1 | 0.250 | 0.500 | 1.00 | |
| 95-63-6 | 1,2,4-Trimethylbenzene | 48.2 | 0.250 | 0.500 | 1.00 | |
| 75-01-4 | Vinyl chloride | 40.7 | 0.250 | 0.500 | 1.00 | Y |
| 108-38-3/106-42- | m,p-Xylene | 95.4 | 0.500 | 1.00 | 2.00 | |
| 95-47-6 | o-Xylene | 48.0 | 0.250 | 0.500 | 1.00 | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 30.00 | 32.82 | 109 | 75 - 120 | |
| Dibromofluoromethane | 30.00 | 30.56 | 102 | 85 - 115 | |
| 1,2-Dichloroethane-d4 | 30.00 | 30.33 | 101 | 70 - 120 | |
| Toluene-d8 | 30.00 | 32.74 | 109 | 85 - 120 | |

# HOLDING TIME SUMMARY

## SW8260B

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| GW0102 | 05/23/11 14:43 | 05/24/11 09:00 | 05/28/11 00:00 | N/A | 14.00 | 05/28/11 16:47 | 5.04 | 14.00 | |
| GW8012-RB | 05/23/11 08:47 | 05/24/11 09:00 | 05/28/11 00:00 | N/A | 14.00 | 05/28/11 13:43 | 5.16 | 14.00 | |
| GW8048-TB | 05/23/11 08:00 | 05/24/11 09:00 | 05/28/11 00:00 | N/A | 14.00 | 05/28/11 13:17 | 5.18 | 14.00 | |
| GW0064 | 05/24/11 13:58 | 05/25/11 09:00 | 05/28/11 00:00 | N/A | 14.00 | 05/28/11 18:06 | 4.13 | 14.00 | |
| GW8049-TB | 05/24/11 10:30 | 05/25/11 09:00 | 05/28/11 00:00 | N/A | 14.00 | 05/28/11 15:01 | 4.15 | 14.00 | |
| GW0065 | 05/25/11 10:42 | 05/26/11 09:00 | 06/05/11 00:00 | N/A | 14.00 | 06/05/11 21:57 | 11.43 | 14.00 | |
| GW0066 | 05/25/11 13:56 | 05/26/11 09:00 | 06/05/11 00:00 | N/A | 14.00 | 06/05/11 22:23 | 11.31 | 14.00 | |
| GW8013-AB | 05/25/11 13:56 | 05/26/11 09:00 | 06/05/11 00:00 | N/A | 14.00 | 06/05/11 22:49 | 11.33 | 14.00 | |
| GW8050-TB | 05/25/11 08:00 | 05/26/11 09:00 | 06/05/11 00:00 | N/A | 14.00 | 06/05/11 19:22 | 11.43 | 14.00 | |

# Data for SW8270C Forms

# ANALYSIS DATA SHEET

**GW0102**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-01 | File ID: | 0520801.D |
| Sampled: | 05/23/11 14:43 | Prepared: | 05/25/11 09:58 | Analyzed: | 05/27/11 02:46 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E24013 Sequence: 1E14710 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.20 | 2.40 | 4.81 | Y, U |
| 83-32-9 | Acenaphthene | | 1.20 | 2.40 | 4.81 | U |
| 208-96-8 | Acenaphthylene | | 1.20 | 2.40 | 4.81 | U |
| 98-86-2 | Acetophenone | | 1.20 | 2.40 | 4.81 | U |
| 120-12-7 | Anthracene | | 1.20 | 2.40 | 4.81 | U |
| 1912-24-9 | Atrazine | | 1.20 | 2.40 | 4.81 | U |
| 100-52-7 | Benzaldehyde | | 1.20 | 2.40 | 4.81 | U |
| 92-87-5 | Benzidine | | 12.0 | 24.0 | 48.1 | X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.20 | 2.40 | 4.81 | U |
| 50-32-8 | Benzo(a)pyrene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 65-85-0 | Benzoic acid | | 12.0 | 24.0 | 48.1 | U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 92-52-4 | 1,1-Biphenyl | | 1.20 | 2.40 | 4.81 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.20 | 2.40 | 4.81 | Q, U |
| 85-68-7 | Butylbenzylphthalate | | 1.20 | 2.40 | 4.81 | U |
| 105-60-2 | Caprolactam | | 1.20 | 2.40 | 4.81 | Q, U |
| 86-74-8 | Carbazole | | 1.20 | 2.40 | 4.81 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 106-47-8 | 4-Chloroaniline | | 1.20 | 2.40 | 4.81 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.20 | 2.40 | 4.81 | Q, U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.20 | 2.40 | 4.81 | U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.20 | 2.40 | 4.81 | U |
| 91-58-7 | 2-Chloronaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 95-57-8 | 2-Chlorophenol | | 1.20 | 2.40 | 4.81 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.20 | 2.40 | 4.81 | Q, U |
| 218-01-9 | Chrysene | | 1.20 | 2.40 | 4.81 | U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.20 | 2.40 | 4.81 | X, U |
| 132-64-9 | Dibenzofuran | | 1.20 | 2.40 | 4.81 | Q, U |
| 84-74-2 | Di-n-butylphthalate | | 1.20 | 2.40 | 4.81 | U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.20 | 2.40 | 4.81 | U |
| 84-66-2 | Diethylphthalate | | 1.20 | 2.40 | 4.81 | Q, U |
| 105-67-9 | 2,4-Dimethylphenol | | 4.81 | 9.62 | 19.2 | U |
| 131-11-3 | Dimethyl phthalate | | 1.20 | 2.40 | 4.81 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 4.81 | 9.62 | 19.2 | X, Q, U |
| 51-28-5 | 2,4-Dinitrophenol | | 12.0 | 24.0 | 48.1 | X, U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.20 | 2.40 | 4.81 | Q, U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.20 | 2.40 | 4.81 | U |
| 117-84-0 | Di-n-octylphthalate | | 1.20 | 2.40 | 4.81 | Q, X, U |

# ANALYSIS DATA SHEET

**GW0102**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-01 | File ID: | 0520801.D |
| Sampled: | 05/23/11 14:43 | Prepared: | 05/25/11 09:58 | Analyzed: | 05/27/11 02:46 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E24013 Sequence: 1E14710 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.20 | 2.40 | 4.81 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 9.10 | 1.20 | 2.40 | 4.81 | |
| 206-44-0 | Fluoranthene | | 1.20 | 2.40 | 4.81 | U |
| 86-73-7 | Fluorene | | 1.20 | 2.40 | 4.81 | X, U |
| 118-74-1 | Hexachlorobenzene | | 1.20 | 2.40 | 4.81 | Q, U |
| 87-68-3 | Hexachlorobutadiene | | 1.20 | 2.40 | 4.81 | U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.20 | 2.40 | 4.81 | U |
| 67-72-1 | Hexachloroethane | | 1.20 | 2.40 | 4.81 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.20 | 2.40 | 4.81 | X, U |
| 78-59-1 | Isophorone | | 1.20 | 2.40 | 4.81 | U |
| 90-12-0 | 1-Methylnaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 91-57-6 | 2-Methylnaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 95-48-7 | 2-Methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 65794-96-9 | 3+4-Methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 100-01-6 | 4-Nitroaniline | | 4.81 | 9.62 | 19.2 | Q, X, U |
| 99-09-2 | 3-Nitroaniline | | 4.81 | 9.62 | 19.2 | U |
| 88-74-4 | 2-Nitroaniline | | 4.81 | 9.62 | 19.2 | U |
| 98-95-3 | Nitrobenzene | | 1.20 | 2.40 | 4.81 | Q, U |
| 100-02-7 | 4-Nitrophenol | | 4.81 | 9.62 | 19.2 | U |
| 88-75-5 | 2-Nitrophenol | | 1.20 | 2.40 | 4.81 | U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.20 | 2.40 | 4.81 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.20 | 2.40 | 4.81 | U |
| 87-86-5 | Pentachlorophenol | | 4.81 | 9.62 | 19.2 | Q, U |
| 85-01-8 | Phenanthrene | | 1.20 | 2.40 | 4.81 | U |
| 108-95-2 | Phenol | | 1.20 | 2.40 | 4.81 | U |
| 129-00-0 | Pyrene | | 1.20 | 2.40 | 4.81 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.20 | 2.40 | 4.81 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.20 | 2.40 | 4.81 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 48.08 | 38.85 | 80.8 | 50 - 110 | |
| 2-Fluorophenol | 96.15 | 32.55 | 33.9 | 20 - 110 | |
| Nitrobenzene-d5 | 48.08 | 52.84 | 110 | 40 - 110 | |
| Phenol-d6 | 96.15 | 20.64 | 21.5 | 10 - 110 | |
| Terphenyl-d14 | 48.08 | 45.60 | 94.9 | 50 - 135 | |
| 2,4,6-Tribromophenol | 96.15 | 79.67 | 82.9 | 40 - 125 | |

# ANALYSIS DATA SHEET

**GW8012-RB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-03 | File ID: | 0520803.D |
| Sampled: | 05/23/11 08:47 | Prepared: | 05/25/11 09:58 | Analyzed: | 05/27/11 22:41 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E24013 Sequence: 1E15103 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.20 | 2.40 | 4.81 | U |
| 83-32-9 | Acenaphthene | | 1.20 | 2.40 | 4.81 | U |
| 208-96-8 | Acenaphthylene | | 1.20 | 2.40 | 4.81 | U |
| 98-86-2 | Acetophenone | | 1.20 | 2.40 | 4.81 | U |
| 120-12-7 | Anthracene | | 1.20 | 2.40 | 4.81 | U |
| 1912-24-9 | Atrazine | | 1.20 | 2.40 | 4.81 | U |
| 100-52-7 | Benzaldehyde | | 1.20 | 2.40 | 4.81 | U |
| 92-87-5 | Benzidine | | 12.0 | 24.0 | 48.1 | U |
| 56-55-3 | Benzo(a)anthracene | | 1.20 | 2.40 | 4.81 | U |
| 50-32-8 | Benzo(a)pyrene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.20 | 2.40 | 4.81 | Q, U |
| 65-85-0 | Benzoic acid | | 12.0 | 24.0 | 48.1 | U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 92-52-4 | 1,1-Biphenyl | | 1.20 | 2.40 | 4.81 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.20 | 2.40 | 4.81 | Q, U |
| 85-68-7 | Butylbenzylphthalate | | 1.20 | 2.40 | 4.81 | U |
| 105-60-2 | Caprolactam | | 1.20 | 2.40 | 4.81 | Q, U |
| 86-74-8 | Carbazole | | 1.20 | 2.40 | 4.81 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 106-47-8 | 4-Chloroaniline | | 1.20 | 2.40 | 4.81 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.20 | 2.40 | 4.81 | Q, U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.20 | 2.40 | 4.81 | U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.20 | 2.40 | 4.81 | U |
| 91-58-7 | 2-Chloronaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 95-57-8 | 2-Chlorophenol | | 1.20 | 2.40 | 4.81 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.20 | 2.40 | 4.81 | Q, U |
| 218-01-9 | Chrysene | | 1.20 | 2.40 | 4.81 | U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.20 | 2.40 | 4.81 | U |
| 132-64-9 | Dibenzofuran | | 1.20 | 2.40 | 4.81 | Q, U |
| 84-74-2 | Di-n-butylphthalate | | 1.20 | 2.40 | 4.81 | U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.20 | 2.40 | 4.81 | U |
| 84-66-2 | Diethylphthalate | | 1.20 | 2.40 | 4.81 | Q, U |
| 105-67-9 | 2,4-Dimethylphenol | | 4.81 | 9.62 | 19.2 | U |
| 131-11-3 | Dimethyl phthalate | | 1.20 | 2.40 | 4.81 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 4.81 | 9.62 | 19.2 | Q, X, U |
| 51-28-5 | 2,4-Dinitrophenol | | 12.0 | 24.0 | 48.1 | X, U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.20 | 2.40 | 4.81 | U |
| 117-84-0 | Di-n-octylphthalate | | 1.20 | 2.40 | 4.81 | X, Q, U |

# ANALYSIS DATA SHEET

**GW8012-RB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-03 | File ID: | 0520803.D |
| Sampled: | 05/23/11 08:47 | Prepared: | 05/25/11 09:58 | Analyzed: | 05/27/11 22:41 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E24013 Sequence: 1E15103 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.20 | 2.40 | 4.81 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 1.52 | 1.20 | 2.40 | 4.81 | J |
| 206-44-0 | Fluoranthene | | 1.20 | 2.40 | 4.81 | U |
| 86-73-7 | Fluorene | | 1.20 | 2.40 | 4.81 | U |
| 118-74-1 | Hexachlorobenzene | | 1.20 | 2.40 | 4.81 | Q, U |
| 87-68-3 | Hexachlorobutadiene | | 1.20 | 2.40 | 4.81 | U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.20 | 2.40 | 4.81 | X, U |
| 67-72-1 | Hexachloroethane | | 1.20 | 2.40 | 4.81 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.20 | 2.40 | 4.81 | U |
| 78-59-1 | Isophorone | | 1.20 | 2.40 | 4.81 | U |
| 90-12-0 | 1-Methylnaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 91-57-6 | 2-Methylnaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 95-48-7 | 2-Methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 65794-96-9 | 3+4-Methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 100-01-6 | 4-Nitroaniline | | 4.81 | 9.62 | 19.2 | Q, X, U |
| 99-09-2 | 3-Nitroaniline | | 4.81 | 9.62 | 19.2 | X, U |
| 88-74-4 | 2-Nitroaniline | | 4.81 | 9.62 | 19.2 | X, U |
| 98-95-3 | Nitrobenzene | | 1.20 | 2.40 | 4.81 | Q, U |
| 100-02-7 | 4-Nitrophenol | | 4.81 | 9.62 | 19.2 | X, U |
| 88-75-5 | 2-Nitrophenol | | 1.20 | 2.40 | 4.81 | U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.20 | 2.40 | 4.81 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.20 | 2.40 | 4.81 | U |
| 87-86-5 | Pentachlorophenol | | 4.81 | 9.62 | 19.2 | Q, U |
| 85-01-8 | Phenanthrene | | 1.20 | 2.40 | 4.81 | U |
| 108-95-2 | Phenol | | 1.20 | 2.40 | 4.81 | U |
| 129-00-0 | Pyrene | | 1.20 | 2.40 | 4.81 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.20 | 2.40 | 4.81 | X, U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.20 | 2.40 | 4.81 | X, U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 48.08 | 33.53 | 69.7 | 50 - 110 | |
| 2-Fluorophenol | 96.15 | 28.64 | 29.8 | 20 - 110 | |
| Nitrobenzene-d5 | 48.08 | 36.45 | 75.8 | 40 - 110 | |
| Phenol-d6 | 96.15 | 18.82 | 19.6 | 10 - 110 | |
| Terphenyl-d14 | 48.08 | 48.51 | 101 | 50 - 135 | |
| 2,4,6-Tribromophenol | 96.15 | 84.36 | 87.7 | 40 - 125 | |

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01 | File ID: | 0521701.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 05/27/11 17:15 | Analyzed: | 05/29/11 00:03 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.25 | 2.50 | 5.00 | U |
| 83-32-9 | Acenaphthene | | 1.25 | 2.50 | 5.00 | U |
| 208-96-8 | Acenaphthylene | | 1.25 | 2.50 | 5.00 | U |
| 98-86-2 | Acetophenone | | 1.25 | 2.50 | 5.00 | U |
| 120-12-7 | Anthracene | | 1.25 | 2.50 | 5.00 | U |
| 1912-24-9 | Atrazine | | 1.25 | 2.50 | 5.00 | U |
| 100-52-7 | Benzaldehyde | | 1.25 | 2.50 | 5.00 | Y, U |
| 92-87-5 | Benzidine | | 12.5 | 25.0 | 50.0 | X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.25 | 2.50 | 5.00 | U |
| 50-32-8 | Benzo(a)pyrene | | 1.25 | 2.50 | 5.00 | X, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.25 | 2.50 | 5.00 | X, Q, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.25 | 2.50 | 5.00 | X, Q, U |
| 65-85-0 | Benzoic acid | | 12.5 | 25.0 | 50.0 | U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.25 | 2.50 | 5.00 | X, Q, U |
| 92-52-4 | 1,1-Biphenyl | | 1.25 | 2.50 | 5.00 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.25 | 2.50 | 5.00 | U |
| 85-68-7 | Butylbenzylphthalate | | 1.25 | 2.50 | 5.00 | U |
| 105-60-2 | Caprolactam | | 1.25 | 2.50 | 5.00 | Q, U |
| 86-74-8 | Carbazole | | 1.25 | 2.50 | 5.00 | Q, U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 106-47-8 | 4-Chloroaniline | | 1.25 | 2.50 | 5.00 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.25 | 2.50 | 5.00 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.25 | 2.50 | 5.00 | U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.25 | 2.50 | 5.00 | Y, U |
| 91-58-7 | 2-Chloronaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 95-57-8 | 2-Chlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.25 | 2.50 | 5.00 | U |
| 218-01-9 | Chrysene | | 1.25 | 2.50 | 5.00 | U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.25 | 2.50 | 5.00 | X, Q, U |
| 132-64-9 | Dibenzofuran | | 1.25 | 2.50 | 5.00 | U |
| 84-74-2 | Di-n-butylphthalate | | 1.25 | 2.50 | 5.00 | U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 84-66-2 | Diethylphthalate | | 1.25 | 2.50 | 5.00 | U |
| 105-67-9 | 2,4-Dimethylphenol | | 5.00 | 10.0 | 20.0 | U |
| 131-11-3 | Dimethyl phthalate | | 1.25 | 2.50 | 5.00 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 5.00 | 10.0 | 20.0 | U |
| 51-28-5 | 2,4-Dinitrophenol | | 12.5 | 25.0 | 50.0 | U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.25 | 2.50 | 5.00 | U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.25 | 2.50 | 5.00 | U |
| 117-84-0 | Di-n-octylphthalate | | 1.25 | 2.50 | 5.00 | X, Q, U |

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01 | File ID: | 0521701.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 05/27/11 17:15 | Analyzed: | 05/29/11 00:03 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.25 | 2.50 | 5.00 | Y, U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.25 | 2.50 | 5.00 | U |
| 206-44-0 | Fluoranthene | | 1.25 | 2.50 | 5.00 | U |
| 86-73-7 | Fluorene | | 1.25 | 2.50 | 5.00 | U |
| 118-74-1 | Hexachlorobenzene | | 1.25 | 2.50 | 5.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 1.25 | 2.50 | 5.00 | Q, U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.25 | 2.50 | 5.00 | Q, U |
| 67-72-1 | Hexachloroethane | | 1.25 | 2.50 | 5.00 | Q, U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.25 | 2.50 | 5.00 | X, U |
| 78-59-1 | Isophorone | | 1.25 | 2.50 | 5.00 | U |
| 90-12-0 | 1-Methylnaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 91-57-6 | 2-Methylnaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 95-48-7 | 2-Methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 65794-96-9 | 3+4-Methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 100-01-6 | 4-Nitroaniline | | 5.00 | 10.0 | 20.0 | X, Q, U |
| 99-09-2 | 3-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 88-74-4 | 2-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 98-95-3 | Nitrobenzene | | 1.25 | 2.50 | 5.00 | U |
| 100-02-7 | 4-Nitrophenol | | 5.00 | 10.0 | 20.0 | U |
| 88-75-5 | 2-Nitrophenol | | 1.25 | 2.50 | 5.00 | U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.25 | 2.50 | 5.00 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.25 | 2.50 | 5.00 | U |
| 87-86-5 | Pentachlorophenol | | 5.00 | 10.0 | 20.0 | Q, U |
| 85-01-8 | Phenanthrene | | 1.25 | 2.50 | 5.00 | U |
| 108-95-2 | Phenol | | 1.25 | 2.50 | 5.00 | U |
| 129-00-0 | Pyrene | | 1.25 | 2.50 | 5.00 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.25 | 2.50 | 5.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 50.00 | 30.95 | 61.9 | 50 - 110 | |
| 2-Fluorophenol | 100.0 | 26.99 | 27.0 | 20 - 110 | |
| Nitrobenzene-d5 | 50.00 | 33.77 | 67.5 | 40 - 110 | |
| Phenol-d6 | 100.0 | 15.09 | 15.1 | 10 - 110 | |
| Terphenyl-d14 | 50.00 | 51.32 | 103 | 50 - 135 | |
| 2,4,6-Tribromophenol | 100.0 | 72.20 | 72.2 | 40 - 125 | |

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01RE1 | File ID: | 0521701R.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 06/02/11 10:28 | Analyzed: | 06/05/11 04:57 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1F01024 Sequence: 1F15808 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 83-32-9 | Acenaphthene | | 1.17 | 2.34 | 4.67 | H2, U |
| 208-96-8 | Acenaphthylene | | 1.17 | 2.34 | 4.67 | H2, U |
| 98-86-2 | Acetophenone | | 1.17 | 2.34 | 4.67 | H2, U |
| 120-12-7 | Anthracene | | 1.17 | 2.34 | 4.67 | H2, U |
| 1912-24-9 | Atrazine | | 1.17 | 2.34 | 4.67 | H2, U |
| 100-52-7 | Benzaldehyde | | 1.17 | 2.34 | 4.67 | H2, U |
| 92-87-5 | Benzidine | | 11.7 | 23.4 | 46.7 | H2, X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 50-32-8 | Benzo(a)pyrene | | 1.17 | 2.34 | 4.67 | H2, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.17 | 2.34 | 4.67 | H2, U |
| 65-85-0 | Benzoic acid | | 11.7 | 23.4 | 46.7 | H2, U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.17 | 2.34 | 4.67 | H2, U |
| 92-52-4 | 1,1-Biphenyl | | 1.17 | 2.34 | 4.67 | H2, U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 85-68-7 | Butylbenzylphthalate | | 1.17 | 2.34 | 4.67 | Q, H2, U |
| 105-60-2 | Caprolactam | 1.52 | 1.17 | 2.34 | 4.67 | H2, Q, J |
| 86-74-8 | Carbazole | | 1.17 | 2.34 | 4.67 | H2, U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.17 | 2.34 | 4.67 | H2, X, U |
| 106-47-8 | 4-Chloroaniline | | 1.17 | 2.34 | 4.67 | H2, U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.17 | 2.34 | 4.67 | H2, Y, U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.17 | 2.34 | 4.67 | H2, Y, U |
| 91-58-7 | 2-Chloronaphthalene | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 95-57-8 | 2-Chlorophenol | | 1.17 | 2.34 | 4.67 | H2, U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 218-01-9 | Chrysene | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.17 | 2.34 | 4.67 | H2, U |
| 132-64-9 | Dibenzofuran | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 84-74-2 | Di-n-butylphthalate | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.17 | 2.34 | 4.67 | H2, X, U |
| 84-66-2 | Diethylphthalate | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 105-67-9 | 2,4-Dimethylphenol | | 4.67 | 9.35 | 18.7 | H2, X, U |
| 131-11-3 | Dimethyl phthalate | | 1.17 | 2.34 | 4.67 | H2, U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 4.67 | 9.35 | 18.7 | H2, U |
| 51-28-5 | 2,4-Dinitrophenol | | 11.7 | 23.4 | 46.7 | H2, U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 117-84-0 | Di-n-octylphthalate | | 1.17 | 2.34 | 4.67 | H2, Y, U |

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01RE1 | File ID: | 0521701R.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 06/02/11 10:28 | Analyzed: | 06/05/11 04:57 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1F01024 Sequence: 1F15808 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.17 | 2.34 | 4.67 | Y, H2, U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.17 | 2.34 | 4.67 | H2, Q, Y, U |
| 206-44-0 | Fluoranthene | | 1.17 | 2.34 | 4.67 | H2, U |
| 86-73-7 | Fluorene | | 1.17 | 2.34 | 4.67 | H2, U |
| 118-74-1 | Hexachlorobenzene | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 87-68-3 | Hexachlorobutadiene | | 1.17 | 2.34 | 4.67 | H2, X, U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.17 | 2.34 | 4.67 | H2, U |
| 67-72-1 | Hexachloroethane | | 1.17 | 2.34 | 4.67 | H2, U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.17 | 2.34 | 4.67 | H2, U |
| 78-59-1 | Isophorone | | 1.17 | 2.34 | 4.67 | H2, U |
| 90-12-0 | 1-Methylnaphthalene | | 1.17 | 2.34 | 4.67 | H2, U |
| 91-57-6 | 2-Methylnaphthalene | | 1.17 | 2.34 | 4.67 | H2, U |
| 95-48-7 | 2-Methylphenol | | 1.17 | 2.34 | 4.67 | H2, U |
| 65794-96-9 | 3+4-Methylphenol | | 1.17 | 2.34 | 4.67 | H2, U |
| 100-01-6 | 4-Nitroaniline | | 4.67 | 9.35 | 18.7 | H2, X, U |
| 99-09-2 | 3-Nitroaniline | | 4.67 | 9.35 | 18.7 | H2, U |
| 88-74-4 | 2-Nitroaniline | | 4.67 | 9.35 | 18.7 | H2, U |
| 98-95-3 | Nitrobenzene | | 1.17 | 2.34 | 4.67 | H2, U |
| 100-02-7 | 4-Nitrophenol | | 4.67 | 9.35 | 18.7 | H2, U |
| 88-75-5 | 2-Nitrophenol | | 1.17 | 2.34 | 4.67 | H2, U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.17 | 2.34 | 4.67 | H2, U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.17 | 2.34 | 4.67 | H2, Y, U |
| 87-86-5 | Pentachlorophenol | | 4.67 | 9.35 | 18.7 | H2, U |
| 85-01-8 | Phenanthrene | | 1.17 | 2.34 | 4.67 | H2, Q, U |
| 108-95-2 | Phenol | | 1.17 | 2.34 | 4.67 | H2, U |
| 129-00-0 | Pyrene | | 1.17 | 2.34 | 4.67 | H2, U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.17 | 2.34 | 4.67 | H2, U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.17 | 2.34 | 4.67 | H2, U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 46.73 | 45.65 | 97.7 | 50 - 110 | H2 |
| 2-Fluorophenol | 93.46 | 32.31 | 34.6 | 20 - 110 | H2 |
| Nitrobenzene-d5 | 46.73 | 45.39 | 97.1 | 40 - 110 | H2 |
| Phenol-d6 | 93.46 | 18.37 | 19.7 | 10 - 110 | H2 |
| Terphenyl-d14 | 46.73 | 44.08 | 94.3 | 50 - 135 | H2 |
| 2,4,6-Tribromophenol | 93.46 | 101.7 | 109 | 40 - 125 | H2 |

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01 | File ID: | 0522501.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 05/27/11 17:15 | Analyzed: | 05/29/11 00:32 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.20 | 2.40 | 4.81 | U |
| 83-32-9 | Acenaphthene | | 1.20 | 2.40 | 4.81 | U |
| 208-96-8 | Acenaphthylene | | 1.20 | 2.40 | 4.81 | U |
| 98-86-2 | Acetophenone | | 1.20 | 2.40 | 4.81 | U |
| 120-12-7 | Anthracene | | 1.20 | 2.40 | 4.81 | U |
| 1912-24-9 | Atrazine | | 1.20 | 2.40 | 4.81 | U |
| 100-52-7 | Benzaldehyde | | 1.20 | 2.40 | 4.81 | Y, U |
| 92-87-5 | Benzidine | | 12.0 | 24.0 | 48.1 | X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.20 | 2.40 | 4.81 | U |
| 50-32-8 | Benzo(a)pyrene | | 1.20 | 2.40 | 4.81 | X, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 65-85-0 | Benzoic acid | | 12.0 | 24.0 | 48.1 | U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.20 | 2.40 | 4.81 | Q, X, U |
| 92-52-4 | 1,1-Biphenyl | | 1.20 | 2.40 | 4.81 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.20 | 2.40 | 4.81 | U |
| 85-68-7 | Butylbenzylphthalate | | 1.20 | 2.40 | 4.81 | U |
| 105-60-2 | Caprolactam | | 1.20 | 2.40 | 4.81 | Q, U |
| 86-74-8 | Carbazole | | 1.20 | 2.40 | 4.81 | Q, U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 106-47-8 | 4-Chloroaniline | | 1.20 | 2.40 | 4.81 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.20 | 2.40 | 4.81 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.20 | 2.40 | 4.81 | U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.20 | 2.40 | 4.81 | Y, U |
| 91-58-7 | 2-Chloronaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 95-57-8 | 2-Chlorophenol | | 1.20 | 2.40 | 4.81 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.20 | 2.40 | 4.81 | U |
| 218-01-9 | Chrysene | | 1.20 | 2.40 | 4.81 | U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.20 | 2.40 | 4.81 | X, Q, U |
| 132-64-9 | Dibenzofuran | | 1.20 | 2.40 | 4.81 | U |
| 84-74-2 | Di-n-butylphthalate | | 1.20 | 2.40 | 4.81 | U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.20 | 2.40 | 4.81 | U |
| 84-66-2 | Diethylphthalate | | 1.20 | 2.40 | 4.81 | U |
| 105-67-9 | 2,4-Dimethylphenol | | 4.81 | 9.62 | 19.2 | U |
| 131-11-3 | Dimethyl phthalate | | 1.20 | 2.40 | 4.81 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 4.81 | 9.62 | 19.2 | U |
| 51-28-5 | 2,4-Dinitrophenol | | 12.0 | 24.0 | 48.1 | U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.20 | 2.40 | 4.81 | U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.20 | 2.40 | 4.81 | U |
| 117-84-0 | Di-n-octylphthalate | | 1.20 | 2.40 | 4.81 | Q, X, U |

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01 | File ID: | 0522501.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 05/27/11 17:15 | Analyzed: | 05/29/11 00:32 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.20 | 2.40 | 4.81 | Y, U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.20 | 2.40 | 4.81 | U |
| 206-44-0 | Fluoranthene | | 1.20 | 2.40 | 4.81 | U |
| 86-73-7 | Fluorene | | 1.20 | 2.40 | 4.81 | U |
| 118-74-1 | Hexachlorobenzene | | 1.20 | 2.40 | 4.81 | U |
| 87-68-3 | Hexachlorobutadiene | | 1.20 | 2.40 | 4.81 | Q, U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.20 | 2.40 | 4.81 | Q, U |
| 67-72-1 | Hexachloroethane | | 1.20 | 2.40 | 4.81 | Q, U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.20 | 2.40 | 4.81 | X, U |
| 78-59-1 | Isophorone | | 1.20 | 2.40 | 4.81 | U |
| 90-12-0 | 1-Methylnaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 91-57-6 | 2-Methylnaphthalene | | 1.20 | 2.40 | 4.81 | U |
| 95-48-7 | 2-Methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 65794-96-9 | 3+4-Methylphenol | | 1.20 | 2.40 | 4.81 | U |
| 100-01-6 | 4-Nitroaniline | | 4.81 | 9.62 | 19.2 | Q, X, U |
| 99-09-2 | 3-Nitroaniline | | 4.81 | 9.62 | 19.2 | U |
| 88-74-4 | 2-Nitroaniline | | 4.81 | 9.62 | 19.2 | U |
| 98-95-3 | Nitrobenzene | | 1.20 | 2.40 | 4.81 | U |
| 100-02-7 | 4-Nitrophenol | | 4.81 | 9.62 | 19.2 | U |
| 88-75-5 | 2-Nitrophenol | | 1.20 | 2.40 | 4.81 | U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.20 | 2.40 | 4.81 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.20 | 2.40 | 4.81 | U |
| 87-86-5 | Pentachlorophenol | | 4.81 | 9.62 | 19.2 | Q, U |
| 85-01-8 | Phenanthrene | | 1.20 | 2.40 | 4.81 | U |
| 108-95-2 | Phenol | | 1.20 | 2.40 | 4.81 | U |
| 129-00-0 | Pyrene | | 1.20 | 2.40 | 4.81 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.20 | 2.40 | 4.81 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.20 | 2.40 | 4.81 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 48.08 | 36.55 | 76.0 | 50 - 110 | |
| 2-Fluorophenol | 96.15 | 32.72 | 34.0 | 20 - 110 | |
| Nitrobenzene-d5 | 48.08 | 34.86 | 72.5 | 40 - 110 | |
| Phenol-d6 | 96.15 | 17.95 | 18.7 | 10 - 110 | |
| Terphenyl-d14 | 48.08 | 45.63 | 94.9 | 50 - 135 | |
| 2,4,6-Tribromophenol | 96.15 | 73.58 | 76.5 | 40 - 125 | |

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01RE1 | File ID: | 0522501R.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 06/02/11 10:28 | Analyzed: | 06/05/11 05:26 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1F01024 Sequence: 1F15808 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 83-32-9 | Acenaphthene | | 1.18 | 2.36 | 4.72 | H2, U |
| 208-96-8 | Acenaphthylene | | 1.18 | 2.36 | 4.72 | H2, U |
| 98-86-2 | Acetophenone | | 1.18 | 2.36 | 4.72 | H2, U |
| 120-12-7 | Anthracene | | 1.18 | 2.36 | 4.72 | H2, U |
| 1912-24-9 | Atrazine | | 1.18 | 2.36 | 4.72 | H2, U |
| 100-52-7 | Benzaldehyde | | 1.18 | 2.36 | 4.72 | H2, U |
| 92-87-5 | Benzidine | | 11.8 | 23.6 | 47.2 | H2, X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 50-32-8 | Benzo(a)pyrene | | 1.18 | 2.36 | 4.72 | H2, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.18 | 2.36 | 4.72 | H2, U |
| 65-85-0 | Benzoic acid | | 11.8 | 23.6 | 47.2 | H2, U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.18 | 2.36 | 4.72 | H2, U |
| 92-52-4 | 1,1-Biphenyl | | 1.18 | 2.36 | 4.72 | H2, U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 85-68-7 | Butylbenzylphthalate | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 105-60-2 | Caprolactam | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 86-74-8 | Carbazole | | 1.18 | 2.36 | 4.72 | H2, U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.18 | 2.36 | 4.72 | H2, X, U |
| 106-47-8 | 4-Chloroaniline | | 1.18 | 2.36 | 4.72 | H2, U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.18 | 2.36 | 4.72 | H2, Y, U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.18 | 2.36 | 4.72 | H2, Y, U |
| 91-58-7 | 2-Chloronaphthalene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 95-57-8 | 2-Chlorophenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 218-01-9 | Chrysene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.18 | 2.36 | 4.72 | H2, U |
| 132-64-9 | Dibenzofuran | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 84-74-2 | Di-n-butylphthalate | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.18 | 2.36 | 4.72 | H2, X, U |
| 84-66-2 | Diethylphthalate | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 105-67-9 | 2,4-Dimethylphenol | | 4.72 | 9.43 | 18.9 | H2, X, U |
| 131-11-3 | Dimethyl phthalate | | 1.18 | 2.36 | 4.72 | H2, U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 4.72 | 9.43 | 18.9 | H2, U |
| 51-28-5 | 2,4-Dinitrophenol | | 11.8 | 23.6 | 47.2 | H2, U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 117-84-0 | Di-n-octylphthalate | | 1.18 | 2.36 | 4.72 | Y, H2, U |

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01RE1 | File ID: | 0522501R.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 06/02/11 10:28 | Analyzed: | 06/05/11 05:26 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1F01024 Sequence: 1F15808 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.18 | 2.36 | 4.72 | H2, Y, U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.18 | 2.36 | 4.72 | H2, Q, Y, U |
| 206-44-0 | Fluoranthene | | 1.18 | 2.36 | 4.72 | H2, U |
| 86-73-7 | Fluorene | | 1.18 | 2.36 | 4.72 | H2, U |
| 118-74-1 | Hexachlorobenzene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 87-68-3 | Hexachlorobutadiene | | 1.18 | 2.36 | 4.72 | H2, X, U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.18 | 2.36 | 4.72 | H2, U |
| 67-72-1 | Hexachloroethane | | 1.18 | 2.36 | 4.72 | H2, U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.18 | 2.36 | 4.72 | H2, U |
| 78-59-1 | Isophorone | | 1.18 | 2.36 | 4.72 | H2, U |
| 90-12-0 | 1-Methylnaphthalene | | 1.18 | 2.36 | 4.72 | H2, U |
| 91-57-6 | 2-Methylnaphthalene | | 1.18 | 2.36 | 4.72 | H2, U |
| 95-48-7 | 2-Methylphenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 65794-96-9 | 3+4-Methylphenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 100-01-6 | 4-Nitroaniline | | 4.72 | 9.43 | 18.9 | H2, X, U |
| 99-09-2 | 3-Nitroaniline | | 4.72 | 9.43 | 18.9 | H2, U |
| 88-74-4 | 2-Nitroaniline | | 4.72 | 9.43 | 18.9 | H2, U |
| 98-95-3 | Nitrobenzene | | 1.18 | 2.36 | 4.72 | H2, U |
| 100-02-7 | 4-Nitrophenol | | 4.72 | 9.43 | 18.9 | H2, U |
| 88-75-5 | 2-Nitrophenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.18 | 2.36 | 4.72 | H2, U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.18 | 2.36 | 4.72 | H2, Y, U |
| 87-86-5 | Pentachlorophenol | | 4.72 | 9.43 | 18.9 | H2, U |
| 85-01-8 | Phenanthrene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 108-95-2 | Phenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 129-00-0 | Pyrene | | 1.18 | 2.36 | 4.72 | H2, U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.18 | 2.36 | 4.72 | H2, U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 47.17 | 44.84 | 95.1 | 50 - 110 | H2 |
| 2-Fluorophenol | 94.34 | 30.89 | 32.7 | 20 - 110 | H2 |
| Nitrobenzene-d5 | 47.17 | 41.59 | 88.2 | 40 - 110 | H2 |
| Phenol-d6 | 94.34 | 15.83 | 16.8 | 10 - 110 | H2 |
| Terphenyl-d14 | 47.17 | 42.49 | 90.1 | 50 - 135 | H2 |
| 2,4,6-Tribromophenol | 94.34 | 85.45 | 90.6 | 40 - 125 | H2 |

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03 | File ID: | 0522503.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 05/27/11 17:15 | Analyzed: | 05/29/11 01:01 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.23 | 2.45 | 4.90 | U |
| 83-32-9 | Acenaphthene | | 1.23 | 2.45 | 4.90 | U |
| 208-96-8 | Acenaphthylene | | 1.23 | 2.45 | 4.90 | U |
| 98-86-2 | Acetophenone | | 1.23 | 2.45 | 4.90 | U |
| 120-12-7 | Anthracene | | 1.23 | 2.45 | 4.90 | U |
| 1912-24-9 | Atrazine | | 1.23 | 2.45 | 4.90 | U |
| 100-52-7 | Benzaldehyde | | 1.23 | 2.45 | 4.90 | Y, U |
| 92-87-5 | Benzidine | | 12.3 | 24.5 | 49.0 | X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.23 | 2.45 | 4.90 | U |
| 50-32-8 | Benzo(a)pyrene | | 1.23 | 2.45 | 4.90 | X, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.23 | 2.45 | 4.90 | Q, X, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.23 | 2.45 | 4.90 | X, Q, U |
| 65-85-0 | Benzoic acid | | 12.3 | 24.5 | 49.0 | U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.23 | 2.45 | 4.90 | Q, X, U |
| 92-52-4 | 1,1-Biphenyl | | 1.23 | 2.45 | 4.90 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.23 | 2.45 | 4.90 | U |
| 85-68-7 | Butylbenzylphthalate | | 1.23 | 2.45 | 4.90 | U |
| 105-60-2 | Caprolactam | | 1.23 | 2.45 | 4.90 | Q, U |
| 86-74-8 | Carbazole | | 1.23 | 2.45 | 4.90 | Q, U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.23 | 2.45 | 4.90 | U |
| 106-47-8 | 4-Chloroaniline | | 1.23 | 2.45 | 4.90 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.23 | 2.45 | 4.90 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.23 | 2.45 | 4.90 | U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.23 | 2.45 | 4.90 | Y, U |
| 91-58-7 | 2-Chloronaphthalene | | 1.23 | 2.45 | 4.90 | U |
| 95-57-8 | 2-Chlorophenol | | 1.23 | 2.45 | 4.90 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.23 | 2.45 | 4.90 | U |
| 218-01-9 | Chrysene | | 1.23 | 2.45 | 4.90 | U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.23 | 2.45 | 4.90 | X, Q, U |
| 132-64-9 | Dibenzofuran | | 1.23 | 2.45 | 4.90 | U |
| 84-74-2 | Di-n-butylphthalate | | 1.23 | 2.45 | 4.90 | U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.23 | 2.45 | 4.90 | U |
| 84-66-2 | Diethylphthalate | | 1.23 | 2.45 | 4.90 | U |
| 105-67-9 | 2,4-Dimethylphenol | | 4.90 | 9.80 | 19.6 | U |
| 131-11-3 | Dimethyl phthalate | | 1.23 | 2.45 | 4.90 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 4.90 | 9.80 | 19.6 | U |
| 51-28-5 | 2,4-Dinitrophenol | | 12.3 | 24.5 | 49.0 | U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.23 | 2.45 | 4.90 | U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.23 | 2.45 | 4.90 | U |
| 117-84-0 | Di-n-octylphthalate | | 1.23 | 2.45 | 4.90 | Q, X, U |

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03 | File ID: | 0522503.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 05/27/11 17:15 | Analyzed: | 05/29/11 01:01 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.23 | 2.45 | 4.90 | Y, U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.23 | 2.45 | 4.90 | U |
| 206-44-0 | Fluoranthene | | 1.23 | 2.45 | 4.90 | U |
| 86-73-7 | Fluorene | | 1.23 | 2.45 | 4.90 | U |
| 118-74-1 | Hexachlorobenzene | | 1.23 | 2.45 | 4.90 | U |
| 87-68-3 | Hexachlorobutadiene | | 1.23 | 2.45 | 4.90 | Q, U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.23 | 2.45 | 4.90 | Q, U |
| 67-72-1 | Hexachloroethane | | 1.23 | 2.45 | 4.90 | Q, U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.23 | 2.45 | 4.90 | X, U |
| 78-59-1 | Isophorone | | 1.23 | 2.45 | 4.90 | U |
| 90-12-0 | 1-Methylnaphthalene | | 1.23 | 2.45 | 4.90 | U |
| 91-57-6 | 2-Methylnaphthalene | | 1.23 | 2.45 | 4.90 | U |
| 95-48-7 | 2-Methylphenol | | 1.23 | 2.45 | 4.90 | U |
| 65794-96-9 | 3+4-Methylphenol | | 1.23 | 2.45 | 4.90 | U |
| 100-01-6 | 4-Nitroaniline | | 4.90 | 9.80 | 19.6 | Q, X, U |
| 99-09-2 | 3-Nitroaniline | | 4.90 | 9.80 | 19.6 | U |
| 88-74-4 | 2-Nitroaniline | | 4.90 | 9.80 | 19.6 | U |
| 98-95-3 | Nitrobenzene | | 1.23 | 2.45 | 4.90 | U |
| 100-02-7 | 4-Nitrophenol | | 4.90 | 9.80 | 19.6 | U |
| 88-75-5 | 2-Nitrophenol | | 1.23 | 2.45 | 4.90 | U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.23 | 2.45 | 4.90 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.23 | 2.45 | 4.90 | U |
| 87-86-5 | Pentachlorophenol | | 4.90 | 9.80 | 19.6 | Q, U |
| 85-01-8 | Phenanthrene | | 1.23 | 2.45 | 4.90 | U |
| 108-95-2 | Phenol | | 1.23 | 2.45 | 4.90 | U |
| 129-00-0 | Pyrene | | 1.23 | 2.45 | 4.90 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.23 | 2.45 | 4.90 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.23 | 2.45 | 4.90 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 49.02 | 32.39 | 66.1 | 50 - 110 | |
| 2-Fluorophenol | 98.04 | 29.52 | 30.1 | 20 - 110 | |
| Nitrobenzene-d5 | 49.02 | 34.25 | 69.9 | 40 - 110 | |
| Phenol-d6 | 98.04 | 16.52 | 16.8 | 10 - 110 | |
| Terphenyl-d14 | 49.02 | 44.99 | 91.8 | 50 - 135 | |
| 2,4,6-Tribromophenol | 98.04 | 77.73 | 79.3 | 40 - 125 | |

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03RE1 | File ID: | 0522503R.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 06/02/11 10:28 | Analyzed: | 06/05/11 05:55 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1F01024 Sequence: 1F15808 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 83-32-9 | Acenaphthene | | 1.18 | 2.36 | 4.72 | H2, U |
| 208-96-8 | Acenaphthylene | | 1.18 | 2.36 | 4.72 | H2, U |
| 98-86-2 | Acetophenone | | 1.18 | 2.36 | 4.72 | H2, U |
| 120-12-7 | Anthracene | | 1.18 | 2.36 | 4.72 | H2, U |
| 1912-24-9 | Atrazine | | 1.18 | 2.36 | 4.72 | H2, U |
| 100-52-7 | Benzaldehyde | | 1.18 | 2.36 | 4.72 | H2, U |
| 92-87-5 | Benzidine | | 11.8 | 23.6 | 47.2 | H2, X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 50-32-8 | Benzo(a)pyrene | | 1.18 | 2.36 | 4.72 | H2, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.18 | 2.36 | 4.72 | H2, U |
| 65-85-0 | Benzoic acid | | 11.8 | 23.6 | 47.2 | H2, U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.18 | 2.36 | 4.72 | H2, U |
| 92-52-4 | 1,1-Biphenyl | | 1.18 | 2.36 | 4.72 | H2, U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.18 | 2.36 | 4.72 | Q, H2, U |
| 85-68-7 | Butylbenzylphthalate | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 105-60-2 | Caprolactam | 1.51 | 1.18 | 2.36 | 4.72 | H2, Q, J |
| 86-74-8 | Carbazole | | 1.18 | 2.36 | 4.72 | H2, U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.18 | 2.36 | 4.72 | H2, X, U |
| 106-47-8 | 4-Chloroaniline | | 1.18 | 2.36 | 4.72 | H2, U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.18 | 2.36 | 4.72 | H2, Y, U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.18 | 2.36 | 4.72 | H2, Y, U |
| 91-58-7 | 2-Chloronaphthalene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 95-57-8 | 2-Chlorophenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 218-01-9 | Chrysene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.18 | 2.36 | 4.72 | H2, U |
| 132-64-9 | Dibenzofuran | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 84-74-2 | Di-n-butylphthalate | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.18 | 2.36 | 4.72 | H2, X, U |
| 84-66-2 | Diethylphthalate | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 105-67-9 | 2,4-Dimethylphenol | | 4.72 | 9.43 | 18.9 | H2, X, U |
| 131-11-3 | Dimethyl phthalate | | 1.18 | 2.36 | 4.72 | H2, U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 4.72 | 9.43 | 18.9 | H2, U |
| 51-28-5 | 2,4-Dinitrophenol | | 11.8 | 23.6 | 47.2 | H2, U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 117-84-0 | Di-n-octylphthalate | | 1.18 | 2.36 | 4.72 | H2, Y, U |

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03RE1 | File ID: | 0522503R.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 06/02/11 10:28 | Analyzed: | 06/05/11 05:55 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1F01024 Sequence: 1F15808 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.18 | 2.36 | 4.72 | Y, H2, U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.18 | 2.36 | 4.72 | H2, Q, Y, U |
| 206-44-0 | Fluoranthene | | 1.18 | 2.36 | 4.72 | H2, U |
| 86-73-7 | Fluorene | | 1.18 | 2.36 | 4.72 | H2, U |
| 118-74-1 | Hexachlorobenzene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 87-68-3 | Hexachlorobutadiene | | 1.18 | 2.36 | 4.72 | X, H2, U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.18 | 2.36 | 4.72 | H2, U |
| 67-72-1 | Hexachloroethane | | 1.18 | 2.36 | 4.72 | H2, U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.18 | 2.36 | 4.72 | H2, U |
| 78-59-1 | Isophorone | | 1.18 | 2.36 | 4.72 | H2, U |
| 90-12-0 | 1-Methylnaphthalene | | 1.18 | 2.36 | 4.72 | H2, U |
| 91-57-6 | 2-Methylnaphthalene | | 1.18 | 2.36 | 4.72 | H2, U |
| 95-48-7 | 2-Methylphenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 65794-96-9 | 3+4-Methylphenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 100-01-6 | 4-Nitroaniline | | 4.72 | 9.43 | 18.9 | H2, X, U |
| 99-09-2 | 3-Nitroaniline | | 4.72 | 9.43 | 18.9 | H2, U |
| 88-74-4 | 2-Nitroaniline | | 4.72 | 9.43 | 18.9 | H2, U |
| 98-95-3 | Nitrobenzene | | 1.18 | 2.36 | 4.72 | H2, U |
| 100-02-7 | 4-Nitrophenol | | 4.72 | 9.43 | 18.9 | H2, U |
| 88-75-5 | 2-Nitrophenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.18 | 2.36 | 4.72 | H2, U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.18 | 2.36 | 4.72 | H2, Y, U |
| 87-86-5 | Pentachlorophenol | | 4.72 | 9.43 | 18.9 | H2, U |
| 85-01-8 | Phenanthrene | | 1.18 | 2.36 | 4.72 | H2, Q, U |
| 108-95-2 | Phenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 129-00-0 | Pyrene | | 1.18 | 2.36 | 4.72 | H2, U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.18 | 2.36 | 4.72 | H2, U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.18 | 2.36 | 4.72 | H2, U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 47.17 | 42.92 | 91.0 | 50 - 110 | H2 |
| 2-Fluorophenol | 94.34 | 31.78 | 33.7 | 20 - 110 | H2 |
| Nitrobenzene-d5 | 47.17 | 46.82 | 99.2 | 40 - 110 | H2 |
| Phenol-d6 | 94.34 | 17.58 | 18.6 | 10 - 110 | H2 |
| Terphenyl-d14 | 47.17 | 41.98 | 89.0 | 50 - 135 | H2 |
| 2,4,6-Tribromophenol | 94.34 | 88.05 | 93.3 | 40 - 125 | H2 |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E14710 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E14710-CCV1 ) ug/mL** | | | | Lab File ID: SEQ-CCV1.D | | Analyzed: 05/26/11 16:45 | | |
| 2-Fluorobiphenyl | 50.00 | 110 | 80 - 120 | 8.684 | 8.684 | 0.0000 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 114 | 80 - 120 | 4.376 | 4.376 | 0.0000 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 95.7 | 80 - 120 | 6.523 | 6.523 | 0.0000 | +/-0.500 | |
| Phenol-d6 | 100.0 | 96.0 | 80 - 120 | 5.471 | 5.471 | 0.0000 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 116 | 80 - 120 | 13.254 | 13.254 | 0.0000 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 117 | 80 - 120 | 10.446 | 10.446 | 0.0000 | +/-0.500 | |
| **Blank (1E24013-BLK1 ) ug/L** | | | | Lab File ID: E24013B1.D | | Analyzed: 05/26/11 18:11 | | |
| 2-Fluorobiphenyl | 50.00 | 83.7 | 50 - 110 | 8.676 | 8.684 | -0.0080 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 35.0 | 20 - 110 | 4.367 | 4.376 | -0.0090 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 94.5 | 40 - 110 | 6.515 | 6.523 | -0.0080 | +/-0.500 | |
| Phenol-d6 | 100.0 | 21.8 | 10 - 110 | 5.447 | 5.471 | -0.0240 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 116 | 50 - 135 | 13.248 | 13.254 | -0.0060 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 96.8 | 40 - 125 | 10.437 | 10.446 | -0.0090 | +/-0.500 | |
| **GW0102 (1105208-01 ) ug/L** | | | | Lab File ID: 0520801.D | | Analyzed: 05/27/11 02:46 | | |
| 2-Fluorobiphenyl | 48.08 | 80.8 | 50 - 110 | 8.676 | 8.684 | -0.0080 | +/-0.500 | |
| 2-Fluorophenol | 96.15 | 33.9 | 20 - 110 | 4.375 | 4.376 | -0.0010 | +/-0.500 | |
| Nitrobenzene-d5 | 48.08 | 110 | 40 - 110 | 6.511 | 6.523 | -0.0120 | +/-0.500 | |
| Phenol-d6 | 96.15 | 21.5 | 10 - 110 | 5.443 | 5.471 | -0.0280 | +/-0.500 | |
| Terphenyl-d14 | 48.08 | 94.9 | 50 - 135 | 13.245 | 13.254 | -0.0090 | +/-0.500 | |
| 2,4,6-Tribromophenol | 96.15 | 82.9 | 40 - 125 | 10.434 | 10.446 | -0.0120 | +/-0.500 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15103 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E15103-CCV1 ) ug/mL** | | | | Lab File ID: SEQ-CCV1.D | | Analyzed: 05/27/11 20:08 | | |
| 2-Fluorobiphenyl | 50.00 | 101 | 80 - 120 | 8.584 | 8.584 | 0.0000 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 108 | 80 - 120 | 4.279 | 4.279 | 0.0000 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 91.9 | 80 - 120 | 6.42 | 6.42 | 0.0000 | +/-0.500 | |
| Phenol-d6 | 100.0 | 95.4 | 80 - 120 | 5.375 | 5.375 | 0.0000 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 107 | 80 - 120 | 13.148 | 13.148 | 0.0000 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 109 | 80 - 120 | 10.346 | 10.346 | 0.0000 | +/-0.500 | |
| **LCS (1E24013-BS1 ) ug/L** | | | | Lab File ID: E24013L1.D | | Analyzed: 05/27/11 22:12 | | |
| 2-Fluorobiphenyl | 50.00 | 88.2 | 50 - 110 | 8.584 | 8.584 | 0.0000 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 47.4 | 20 - 110 | 4.284 | 4.279 | 0.0050 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 108 | 40 - 110 | 6.418 | 6.42 | -0.0020 | +/-0.500 | |
| Phenol-d6 | 100.0 | 28.5 | 10 - 110 | 5.364 | 5.375 | -0.0110 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 111 | 50 - 135 | 13.147 | 13.148 | -0.0010 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 110 | 40 - 125 | 10.344 | 10.346 | -0.0020 | +/-0.500 | |
| **GW8012-RB (1105208-03 ) ug/L** | | | | Lab File ID: 0520803.D | | Analyzed: 05/27/11 22:41 | | |
| 2-Fluorobiphenyl | 48.08 | 69.7 | 50 - 110 | 8.581 | 8.584 | -0.0030 | +/-0.500 | |
| 2-Fluorophenol | 96.15 | 29.8 | 20 - 110 | 4.279 | 4.279 | 0.0000 | +/-0.500 | |
| Nitrobenzene-d5 | 48.08 | 75.8 | 40 - 110 | 6.418 | 6.42 | -0.0020 | +/-0.500 | |
| Phenol-d6 | 96.15 | 19.6 | 10 - 110 | 5.352 | 5.375 | -0.0230 | +/-0.500 | |
| Terphenyl-d14 | 48.08 | 101 | 50 - 135 | 13.147 | 13.148 | -0.0010 | +/-0.500 | |
| 2,4,6-Tribromophenol | 96.15 | 87.7 | 40 - 125 | 10.338 | 10.346 | -0.0080 | +/-0.500 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15110 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E15110-CCV1 ) ug/mL** | | | | Lab File ID: SEQ-CCV1.D | | Analyzed: 05/28/11 18:31 | | |
| 2-Fluorobiphenyl | 50.00 | 93.0 | 80 - 120 | 8.558 | 8.558 | 0.0000 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 94.9 | 80 - 120 | 4.255 | 4.255 | 0.0000 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 97.7 | 80 - 120 | 6.395 | 6.395 | 0.0000 | +/-0.500 | |
| Phenol-d6 | 100.0 | 83.5 | 80 - 120 | 5.343 | 5.343 | 0.0000 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 109 | 80 - 120 | 13.124 | 13.124 | 0.0000 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 112 | 80 - 120 | 10.319 | 10.319 | 0.0000 | +/-0.500 | |
| **Blank (1E27018-BLK1 ) ug/L** | | | | Lab File ID: E27018B1.D | | Analyzed: 05/28/11 20:11 | | |
| 2-Fluorobiphenyl | 50.00 | 59.2 | 50 - 110 | 8.552 | 8.558 | -0.0060 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 31.2 | 20 - 110 | 4.248 | 4.255 | -0.0070 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 62.6 | 40 - 110 | 6.39 | 6.395 | -0.0050 | +/-0.500 | |
| Phenol-d6 | 100.0 | 18.0 | 10 - 110 | 5.329 | 5.343 | -0.0140 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 103 | 50 - 135 | 13.12 | 13.124 | -0.0040 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 69.7 | 40 - 125 | 10.307 | 10.319 | -0.0120 | +/-0.500 | |
| **LCS (1E27018-BS1 ) ug/L** | | | | Lab File ID: E27018L1.D | | Analyzed: 05/28/11 21:09 | | |
| 2-Fluorobiphenyl | 50.00 | 64.5 | 50 - 110 | 8.555 | 8.558 | -0.0030 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 39.3 | 20 - 110 | 4.25 | 4.255 | -0.0050 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 70.2 | 40 - 110 | 6.388 | 6.395 | -0.0070 | +/-0.500 | |
| Phenol-d6 | 100.0 | 21.7 | 10 - 110 | 5.331 | 5.343 | -0.0120 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 94.8 | 50 - 135 | 13.116 | 13.124 | -0.0080 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 95.4 | 40 - 125 | 10.316 | 10.319 | -0.0030 | +/-0.500 | |
| **LCS Dup (1E27018-BSD1 ) ug/L** | | | | Lab File ID: E27018L2.D | | Analyzed: 05/28/11 21:38 | | |
| 2-Fluorobiphenyl | 50.00 | 69.4 | 50 - 110 | 8.556 | 8.558 | -0.0020 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 33.5 | 20 - 110 | 4.25 | 4.255 | -0.0050 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 66.3 | 40 - 110 | 6.389 | 6.395 | -0.0060 | +/-0.500 | |
| Phenol-d6 | 100.0 | 20.4 | 10 - 110 | 5.332 | 5.343 | -0.0110 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 82.2 | 50 - 135 | 13.116 | 13.124 | -0.0080 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 84.9 | 40 - 125 | 10.312 | 10.319 | -0.0070 | +/-0.500 | |
| **GW0064 (1105217-01 ) ug/L** | | | | Lab File ID: 0521701.D | | Analyzed: 05/29/11 00:03 | | |
| 2-Fluorobiphenyl | 50.00 | 61.9 | 50 - 110 | 8.55 | 8.558 | -0.0080 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 27.0 | 20 - 110 | 4.245 | 4.255 | -0.0100 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 67.5 | 40 - 110 | 6.385 | 6.395 | -0.0100 | +/-0.500 | |
| Phenol-d6 | 100.0 | 15.1 | 10 - 110 | 5.328 | 5.343 | -0.0150 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 103 | 50 - 135 | 13.117 | 13.124 | -0.0070 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 72.2 | 40 - 125 | 10.304 | 10.319 | -0.0150 | +/-0.500 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15110 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **GW0065 (1105225-01 ) ug/L** | | | | Lab File ID: 0522501.D | | Analyzed: 05/29/11 00:32 | | |
| 2-Fluorobiphenyl | 48.08 | 76.0 | 50 - 110 | 8.556 | 8.558 | -0.0020 | +/-0.500 | |
| 2-Fluorophenol | 96.15 | 34.0 | 20 - 110 | 4.243 | 4.255 | -0.0120 | +/-0.500 | |
| Nitrobenzene-d5 | 48.08 | 72.5 | 40 - 110 | 6.386 | 6.395 | -0.0090 | +/-0.500 | |
| Phenol-d6 | 96.15 | 18.7 | 10 - 110 | 5.331 | 5.343 | -0.0120 | +/-0.500 | |
| Terphenyl-d14 | 48.08 | 94.9 | 50 - 135 | 13.12 | 13.124 | -0.0040 | +/-0.500 | |
| 2,4,6-Tribromophenol | 96.15 | 76.5 | 40 - 125 | 10.305 | 10.319 | -0.0140 | +/-0.500 | |
| **GW0066 (1105225-03 ) ug/L** | | | | Lab File ID: 0522503.D | | Analyzed: 05/29/11 01:01 | | |
| 2-Fluorobiphenyl | 49.02 | 66.1 | 50 - 110 | 8.55 | 8.558 | -0.0080 | +/-0.500 | |
| 2-Fluorophenol | 98.04 | 30.1 | 20 - 110 | 4.251 | 4.255 | -0.0040 | +/-0.500 | |
| Nitrobenzene-d5 | 49.02 | 69.9 | 40 - 110 | 6.389 | 6.395 | -0.0060 | +/-0.500 | |
| Phenol-d6 | 98.04 | 16.8 | 10 - 110 | 5.326 | 5.343 | -0.0170 | +/-0.500 | |
| Terphenyl-d14 | 49.02 | 91.8 | 50 - 135 | 13.115 | 13.124 | -0.0090 | +/-0.500 | |
| 2,4,6-Tribromophenol | 98.04 | 79.3 | 40 - 125 | 10.307 | 10.319 | -0.0120 | +/-0.500 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15808 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F15808-CCV1 ) ug/mL** | | | | Lab File ID: SEQ-CCV1.D | | Analyzed: 06/04/11 22:15 | | |
| 2-Fluorobiphenyl | 50.00 | 97.8 | 80 - 120 | 8.385 | 8.385 | 0.0000 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 97.4 | 80 - 120 | 4.08 | 4.08 | 0.0000 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 103 | 80 - 120 | 6.223 | 6.223 | 0.0000 | +/-0.500 | |
| Phenol-d6 | 100.0 | 88.6 | 80 - 120 | 5.183 | 5.183 | 0.0000 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 85.3 | 80 - 120 | 12.933 | 12.933 | 0.0000 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 107 | 80 - 120 | 10.133 | 10.133 | 0.0000 | +/-0.500 | |
| **GW0064 (1105217-01RE1 ) ug/L** | | | | Lab File ID: 0521701R.D | | Analyzed: 06/05/11 04:57 | | |
| 2-Fluorobiphenyl | 46.73 | 97.7 | 50 - 110 | 8.382 | 8.385 | -0.0030 | +/-0.500 | |
| 2-Fluorophenol | 93.46 | 34.6 | 20 - 110 | 4.08 | 4.08 | 0.0000 | +/-0.500 | |
| Nitrobenzene-d5 | 46.73 | 97.1 | 40 - 110 | 6.215 | 6.223 | -0.0080 | +/-0.500 | |
| Phenol-d6 | 93.46 | 19.7 | 10 - 110 | 5.164 | 5.183 | -0.0190 | +/-0.500 | |
| Terphenyl-d14 | 46.73 | 94.3 | 50 - 135 | 12.935 | 12.933 | 0.0020 | +/-0.500 | |
| 2,4,6-Tribromophenol | 93.46 | 109 | 40 - 125 | 10.126 | 10.133 | -0.0070 | +/-0.500 | |
| **GW0065 (1105225-01RE1 ) ug/L** | | | | Lab File ID: 0522501R.D | | Analyzed: 06/05/11 05:26 | | |
| 2-Fluorobiphenyl | 47.17 | 95.1 | 50 - 110 | 8.375 | 8.385 | -0.0100 | +/-0.500 | |
| 2-Fluorophenol | 94.34 | 32.7 | 20 - 110 | 4.078 | 4.08 | -0.0020 | +/-0.500 | |
| Nitrobenzene-d5 | 47.17 | 88.2 | 40 - 110 | 6.216 | 6.223 | -0.0070 | +/-0.500 | |
| Phenol-d6 | 94.34 | 16.8 | 10 - 110 | 5.167 | 5.183 | -0.0160 | +/-0.500 | |
| Terphenyl-d14 | 47.17 | 90.1 | 50 - 135 | 12.934 | 12.933 | 0.0010 | +/-0.500 | |
| 2,4,6-Tribromophenol | 94.34 | 90.6 | 40 - 125 | 10.126 | 10.133 | -0.0070 | +/-0.500 | |
| **GW0066 (1105225-03RE1 ) ug/L** | | | | Lab File ID: 0522503R.D | | Analyzed: 06/05/11 05:55 | | |
| 2-Fluorobiphenyl | 47.17 | 91.0 | 50 - 110 | 8.383 | 8.385 | -0.0020 | +/-0.500 | |
| 2-Fluorophenol | 94.34 | 33.7 | 20 - 110 | 4.079 | 4.08 | -0.0010 | +/-0.500 | |
| Nitrobenzene-d5 | 47.17 | 99.2 | 40 - 110 | 6.219 | 6.223 | -0.0040 | +/-0.500 | |
| Phenol-d6 | 94.34 | 18.6 | 10 - 110 | 5.169 | 5.183 | -0.0140 | +/-0.500 | |
| Terphenyl-d14 | 47.17 | 89.0 | 50 - 135 | 12.934 | 12.933 | 0.0010 | +/-0.500 | |
| 2,4,6-Tribromophenol | 94.34 | 93.3 | 40 - 125 | 10.127 | 10.133 | -0.0060 | +/-0.500 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15812 | Instrument: | MS-BNA3 |
| | | Calibration: | 1122001 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F15812-CCV1 ) ug/mL** | | | | Lab File ID: SEQ-CCV1.D | | Analyzed: 06/02/11 15:44 | | |
| 2-Fluorobiphenyl | 50.00 | 102 | 80 - 120 | 9.084 | 9.084 | 0.0000 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 99.0 | 80 - 120 | 4.394 | 4.394 | 0.0000 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 94.1 | 80 - 120 | 6.771 | 6.771 | 0.0000 | +/-0.500 | |
| Phenol-d6 | 100.0 | 103 | 80 - 120 | 5.58 | 5.58 | 0.0000 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 104 | 80 - 120 | 13.972 | 13.972 | 0.0000 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 109 | 80 - 120 | 10.901 | 10.901 | 0.0000 | +/-0.500 | |
| **Blank (1F01024-BLK1 ) ug/L** | | | | Lab File ID: F01024B1.D | | Analyzed: 06/02/11 17:59 | | |
| 2-Fluorobiphenyl | 50.00 | 67.9 | 50 - 110 | 9.075 | 9.084 | -0.0090 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 37.5 | 20 - 110 | 4.39 | 4.394 | -0.0040 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 76.9 | 40 - 110 | 6.768 | 6.771 | -0.0030 | +/-0.500 | |
| Phenol-d6 | 100.0 | 21.2 | 10 - 110 | 5.571 | 5.58 | -0.0090 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 109 | 50 - 135 | 13.963 | 13.972 | -0.0090 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 85.6 | 40 - 125 | 10.892 | 10.901 | -0.0090 | +/-0.500 | |
| **LCS (1F01024-BS1 ) ug/L** | | | | Lab File ID: F01024L1.D | | Analyzed: 06/02/11 19:09 | | |
| 2-Fluorobiphenyl | 50.00 | 96.7 | 50 - 110 | 9.081 | 9.084 | -0.0030 | +/-0.500 | |
| 2-Fluorophenol | 100.0 | 35.5 | 20 - 110 | 4.396 | 4.394 | 0.0020 | +/-0.500 | |
| Nitrobenzene-d5 | 50.00 | 92.3 | 40 - 110 | 6.773 | 6.771 | 0.0020 | +/-0.500 | |
| Phenol-d6 | 100.0 | 19.6 | 10 - 110 | 5.571 | 5.58 | -0.0090 | +/-0.500 | |
| Terphenyl-d14 | 50.00 | 122 | 50 - 135 | 13.969 | 13.972 | -0.0030 | +/-0.500 | |
| 2,4,6-Tribromophenol | 100.0 | 104 | 40 - 125 | 10.897 | 10.901 | -0.0040 | +/-0.500 | |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E24013 | Laboratory ID: | 1E24013-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| 3,3'-Dichlorobenzidine | 50.00 | 47.85 | 95.7 | 20 - 110 |
| Acenaphthene | 50.00 | 51.73 | 103 | 45 - 110 |
| Acenaphthylene | 50.00 | 45.46 | 90.9 | 50 - 105 |
| Acetophenone | 50.00 | 42.69 | 85.4 | 50 - 110 |
| Anthracene | 50.00 | 49.52 | 99.0 | 55 - 110 |
| Atrazine | 50.00 | 52.93 | 106 | 70 - 115 |
| Benzaldehyde | 50.00 | 43.66 | 87.3 | 10 - 180 |
| Benzidine | 50.00 | 50.0 U | 0 | 0 - 200 |
| Benzo(a)anthracene | 50.00 | 51.20 | 102 | 55 - 110 |
| **Benzo(a)pyrene** | **50.00** | **60.62** | **121** | **55 - 110** |
| **Benzo(b)fluoranthene** | **50.00** | **71.44** | **143** | **45 - 120** |
| **Benzo(g,h,i)perylene** | **50.00** | **66.14** | **132** | **40 - 125** |
| Benzoic acid | 50.00 | 50.0 U | 0 | 0 - 125 |
| **Benzo(k)fluoranthene** | **50.00** | **77.82** | **156** | **45 - 125** |
| 1,1-Biphenyl | 50.00 | 49.89 | 99.8 | 50 - 110 |
| **4-Bromophenyl-phenylether** | **50.00** | **58.94** | **118** | **50 - 115** |
| Butylbenzylphthalate | 50.00 | 54.34 | 109 | 45 - 115 |
| **Caprolactam** | **50.00** | **9.345** | **18.7** | **20 - 110** |
| Carbazole | 50.00 | 54.90 | 110 | 50 - 115 |
| 4-Chloro-3-methylphenol | 50.00 | 43.88 | 87.8 | 45 - 110 |
| 4-Chloroaniline | 50.00 | 36.81 | 73.6 | 15 - 110 |
| **Bis(2-chloroethoxy)methane** | **50.00** | **54.39** | **109** | **45 - 105** |
| Bis(2-chloroethyl)ether | 50.00 | 47.99 | 96.0 | 35 - 110 |
| 2,2'-Oxybis-1-chloropropane | 50.00 | 47.69 | 95.4 | 25 - 130 |
| 2-Chloronaphthalene | 50.00 | 48.01 | 96.0 | 50 - 105 |
| 2-Chlorophenol | 50.00 | 42.07 | 84.1 | 35 - 105 |
| **4-Chlorophenyl phenyl ether** | **50.00** | **58.68** | **117** | **50 - 110** |
| Chrysene | 50.00 | 48.05 | 96.1 | 55 - 110 |
| Dibenz(a,h)anthracene | 50.00 | 60.28 | 121 | 40 - 125 |
| **Dibenzofuran** | **50.00** | **54.74** | **109** | **55 - 105** |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E24013 | Laboratory ID: | 1E24013-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Di-n-butylphthalate | 50.00 | 57.39 | 115 | 55 - 115 |
| 2,4-Dichlorophenol | 50.00 | 47.08 | 94.2 | 40 - 110 |
| **Diethylphthalate** | **50.00** | **62.16** | **124** | **40 - 120** |
| 2,4-Dimethylphenol | 50.00 | 43.69 | 87.4 | 30 - 110 |
| Dimethyl phthalate | 50.00 | 54.48 | 109 | 25 - 125 |
| **4,6-Dinitro-2-methylphenol** | **50.00** | **67.53** | **135** | **40 - 130** |
| 2,4-Dinitrophenol | 50.00 | 58.55 | 117 | 15 - 140 |
| **2,4-Dinitrotoluene** | **50.00** | **63.81** | **128** | **50 - 120** |
| 2,6-Dinitrotoluene | 50.00 | 55.78 | 112 | 50 - 115 |
| **Di-n-octylphthalate** | **50.00** | **74.47** | **149** | **35 - 135** |
| 1,2-Diphenylhydrazine | 50.00 | 55.59 | 111 | 55 - 115 |
| Bis(2-ethylhexyl)phthalate | 50.00 | 54.33 | 109 | 40 - 125 |
| Fluoranthene | 50.00 | 51.26 | 103 | 55 - 115 |
| Fluorene | 50.00 | 54.45 | 109 | 50 - 110 |
| **Hexachlorobenzene** | **50.00** | **59.90** | **120** | **50 - 110** |
| Hexachlorobutadiene | 50.00 | 31.67 | 63.3 | 25 - 105 |
| Hexachlorocyclopentadiene | 50.00 | 18.28 | 36.6 | 10 - 110 |
| Hexachloroethane | 50.00 | 21.95 | 43.9 | 30 - 95 |
| Indeno(1,2,3-cd)pyrene | 50.00 | 61.90 | 124 | 45 - 125 |
| Isophorone | 50.00 | 39.74 | 79.5 | 50 - 110 |
| 1-Methylnaphthalene | 50.00 | 44.58 | 89.2 | 30 - 115 |
| 2-Methylnaphthalene | 50.00 | 48.18 | 96.4 | 45 - 105 |
| 2-Methylphenol | 50.00 | 31.57 | 63.1 | 40 - 110 |
| 3+4-Methylphenol | 50.00 | 28.01 | 56.0 | 30 - 110 |
| **4-Nitroaniline** | **50.00** | **70.80** | **142** | **35 - 120** |
| 3-Nitroaniline | 50.00 | 47.45 | 94.9 | 20 - 125 |
| 2-Nitroaniline | 50.00 | 57.68 | 115 | 50 - 115 |
| **Nitrobenzene** | **50.00** | **55.28** | **111** | **30 - 110** |
| 4-Nitrophenol | 50.00 | 16.68 | 33.4 | 0 - 125 |
| 2-Nitrophenol | 50.00 | 52.71 | 105 | 40 - 115 |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E24013 | Laboratory ID: | 1E24013-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| N-Nitrosodiphenylamine | 50.00 | 28.78 | 57.6 | 50 - 110 |
| N-Nitroso-di-n-propylamine | 50.00 | 47.72 | 95.4 | 35 - 130 |
| **Pentachlorophenol** | **50.00** | **62.35** | **125** | **40 - 115** |
| Phenanthrene | 50.00 | 47.92 | 95.8 | 50 - 115 |
| Phenol | 50.00 | 16.71 | 33.4 | 0 - 115 |
| Pyrene | 50.00 | 50.46 | 101 | 50 - 130 |
| 2,4,6-Trichlorophenol | 50.00 | 52.97 | 106 | 50 - 115 |
| 2,4,5-Trichlorophenol | 50.00 | 51.58 | 103 | 50 - 110 |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E27018 | Laboratory ID: | 1E27018-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| 3,3'-Dichlorobenzidine | 50.00 | 40.85 | 81.7 | 20 - 110 |
| Acenaphthene | 50.00 | 30.30 | 60.6 | 45 - 110 |
| Acenaphthylene | 50.00 | 27.13 | 54.3 | 50 - 105 |
| Acetophenone | 50.00 | 40.05 | 80.1 | 50 - 110 |
| Anthracene | 50.00 | 46.53 | 93.1 | 55 - 110 |
| Atrazine | 50.00 | 53.17 | 106 | 70 - 115 |
| Benzaldehyde | 50.00 | 39.73 | 79.5 | 10 - 180 |
| Benzidine | 50.00 | 50.0 U | 0 | 0 - 200 |
| Benzo(a)anthracene | 50.00 | 47.35 | 94.7 | 55 - 110 |
| Benzo(a)pyrene | 50.00 | 54.80 | 110 | 55 - 110 |
| **Benzo(b)fluoranthene** | **50.00** | **64.96** | **130** | **45 - 120** |
| **Benzo(g,h,i)perylene** | **50.00** | **63.59** | **127** | **40 - 125** |
| Benzoic acid | 50.00 | 50.0 U | 0 | 0 - 125 |
| **Benzo(k)fluoranthene** | **50.00** | **63.46** | **127** | **45 - 125** |
| 1,1-Biphenyl | 50.00 | 37.98 | 76.0 | 50 - 110 |
| 4-Bromophenyl-phenylether | 50.00 | 43.93 | 87.9 | 50 - 115 |
| Butylbenzylphthalate | 50.00 | 57.38 | 115 | 45 - 115 |
| **Caprolactam** | **50.00** | **7.763** | **15.5** | **20 - 110** |
| **Carbazole** | **50.00** | **59.48** | **119** | **50 - 115** |
| 4-Chloro-3-methylphenol | 50.00 | 44.81 | 89.6 | 45 - 110 |
| 4-Chloroaniline | 50.00 | 30.98 | 62.0 | 15 - 110 |
| Bis(2-chloroethoxy)methane | 50.00 | 41.07 | 82.1 | 45 - 105 |
| Bis(2-chloroethyl)ether | 50.00 | 35.71 | 71.4 | 35 - 110 |
| 2,2'-Oxybis-1-chloropropane | 50.00 | 26.95 | 53.9 | 25 - 130 |
| 2-Chloronaphthalene | 50.00 | 27.54 | 55.1 | 50 - 105 |
| 2-Chlorophenol | 50.00 | 32.99 | 66.0 | 35 - 105 |
| 4-Chlorophenyl phenyl ether | 50.00 | 36.94 | 73.9 | 50 - 110 |
| Chrysene | 50.00 | 47.79 | 95.6 | 55 - 110 |
| Dibenz(a,h)anthracene | 50.00 | 60.69 | 121 | 40 - 125 |
| Dibenzofuran | 50.00 | 37.49 | 75.0 | 55 - 105 |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E27018 | Laboratory ID: | 1E27018-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Di-n-butylphthalate | 50.00 | 53.68 | 107 | 55 - 115 |
| 2,4-Dichlorophenol | 50.00 | 42.50 | 85.0 | 40 - 110 |
| Diethylphthalate | 50.00 | 56.52 | 113 | 40 - 120 |
| 2,4-Dimethylphenol | 50.00 | 43.58 | 87.2 | 30 - 110 |
| Dimethyl phthalate | 50.00 | 51.50 | 103 | 25 - 125 |
| 4,6-Dinitro-2-methylphenol | 50.00 | 60.58 | 121 | 40 - 130 |
| 2,4-Dinitrophenol | 50.00 | 60.94 | 122 | 15 - 140 |
| 2,4-Dinitrotoluene | 50.00 | 59.61 | 119 | 50 - 120 |
| 2,6-Dinitrotoluene | 50.00 | 43.94 | 87.9 | 50 - 115 |
| **Di-n-octylphthalate** | **50.00** | **74.32** | **149** | **35 - 135** |
| 1,2-Diphenylhydrazine | 50.00 | 32.83 | 65.7 | 55 - 115 |
| Bis(2-ethylhexyl)phthalate | 50.00 | 52.77 | 106 | 40 - 125 |
| Fluoranthene | 50.00 | 49.98 | 100 | 55 - 115 |
| Fluorene | 50.00 | 38.06 | 76.1 | 50 - 110 |
| Hexachlorobenzene | 50.00 | 51.39 | 103 | 50 - 110 |
| **Hexachlorobutadiene** | **50.00** | **8.036** | **16.1** | **25 - 105** |
| **Hexachlorocyclopentadiene** | **50.00** | **4.238** | **8.48** | **10 - 110** |
| **Hexachloroethane** | **50.00** | **7.263** | **14.5** | **30 - 95** |
| Indeno(1,2,3-cd)pyrene | 50.00 | 61.80 | 124 | 45 - 125 |
| Isophorone | 50.00 | 30.46 | 60.9 | 50 - 110 |
| 1-Methylnaphthalene | 50.00 | 26.75 | 53.5 | 30 - 115 |
| 2-Methylnaphthalene | 50.00 | 26.59 | 53.2 | 45 - 105 |
| 2-Methylphenol | 50.00 | 30.78 | 61.6 | 40 - 110 |
| 3+4-Methylphenol | 50.00 | 24.61 | 49.2 | 30 - 110 |
| **4-Nitroaniline** | **50.00** | **62.31** | **125** | **35 - 120** |
| 3-Nitroaniline | 50.00 | 39.52 | 79.0 | 20 - 125 |
| 2-Nitroaniline | 50.00 | 41.31 | 82.6 | 50 - 115 |
| Nitrobenzene | 50.00 | 35.46 | 70.9 | 30 - 110 |
| 4-Nitrophenol | 50.00 | 14.64 | 29.3 | 0 - 125 |
| 2-Nitrophenol | 50.00 | 37.45 | 74.9 | 40 - 115 |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E27018 | Laboratory ID: | 1E27018-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| N-Nitrosodiphenylamine | 50.00 | 29.69 | 59.4 | 50 - 110 |
| N-Nitroso-di-n-propylamine | 50.00 | 32.03 | 64.1 | 35 - 130 |
| **Pentachlorophenol** | **50.00** | **63.30** | **127** | **40 - 115** |
| Phenanthrene | 50.00 | 49.82 | 99.6 | 50 - 115 |
| Phenol | 50.00 | 13.82 | 27.6 | 0 - 115 |
| Pyrene | 50.00 | 51.02 | 102 | 50 - 130 |
| 2,4,6-Trichlorophenol | 50.00 | 44.47 | 88.9 | 50 - 115 |
| 2,4,5-Trichlorophenol | 50.00 | 45.67 | 91.3 | 50 - 110 |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 3,3'-Dichlorobenzidine | 50.00 | 38.05 | 76.1 | 7.10 | 30 | 20 - 110 |
| Acenaphthene | 50.00 | 28.52 | 57.0 | 6.07 | 30 | 45 - 110 |
| Acenaphthylene | 50.00 | 26.45 | 52.9 | 2.53 | 30 | 50 - 105 |
| Acetophenone | 50.00 | 37.63 | 75.3 | 6.22 | 30 | 50 - 110 |
| Anthracene | 50.00 | 46.69 | 93.4 | 0.336 | 30 | 55 - 110 |
| Atrazine | 50.00 | 45.19 | 90.4 | 16.2 | 30 | 70 - 115 |
| Benzaldehyde | 50.00 | 35.28 | 70.6 | 11.9 | 30 | 10 - 180 |
| Benzidine | 50.00 | 50.0 U | 0 | | 30 | 0 - 200 |
| Benzo(a)anthracene | 50.00 | 45.73 | 91.5 | 3.48 | 30 | 55 - 110 |
| Benzo(a)pyrene | 50.00 | 51.05 | 102 | 7.09 | 30 | 55 - 110 |
| **Benzo(b)fluoranthene** | **50.00** | **63.68** | **127 *** | **1.99** | **30** | **45 - 120** |
| Benzo(g,h,i)perylene | 50.00 | 62.52 | 125 | 1.69 | 30 | 40 - 125 |
| Benzoic acid | 50.00 | 13.71 | 27.4 | | 30 | 0 - 125 |
| Benzo(k)fluoranthene | 50.00 | 59.83 | 120 | 5.88 | 30 | 45 - 125 |
| 1,1-Biphenyl | 50.00 | 35.19 | 70.4 | 7.63 | 30 | 50 - 110 |
| 4-Bromophenyl-phenylether | 50.00 | 36.91 | 73.8 | 17.4 | 30 | 50 - 115 |
| Butylbenzylphthalate | 50.00 | 48.74 | 97.5 | 16.3 | 30 | 45 - 115 |
| **Caprolactam** | **50.00** | **8.134** | **16.3 *** | **4.66** | **30** | **20 - 110** |
| Carbazole | 50.00 | 56.00 | 112 | 6.03 | 30 | 50 - 115 |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E27018 | Laboratory ID: | 1E27018-BSD1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 4-Chloro-3-methylphenol | 50.00 | 44.47 | 88.9 | 0.761 | 30 | 45 - 110 |
| 4-Chloroaniline | 50.00 | 32.20 | 64.4 | 3.88 | 30 | 15 - 110 |
| Bis(2-chloroethoxy)methane | 50.00 | 42.79 | 85.6 | 4.10 | 30 | 45 - 105 |
| Bis(2-chloroethyl)ether | 50.00 | 35.51 | 71.0 | 0.553 | 30 | 35 - 110 |
| 2,2'-Oxybis-1-chloropropane | 50.00 | 23.35 | 46.7 | 14.3 | 30 | 25 - 130 |
| 2-Chloronaphthalene | 50.00 | 27.12 | 54.2 | 1.54 | 30 | 50 - 105 |
| 2-Chlorophenol | 50.00 | 28.90 | 57.8 | 13.2 | 30 | 35 - 105 |
| 4-Chlorophenyl phenyl ether | 50.00 | 37.33 | 74.7 | 1.06 | 30 | 50 - 110 |
| Chrysene | 50.00 | 48.78 | 97.6 | 2.07 | 30 | 55 - 110 |
| **Dibenz(a,h)anthracene** | **50.00** | **64.30** | **129 *** | **5.77** | **30** | **40 - 125** |
| Dibenzofuran | 50.00 | 36.13 | 72.3 | 3.70 | 30 | 55 - 105 |
| Di-n-butylphthalate | 50.00 | 50.94 | 102 | 5.24 | 30 | 55 - 115 |
| 2,4-Dichlorophenol | 50.00 | 42.67 | 85.3 | 0.393 | 30 | 40 - 110 |
| Diethylphthalate | 50.00 | 56.43 | 113 | 0.160 | 30 | 40 - 120 |
| 2,4-Dimethylphenol | 50.00 | 44.68 | 89.4 | 2.49 | 30 | 30 - 110 |
| Dimethyl phthalate | 50.00 | 55.31 | 111 | 7.12 | 30 | 25 - 125 |
| 4,6-Dinitro-2-methylphenol | 50.00 | 55.93 | 112 | 7.97 | 30 | 40 - 130 |
| 2,4-Dinitrophenol | 50.00 | 58.67 | 117 | 3.79 | 30 | 15 - 140 |
| 2,4-Dinitrotoluene | 50.00 | 57.35 | 115 | 3.86 | 30 | 50 - 120 |
| 2,6-Dinitrotoluene | 50.00 | 47.02 | 94.0 | 6.77 | 30 | 50 - 115 |
| Di-n-octylphthalate | 50.00 | 61.56 | 123 | 18.8 | 30 | 35 - 135 |
| 1,2-Diphenylhydrazine | 50.00 | 32.53 | 65.1 | 0.914 | 30 | 55 - 115 |
| Bis(2-ethylhexyl)phthalate | 50.00 | 44.38 | 88.8 | 17.3 | 30 | 40 - 125 |
| Fluoranthene | 50.00 | 45.25 | 90.5 | 9.95 | 30 | 55 - 115 |
| Fluorene | 50.00 | 39.88 | 79.8 | 4.66 | 30 | 50 - 110 |
| Hexachlorobenzene | 50.00 | 45.70 | 91.4 | 11.7 | 30 | 50 - 110 |
| **Hexachlorobutadiene** | **50.00** | **9.018** | **18.0 *** | **11.5** | **30** | **25 - 105** |
| **Hexachlorocyclopentadiene** | **50.00** | **4.313** | **8.63 *** | **1.77** | **30** | **10 - 110** |
| **Hexachloroethane** | **50.00** | **7.310** | **14.6 *** | **0.657** | **30** | **30 - 95** |
| Indeno(1,2,3-cd)pyrene | 50.00 | 62.24 | 124 | 0.710 | 30 | 45 - 125 |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E27018 | Laboratory ID: | 1E27018-BSD1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Isophorone | 50.00 | 33.20 | 66.4 | 8.60 | 30 | 50 - 110 |
| 1-Methylnaphthalene | 50.00 | 27.32 | 54.6 | 2.11 | 30 | 30 - 115 |
| 2-Methylnaphthalene | 50.00 | 30.37 | 60.7 | 13.3 | 30 | 45 - 105 |
| 2-Methylphenol | 50.00 | 26.87 | 53.7 | 13.6 | 30 | 40 - 110 |
| 3+4-Methylphenol | 50.00 | 23.42 | 46.8 | 4.94 | 30 | 30 - 110 |
| 4-Nitroaniline | 50.00 | 58.17 | 116 | 6.87 | 30 | 35 - 120 |
| 3-Nitroaniline | 50.00 | 37.68 | 75.4 | 4.77 | 30 | 20 - 125 |
| 2-Nitroaniline | 50.00 | 39.42 | 78.8 | 4.67 | 30 | 50 - 115 |
| Nitrobenzene | 50.00 | 35.69 | 71.4 | 0.638 | 30 | 30 - 110 |
| 4-Nitrophenol | 50.00 | 13.95 | 27.9 | 4.80 | 30 | 0 - 125 |
| 2-Nitrophenol | 50.00 | 39.29 | 78.6 | 4.81 | 30 | 40 - 115 |
| N-Nitrosodiphenylamine | 50.00 | 25.58 | 51.2 | 14.9 | 30 | 50 - 110 |
| N-Nitroso-di-n-propylamine | 50.00 | 30.45 | 60.9 | 5.07 | 30 | 35 - 130 |
| Pentachlorophenol | 50.00 | 57.71 | 115 | 9.25 | 30 | 40 - 115 |
| Phenanthrene | 50.00 | 45.43 | 90.9 | 9.20 | 30 | 50 - 115 |
| Phenol | 50.00 | 13.35 | 26.7 | 3.47 | 30 | 0 - 115 |
| Pyrene | 50.00 | 46.76 | 93.5 | 8.71 | 30 | 50 - 130 |
| 2,4,6-Trichlorophenol | 50.00 | 40.53 | 81.1 | 9.25 | 30 | 50 - 115 |
| 2,4,5-Trichlorophenol | 50.00 | 44.52 | 89.0 | 2.54 | 30 | 50 - 110 |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F01024 | Laboratory ID: | 1F01024-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Acenaphthene | 50.00 | 54.59 | 109 | 45 - 110 |
| Acenaphthylene | 50.00 | 47.42 | 94.8 | 50 - 105 |
| Acetophenone | 50.00 | 44.65 | 89.3 | 50 - 110 |
| Anthracene | 50.00 | 54.86 | 110 | 55 - 110 |
| Atrazine | 50.00 | 44.44 | 88.9 | 70 - 115 |
| Benzaldehyde | 50.00 | 44.84 | 89.7 | 10 - 180 |
| Benzidine | 50.00 | 50.0 U | 0 | 0 - 200 |
| **Benzo(a)anthracene** | **50.00** | **58.85** | **118** | **55 - 110** |
| Benzo(a)pyrene | 50.00 | 52.97 | 106 | 55 - 110 |
| **Benzo(b)fluoranthene** | **50.00** | **62.31** | **125** | **45 - 120** |
| Benzo(g,h,i)perylene | 50.00 | 59.97 | 120 | 40 - 125 |
| Benzoic acid | 50.00 | 50.0 U | 0 | 0 - 125 |
| Benzo(k)fluoranthene | 50.00 | 62.60 | 125 | 45 - 125 |
| 1,1-Biphenyl | 50.00 | 47.01 | 94.0 | 50 - 110 |
| **4-Bromophenyl-phenylether** | **50.00** | **59.04** | **118** | **50 - 115** |
| **Butylbenzylphthalate** | **50.00** | **67.14** | **134** | **45 - 115** |
| **Caprolactam** | **50.00** | **5.464** | **10.9** | **20 - 110** |
| Carbazole | 50.00 | 54.16 | 108 | 50 - 115 |
| 4-Chloro-3-methylphenol | 50.00 | 43.03 | 86.1 | 45 - 110 |
| 4-Chloroaniline | 50.00 | 42.38 | 84.8 | 15 - 110 |
| **Bis(2-chloroethoxy)methane** | **50.00** | **58.68** | **117** | **45 - 105** |
| Bis(2-chloroethyl)ether | 50.00 | 54.57 | 109 | 35 - 110 |
| 2,2'-Oxybis-1-chloropropane | 50.00 | 50.89 | 102 | 25 - 130 |
| **2-Chloronaphthalene** | **50.00** | **53.37** | **107** | **50 - 105** |
| 2-Chlorophenol | 50.00 | 37.87 | 75.7 | 35 - 105 |
| **4-Chlorophenyl phenyl ether** | **50.00** | **60.83** | **122** | **50 - 110** |
| **Chrysene** | **50.00** | **60.56** | **121** | **55 - 110** |
| Dibenz(a,h)anthracene | 50.00 | 56.23 | 112 | 40 - 125 |
| **Dibenzofuran** | **50.00** | **57.88** | **116** | **55 - 105** |
| **Di-n-butylphthalate** | **50.00** | **62.30** | **125** | **55 - 115** |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F01024 | Laboratory ID: | 1F01024-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| **3,3'-Dichlorobenzidine** | **50.00** | **60.21** | **120** | **20 - 110** |
| 2,4-Dichlorophenol | 50.00 | 45.98 | 92.0 | 40 - 110 |
| **Diethylphthalate** | **50.00** | **66.20** | **132** | **40 - 120** |
| 2,4-Dimethylphenol | 50.00 | 43.40 | 86.8 | 30 - 110 |
| Dimethyl phthalate | 50.00 | 61.79 | 124 | 25 - 125 |
| 4,6-Dinitro-2-methylphenol | 50.00 | 55.65 | 111 | 40 - 130 |
| 2,4-Dinitrophenol | 50.00 | 50.52 | 101 | 15 - 140 |
| **2,4-Dinitrotoluene** | **50.00** | **61.22** | **122** | **50 - 120** |
| **2,6-Dinitrotoluene** | **50.00** | **58.32** | **117** | **50 - 115** |
| Di-n-octylphthalate | 50.00 | 66.52 | 133 | 35 - 135 |
| 1,2-Diphenylhydrazine | 50.00 | 50.64 | 101 | 55 - 115 |
| **Bis(2-ethylhexyl)phthalate** | **50.00** | **65.52** | **131** | **40 - 125** |
| Fluoranthene | 50.00 | 56.33 | 113 | 55 - 115 |
| Fluorene | 50.00 | 55.21 | 110 | 50 - 110 |
| **Hexachlorobenzene** | **50.00** | **56.82** | **114** | **50 - 110** |
| Hexachlorobutadiene | 50.00 | 31.96 | 63.9 | 25 - 105 |
| Hexachlorocyclopentadiene | 50.00 | 13.84 | 27.7 | 10 - 110 |
| Hexachloroethane | 50.00 | 25.10 | 50.2 | 30 - 95 |
| Indeno(1,2,3-cd)pyrene | 50.00 | 54.74 | 109 | 45 - 125 |
| Isophorone | 50.00 | 40.47 | 80.9 | 50 - 110 |
| 1-Methylnaphthalene | 50.00 | 44.79 | 89.6 | 30 - 115 |
| 2-Methylnaphthalene | 50.00 | 45.91 | 91.8 | 45 - 105 |
| 2-Methylphenol | 50.00 | 30.74 | 61.5 | 40 - 110 |
| 3+4-Methylphenol | 50.00 | 26.14 | 52.3 | 30 - 110 |
| 4-Nitroaniline | 50.00 | 49.67 | 99.3 | 35 - 120 |
| 3-Nitroaniline | 50.00 | 46.23 | 92.5 | 20 - 125 |
| 2-Nitroaniline | 50.00 | 56.62 | 113 | 50 - 115 |
| Nitrobenzene | 50.00 | 49.68 | 99.4 | 30 - 110 |
| 4-Nitrophenol | 50.00 | 9.952 | 19.9 | 0 - 125 |
| 2-Nitrophenol | 50.00 | 48.48 | 97.0 | 40 - 115 |

# LCS / LCS DUPLICATE RECOVERY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F01024 | Laboratory ID: | 1F01024-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| N-Nitrosodiphenylamine | 50.00 | 28.88 | 57.8 | 50 - 110 |
| N-Nitroso-di-n-propylamine | 50.00 | 49.93 | 99.9 | 35 - 130 |
| Pentachlorophenol | 50.00 | 51.37 | 103 | 40 - 115 |
| **Phenanthrene** | **50.00** | **57.92** | **116** | **50 - 115** |
| Phenol | 50.00 | 10.71 | 21.4 | 0 - 115 |
| Pyrene | 50.00 | 60.82 | 122 | 50 - 130 |
| 2,4,6-Trichlorophenol | 50.00 | 54.56 | 109 | 50 - 115 |
| 2,4,5-Trichlorophenol | 50.00 | 54.85 | 110 | 50 - 110 |

# PREPARATION BATCH SUMMARY

## SW8270C

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E24013 Batch Matrix: Water Preparation: EXT_3510

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 05/25/11 09:58 | 1,040.00 | 1.00 |
| GW8012-RB | 1105208-03 | 05/25/11 09:58 | 1,040.00 | 1.00 |
| Blank | 1E24013-BLK1 | 05/25/11 09:58 | 1,000.00 | 1.00 |
| LCS | 1E24013-BS1 | 05/25/11 09:58 | 1,000.00 | 1.00 |

# PREPARATION BATCH SUMMARY

## SW8270C

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E27018 Batch Matrix: Water Preparation: EXT_3510

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0064 | 1105217-01 | 05/27/11 17:15 | 1,000.00 | 1.00 |
| GW0065 | 1105225-01 | 05/27/11 17:15 | 1,040.00 | 1.00 |
| GW0066 | 1105225-03 | 05/27/11 17:15 | 1,020.00 | 1.00 |
| Blank | 1E27018-BLK1 | 05/27/11 17:15 | 1,000.00 | 1.00 |
| LCS | 1E27018-BS1 | 05/27/11 17:15 | 1,000.00 | 1.00 |
| LCS Dup | 1E27018-BSD1 | 05/27/11 17:15 | 1,000.00 | 1.00 |

# PREPARATION BATCH SUMMARY

## SW8270C

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F01024 Batch Matrix: Water Preparation: EXT_3510

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0064 | 1105217-01RE1 | 06/02/11 10:28 | 1,070.00 | 1.00 |
| GW0065 | 1105225-01RE1 | 06/02/11 10:28 | 1,060.00 | 1.00 |
| GW0066 | 1105225-03RE1 | 06/02/11 10:28 | 1,060.00 | 1.00 |
| Blank | 1F01024-BLK1 | 06/02/11 10:28 | 1,000.00 | 1.00 |
| LCS | 1F01024-BS1 | 06/02/11 10:28 | 1,000.00 | 1.00 |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 01/26/11 |
| Instrument ID: | MS-BNA1 | Injection Time: | 15:13 |
| Sequence: | 1B03208 | Lab Sample ID: | 1B03208-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 41.9 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 62.8 | PASS |
| 70 | Less than 2% of 69 | 0.345 | PASS |
| 127 | 40 - 60% of 198 | 44.3 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 6.89 | PASS |
| 275 | 10 - 30% of 198 | 16.8 | PASS |
| 365 | 1 - 200% of 198 | 1.47 | PASS |
| 441 | 0.001 - 100% of 443 | 70.3 | PASS |
| 442 | 40 - 200% of 198 | 40.3 | PASS |
| 443 | 17 - 23% of 442 | 21.7 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 01/28/11 |
| Instrument ID: | MS-BNA1 | Injection Time: | 09:18 |
| Sequence: | 1B03208 | Lab Sample ID: | 1B03208-TUN2 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 31.1 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 48.5 | PASS |
| 70 | Less than 2% of 69 | 0.314 | PASS |
| 127 | 40 - 60% of 198 | 40.4 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 6.62 | PASS |
| 275 | 10 - 30% of 198 | 20 | PASS |
| 365 | 1 - 200% of 198 | 2.17 | PASS |
| 441 | 0.001 - 100% of 443 | 75.3 | PASS |
| 442 | 40 - 200% of 198 | 77.2 | PASS |
| 443 | 17 - 23% of 442 | 19.8 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 04/29/11 |
| Instrument ID: | MS-BNA3 | Injection Time: | 17:21 |
| Sequence: | 1E12203 | Lab Sample ID: | 1E12203-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 47.3 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 52.7 | PASS |
| 70 | Less than 2% of 69 | 0.492 | PASS |
| 127 | 40 - 60% of 198 | 54.6 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 6.87 | PASS |
| 275 | 10 - 30% of 198 | 22 | PASS |
| 365 | 1 - 200% of 198 | 2.1 | PASS |
| 441 | 0.001 - 100% of 443 | 77.8 | PASS |
| 442 | 40 - 200% of 198 | 47.4 | PASS |
| 443 | 17 - 23% of 442 | 19.2 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 04/30/11 |
| Instrument ID: | MS-BNA3 | Injection Time: | 14:42 |
| Sequence: | 1E12203 | Lab Sample ID: | 1E12203-TUN2 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 52.2 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 55.8 | PASS |
| 70 | Less than 2% of 69 | 0.42 | PASS |
| 127 | 40 - 60% of 198 | 56.8 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 7.25 | PASS |
| 275 | 10 - 30% of 198 | 22.9 | PASS |
| 365 | 1 - 200% of 198 | 2.34 | PASS |
| 441 | 0.001 - 100% of 443 | 74.4 | PASS |
| 442 | 40 - 200% of 198 | 46.4 | PASS |
| 443 | 17 - 23% of 442 | 20.9 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 05/02/11 |
| Instrument ID: | MS-BNA3 | Injection Time: | 13:51 |
| Sequence: | 1E12203 | Lab Sample ID: | 1E12203-TUN3 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 52.5 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 58.2 | PASS |
| 70 | Less than 2% of 69 | 0.51 | PASS |
| 127 | 40 - 60% of 198 | 56.1 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 7.39 | PASS |
| 275 | 10 - 30% of 198 | 21.4 | PASS |
| 365 | 1 - 200% of 198 | 2.24 | PASS |
| 441 | 0.001 - 100% of 443 | 72.1 | PASS |
| 442 | 40 - 200% of 198 | 46.9 | PASS |
| 443 | 17 - 23% of 442 | 21.4 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 05/26/11 |
| Instrument ID: | MS-BNA1 | Injection Time: | 16:18 |
| Sequence: | 1E14710 | Lab Sample ID: | 1E14710-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 42.9 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 62.1 | PASS |
| 70 | Less than 2% of 69 | 0.332 | PASS |
| 127 | 40 - 60% of 198 | 48.8 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 6.98 | PASS |
| 275 | 10 - 30% of 198 | 17.6 | PASS |
| 365 | 1 - 200% of 198 | 1.88 | PASS |
| 441 | 0.001 - 100% of 443 | 76.5 | PASS |
| 442 | 40 - 200% of 198 | 43.6 | PASS |
| 443 | 17 - 23% of 442 | 20.1 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 05/27/11 |
| Instrument ID: | MS-BNA1 | Injection Time: | 19:39 |
| Sequence: | 1E15103 | Lab Sample ID: | 1E15103-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 40.9 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 64.5 | PASS |
| 70 | Less than 2% of 69 | 0 | PASS |
| 127 | 40 - 60% of 198 | 49 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 6.9 | PASS |
| 275 | 10 - 30% of 198 | 19.1 | PASS |
| 365 | 1 - 200% of 198 | 1.45 | PASS |
| 441 | 0.001 - 100% of 443 | 81.7 | PASS |
| 442 | 40 - 200% of 198 | 50.9 | PASS |
| 443 | 17 - 23% of 442 | 18.9 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 05/28/11 |
| Instrument ID: | MS-BNA1 | Injection Time: | 18:05 |
| Sequence: | 1E15110 | Lab Sample ID: | 1E15110-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 40.1 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 56.8 | PASS |
| 70 | Less than 2% of 69 | 0 | PASS |
| 127 | 40 - 60% of 198 | 48.6 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 7.43 | PASS |
| 275 | 10 - 30% of 198 | 17.6 | PASS |
| 365 | 1 - 200% of 198 | 1.48 | PASS |
| 441 | 0.001 - 100% of 443 | 71.9 | PASS |
| 442 | 40 - 200% of 198 | 42.7 | PASS |
| 443 | 17 - 23% of 442 | 22 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 06/04/11 |
| Instrument ID: | MS-BNA1 | Injection Time: | 21:49 |
| Sequence: | 1F15808 | Lab Sample ID: | 1F15808-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 30 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 49.2 | PASS |
| 70 | Less than 2% of 69 | 0.174 | PASS |
| 127 | 40 - 60% of 198 | 40.8 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 6.72 | PASS |
| 275 | 10 - 30% of 198 | 20.4 | PASS |
| 365 | 1 - 200% of 198 | 2.28 | PASS |
| 441 | 0.001 - 100% of 443 | 78.8 | PASS |
| 442 | 40 - 200% of 198 | 83.1 | PASS |
| 443 | 17 - 23% of 442 | 19.2 | PASS |

# MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Lab File ID: | SEQ-TUN1.D | Injection Date: | 06/02/11 |
| Instrument ID: | MS-BNA3 | Injection Time: | 14:43 |
| Sequence: | 1F15812 | Lab Sample ID: | 1F15812-TUN1 |

| m/z | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30 - 60% of 198 | 49.4 | PASS |
| 68 | Less than 2% of 69 | 0 | PASS |
| 69 | Less than 200% of 198 | 51 | PASS |
| 70 | Less than 2% of 69 | 0.665 | PASS |
| 127 | 40 - 60% of 198 | 54.5 | PASS |
| 197 | Less than 1% of 198 | 0 | PASS |
| 198 | Base peak, 100% relative abundance | 100 | PASS |
| 199 | 5 - 9% of 198 | 5.75 | PASS |
| 275 | 10 - 30% of 198 | 20.9 | PASS |
| 365 | 1 - 200% of 198 | 1.54 | PASS |
| 441 | 0.001 - 100% of 443 | 81.4 | PASS |
| 442 | 40 - 200% of 198 | 41.7 | PASS |
| 443 | 17 - 23% of 442 | 18.4 | PASS |

# ANALYSIS SEQUENCE SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1B03208 | Instrument: | MS-BNA1 |
| Calibration: | 1032006 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1B03208-TUN1 | SEQ-TUN1.D | 01/26/11 15:13 |
| Cal Standard | 1B03208-CAL1 | SEQ-CAL1.D | 01/26/11 15:40 |
| Cal Standard | 1B03208-CAL2 | SEQ-CAL2.D | 01/26/11 16:08 |
| Cal Standard | 1B03208-CAL3 | SEQ-CAL3.D | 01/26/11 16:37 |
| Cal Standard | 1B03208-CAL4 | SEQ-CAL4.D | 01/26/11 17:05 |
| Cal Standard | 1B03208-CAL5 | SEQ-CAL5.D | 01/26/11 17:34 |
| Cal Standard | 1B03208-CAL6 | SEQ-CAL6.D | 01/26/11 18:03 |
| Cal Standard | 1B03208-CAL7 | SEQ-CAL7.D | 01/26/11 18:31 |
| Cal Standard | 1B03208-CAL8 | SEQ-CAL8.D | 01/26/11 19:00 |
| Cal Standard | 1B03208-CAL9 | SEQ-CAL9.D | 01/26/11 19:29 |
| Cal Standard | 1B03208-CALA | SEQ-CALA.D | 01/26/11 19:57 |
| Cal Standard | 1B03208-CALB | SEQ-CALB.D | 01/26/11 20:26 |
| Cal Standard | 1B03208-CALC | SEQ-CALC.D | 01/26/11 20:54 |
| Cal Standard | 1B03208-CALD | SEQ-CALD.D | 01/26/11 21:23 |
| Cal Standard | 1B03208-CALE | SEQ-CALE.D | 01/26/11 21:52 |
| Cal Standard | 1B03208-CALF | SEQ-CALF.D | 01/26/11 22:20 |
| Cal Standard | 1B03208-CALG | SEQ-CALG.D | 01/26/11 22:49 |
| Initial Cal Check | 1B03208-ICV1 | SEQ-ICV1.D | 01/26/11 23:17 |
| Initial Cal Check | 1B03208-ICV2 | SEQ-ICV2.D | 01/26/11 23:45 |
| Initial Cal Check | 1B03208-ICV3 | SEQ-ICV3.D | 01/27/11 00:13 |
| MS Tune | 1B03208-TUN2 | SEQ-TUN1.D | 01/28/11 09:18 |
| Initial Cal Check | 1B03208-ICV4 | SEQ-ICV4.D | 01/28/11 10:25 |

# ANALYSIS SEQUENCE SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E12203 | Instrument: | MS-BNA3 |
| Calibration: | 1122001 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1E12203-TUN1 | SEQ-TUN1.D | 04/29/11 17:21 |
| Cal Standard | 1E12203-CAL1 | SEQ-CAL1.D | 04/29/11 17:45 |
| Cal Standard | 1E12203-CAL2 | SEQ-CAL2.D | 04/29/11 18:19 |
| Cal Standard | 1E12203-CAL3 | SEQ-CAL3.D | 04/29/11 18:52 |
| Cal Standard | 1E12203-CAL4 | SEQ-CAL4.D | 04/29/11 19:25 |
| Cal Standard | 1E12203-CAL5 | SEQ-CAL5.D | 04/29/11 19:58 |
| Cal Standard | 1E12203-CAL6 | SEQ-CAL6.D | 04/29/11 20:31 |
| Cal Standard | 1E12203-CAL7 | SEQ-CAL7.D | 04/29/11 21:04 |
| Cal Standard | 1E12203-CAL8 | SEQ-CAL8.D | 04/29/11 21:37 |
| Cal Standard | 1E12203-CAL9 | SEQ-CAL9.D | 04/29/11 22:09 |
| Cal Standard | 1E12203-CALA | SEQ-CALA.D | 04/29/11 22:42 |
| Cal Standard | 1E12203-CALB | SEQ-CALB.D | 04/29/11 23:15 |
| Cal Standard | 1E12203-CALC | SEQ-CALC.D | 04/29/11 23:47 |
| Cal Standard | 1E12203-CALD | SEQ-CALD.D | 04/30/11 00:20 |
| Cal Standard | 1E12203-CALE | SEQ-CALE.D | 04/30/11 00:53 |
| Cal Standard | 1E12203-CALF | SEQ-CALF.D | 04/30/11 01:25 |
| Cal Standard | 1E12203-CALG | SEQ-CALG.D | 04/30/11 01:58 |
| MS Tune | 1E12203-TUN2 | SEQ-TUN1.D | 04/30/11 14:42 |
| Initial Cal Check | 1E12203-ICV1 | SEQ-ICV1.D | 04/30/11 15:07 |
| Initial Cal Check | 1E12203-ICV2 | SEQ-ICV2.D | 04/30/11 15:40 |
| Initial Cal Check | 1E12203-ICV3 | SEQ-ICV5.D | 04/30/11 17:19 |
| MS Tune | 1E12203-TUN3 | SEQ-TUN1.D | 05/02/11 13:51 |
| Initial Cal Check | 1E12203-ICV4 | SEQ-ICV4.D | 05/02/11 14:16 |

# ANALYSIS SEQUENCE SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E14710 | Instrument: | MS-BNA1 |
| Calibration: | 1032006 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1E14710-TUN1 | SEQ-TUN1.D | 05/26/11 16:18 |
| Calibration Check | 1E14710-CCV1 | SEQ-CCV1.D | 05/26/11 16:45 |
| Blank | 1E24013-BLK1 | E24013B1.D | 05/26/11 18:11 |
| GW0102 | 1105208-01 | 0520801.D | 05/27/11 02:46 |

# ANALYSIS SEQUENCE SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15103 | Instrument: | MS-BNA1 |
| Calibration: | 1032006 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1E15103-TUN1 | SEQ-TUN1.D | 05/27/11 19:39 |
| Calibration Check | 1E15103-CCV1 | SEQ-CCV1.D | 05/27/11 20:08 |
| LCS | 1E24013-BS1 | E24013L1.D | 05/27/11 22:12 |
| GW8012-RB | 1105208-03 | 0520803.D | 05/27/11 22:41 |

# ANALYSIS SEQUENCE SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15110 | Instrument: | MS-BNA1 |
| Calibration: | 1032006 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1E15110-TUN1 | SEQ-TUN1.D | 05/28/11 18:05 |
| Calibration Check | 1E15110-CCV1 | SEQ-CCV1.D | 05/28/11 18:31 |
| Blank | 1E27018-BLK1 | E27018B1.D | 05/28/11 20:11 |
| LCS | 1E27018-BS1 | E27018L1.D | 05/28/11 21:09 |
| LCS Dup | 1E27018-BSD1 | E27018L2.D | 05/28/11 21:38 |
| GW0064 | 1105217-01 | 0521701.D | 05/29/11 00:03 |
| GW0065 | 1105225-01 | 0522501.D | 05/29/11 00:32 |
| GW0066 | 1105225-03 | 0522503.D | 05/29/11 01:01 |

# ANALYSIS SEQUENCE SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15808 | Instrument: | MS-BNA1 |
| Calibration: | 1032006 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1F15808-TUN1 | SEQ-TUN1.D | 06/04/11 21:49 |
| Calibration Check | 1F15808-CCV1 | SEQ-CCV1.D | 06/04/11 22:15 |
| GW0064 | 1105217-01RE1 | 0521701R.D | 06/05/11 04:57 |
| GW0065 | 1105225-01RE1 | 0522501R.D | 06/05/11 05:26 |
| GW0066 | 1105225-03RE1 | 0522503R.D | 06/05/11 05:55 |

# ANALYSIS SEQUENCE SUMMARY

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15812 | Instrument: | MS-BNA3 |
| Calibration: | 1122001 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| MS Tune | 1F15812-TUN1 | SEQ-TUN1.D | 06/02/11 14:43 |
| Calibration Check | 1F15812-CCV1 | SEQ-CCV1.D | 06/02/11 15:44 |
| Blank | 1F01024-BLK1 | F01024B1.D | 06/02/11 17:59 |
| LCS | 1F01024-BS1 | F01024L1.D | 06/02/11 19:09 |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E14710 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E14710-CCV1 )** | | | Lab File ID: SEQ-CCV1.D | | | Analyzed: 05/26/11 16:45 | | | |
| 1,4-Dichlorobenzene-d4 | 464290 | 5.867 | 537968 | 6.172 | 86 | 50 - 200 | -0.3050 | +/-0.50 | |
| Naphthalene-d8 | 1458511 | 7.362 | 1642233 | 7.653 | 89 | 50 - 200 | -0.2910 | +/-0.50 | |
| Acenaphthene-d10 | 783949 | 9.487 | 783714 | 9.779 | 100 | 50 - 200 | -0.2920 | +/-0.50 | |
| Phenanthrene-d10 | 1149948 | 11.292 | 1089157 | 11.597 | 106 | 50 - 200 | -0.3050 | +/-0.50 | |
| Chrysene-d12 | 872627 | 14.51 | 993474 | 14.84 | 88 | 50 - 200 | -0.3300 | +/-0.50 | |
| Perylene-d12 | 530181 | 16.226 | 932715 | 16.597 | 57 | 50 - 200 | -0.3710 | +/-0.50 | |
| **Blank (1E24013-BLK1 )** | | | Lab File ID: E24013B1.D | | | Analyzed: 05/26/11 18:11 | | | |
| 1,4-Dichlorobenzene-d4 | 510804 | 5.862 | 464290 | 5.867 | 110 | 50 - 200 | -0.0050 | +/-0.50 | |
| Naphthalene-d8 | 1403287 | 7.357 | 1458511 | 7.362 | 96 | 50 - 200 | -0.0050 | +/-0.50 | |
| Acenaphthene-d10 | 696135 | 9.478 | 783949 | 9.487 | 89 | 50 - 200 | -0.0090 | +/-0.50 | |
| Phenanthrene-d10 | 944019 | 11.28 | 1149948 | 11.292 | 82 | 50 - 200 | -0.0120 | +/-0.50 | |
| Chrysene-d12 | 795521 | 14.504 | 872627 | 14.51 | 91 | 50 - 200 | -0.0060 | +/-0.50 | |
| Perylene-d12 | 582193 | 16.215 | 530181 | 16.226 | 110 | 50 - 200 | -0.0110 | +/-0.50 | |
| **GW0102 (1105208-01 )** | | | Lab File ID: 0520801.D | | | Analyzed: 05/27/11 02:46 | | | |
| 1,4-Dichlorobenzene-d4 | 542427 | 5.858 | 464290 | 5.867 | 117 | 50 - 200 | -0.0090 | +/-0.50 | |
| Naphthalene-d8 | 1350809 | 7.355 | 1458511 | 7.362 | 93 | 50 - 200 | -0.0070 | +/-0.50 | |
| Acenaphthene-d10 | 755041 | 9.474 | 783949 | 9.487 | 96 | 50 - 200 | -0.0130 | +/-0.50 | |
| Phenanthrene-d10 | 1087214 | 11.281 | 1149948 | 11.292 | 95 | 50 - 200 | -0.0110 | +/-0.50 | |
| Chrysene-d12 | 791795 | 14.5 | 872627 | 14.51 | 91 | 50 - 200 | -0.0100 | +/-0.50 | |
| Perylene-d12 | 439036 | 16.212 | 530181 | 16.226 | 83 | 50 - 200 | -0.0140 | +/-0.50 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15103 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E15103-CCV1 )** | | | Lab File ID: SEQ-CCV1.D | | | Analyzed: 05/27/11 20:08 | | | |
| 1,4-Dichlorobenzene-d4 | 599128 | 5.77 | 537968 | 6.172 | 111 | 50 - 200 | -0.4020 | +/-0.50 | |
| Naphthalene-d8 | 1764491 | 7.262 | 1642233 | 7.653 | 107 | 50 - 200 | -0.3910 | +/-0.50 | |
| Acenaphthene-d10 | 760798 | 9.381 | 783714 | 9.779 | 97 | 50 - 200 | -0.3980 | +/-0.50 | |
| Phenanthrene-d10 | 1216796 | 11.186 | 1089157 | 11.597 | 112 | 50 - 200 | -0.4110 | +/-0.50 | |
| Chrysene-d12 | 1054309 | 14.399 | 993474 | 14.84 | 106 | 50 - 200 | -0.4410 | +/-0.50 | |
| Perylene-d12 | 620373 | 16.103 | 932715 | 16.597 | 67 | 50 - 200 | -0.4940 | +/-0.50 | |
| **LCS (1E24013-BS1 )** | | | Lab File ID: E24013L1.D | | | Analyzed: 05/27/11 22:12 | | | |
| 1,4-Dichlorobenzene-d4 | 645409 | 5.767 | 599128 | 5.77 | 108 | 50 - 200 | -0.0030 | +/-0.50 | |
| Naphthalene-d8 | 1755542 | 7.267 | 1764491 | 7.262 | 99 | 50 - 200 | 0.0050 | +/-0.50 | |
| Acenaphthene-d10 | 836811 | 9.378 | 760798 | 9.381 | 110 | 50 - 200 | -0.0030 | +/-0.50 | |
| Phenanthrene-d10 | 1253696 | 11.179 | 1216796 | 11.186 | 103 | 50 - 200 | -0.0070 | +/-0.50 | |
| Chrysene-d12 | 1066342 | 14.397 | 1054309 | 14.399 | 101 | 50 - 200 | -0.0020 | +/-0.50 | |
| Perylene-d12 | 590913 | 16.102 | 620373 | 16.103 | 95 | 50 - 200 | -0.0010 | +/-0.50 | |
| **GW8012-RB (1105208-03 )** | | | Lab File ID: 0520803.D | | | Analyzed: 05/27/11 22:41 | | | |
| 1,4-Dichlorobenzene-d4 | 621154 | 5.766 | 599128 | 5.77 | 104 | 50 - 200 | -0.0040 | +/-0.50 | |
| Naphthalene-d8 | 1888963 | 7.261 | 1764491 | 7.262 | 107 | 50 - 200 | -0.0010 | +/-0.50 | |
| Acenaphthene-d10 | 834855 | 9.376 | 760798 | 9.381 | 110 | 50 - 200 | -0.0050 | +/-0.50 | |
| Phenanthrene-d10 | 1232495 | 11.174 | 1216796 | 11.186 | 101 | 50 - 200 | -0.0120 | +/-0.50 | |
| Chrysene-d12 | 1067128 | 14.391 | 1054309 | 14.399 | 101 | 50 - 200 | -0.0080 | +/-0.50 | |
| Perylene-d12 | 673713 | 16.1 | 620373 | 16.103 | 109 | 50 - 200 | -0.0030 | +/-0.50 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15110 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E15110-CCV1 )** | | | Lab File ID: SEQ-CCV1.D | | | Analyzed: 05/28/11 18:31 | | | |
| 1,4-Dichlorobenzene-d4 | 540057 | 5.746 | 537968 | 6.172 | 100 | 50 - 200 | -0.4260 | +/-0.50 | |
| Naphthalene-d8 | 1645830 | 7.236 | 1642233 | 7.653 | 100 | 50 - 200 | -0.4170 | +/-0.50 | |
| Acenaphthene-d10 | 934398 | 9.354 | 783714 | 9.779 | 119 | 50 - 200 | -0.4250 | +/-0.50 | |
| Phenanthrene-d10 | 1412340 | 11.161 | 1089157 | 11.597 | 130 | 50 - 200 | -0.4360 | +/-0.50 | |
| Chrysene-d12 | 1095697 | 14.372 | 993474 | 14.84 | 110 | 50 - 200 | -0.4680 | +/-0.50 | |
| Perylene-d12 | 697659 | 16.07 | 932715 | 16.597 | 75 | 50 - 200 | -0.5270 | +/-0.50 | |
| **Blank (1E27018-BLK1 )** | | | Lab File ID: E27018B1.D | | | Analyzed: 05/28/11 20:11 | | | |
| 1,4-Dichlorobenzene-d4 | 538259 | 5.744 | 540057 | 5.746 | 100 | 50 - 200 | -0.0020 | +/-0.50 | |
| Naphthalene-d8 | 1630714 | 7.233 | 1645830 | 7.236 | 99 | 50 - 200 | -0.0030 | +/-0.50 | |
| Acenaphthene-d10 | 914635 | 9.354 | 934398 | 9.354 | 98 | 50 - 200 | 0.0000 | +/-0.50 | |
| Phenanthrene-d10 | 1291078 | 11.146 | 1412340 | 11.161 | 91 | 50 - 200 | -0.0150 | +/-0.50 | |
| Chrysene-d12 | 950682 | 14.358 | 1095697 | 14.372 | 87 | 50 - 200 | -0.0140 | +/-0.50 | |
| Perylene-d12 | 716598 | 16.064 | 697659 | 16.07 | 103 | 50 - 200 | -0.0060 | +/-0.50 | |
| **LCS (1E27018-BS1 )** | | | Lab File ID: E27018L1.D | | | Analyzed: 05/28/11 21:09 | | | |
| 1,4-Dichlorobenzene-d4 | 520116 | 5.74 | 540057 | 5.746 | 96 | 50 - 200 | -0.0060 | +/-0.50 | |
| Naphthalene-d8 | 1705915 | 7.234 | 1645830 | 7.236 | 104 | 50 - 200 | -0.0020 | +/-0.50 | |
| Acenaphthene-d10 | 907475 | 9.351 | 934398 | 9.354 | 97 | 50 - 200 | -0.0030 | +/-0.50 | |
| Phenanthrene-d10 | 1363871 | 11.157 | 1412340 | 11.161 | 97 | 50 - 200 | -0.0040 | +/-0.50 | |
| Chrysene-d12 | 1149848 | 14.37 | 1095697 | 14.372 | 105 | 50 - 200 | -0.0020 | +/-0.50 | |
| Perylene-d12 | 805976 | 16.069 | 697659 | 16.07 | 116 | 50 - 200 | -0.0010 | +/-0.50 | |
| **LCS Dup (1E27018-BSD1 )** | | | Lab File ID: E27018L2.D | | | Analyzed: 05/28/11 21:38 | | | |
| 1,4-Dichlorobenzene-d4 | 495588 | 5.741 | 540057 | 5.746 | 92 | 50 - 200 | -0.0050 | +/-0.50 | |
| Naphthalene-d8 | 1317989 | 7.236 | 1645830 | 7.236 | 80 | 50 - 200 | 0.0000 | +/-0.50 | |
| Acenaphthene-d10 | 813688 | 9.351 | 934398 | 9.354 | 87 | 50 - 200 | -0.0030 | +/-0.50 | |
| Phenanthrene-d10 | 1327010 | 11.152 | 1412340 | 11.161 | 94 | 50 - 200 | -0.0090 | +/-0.50 | |
| Chrysene-d12 | 1104179 | 14.364 | 1095697 | 14.372 | 101 | 50 - 200 | -0.0080 | +/-0.50 | |
| Perylene-d12 | 774686 | 16.07 | 697659 | 16.07 | 111 | 50 - 200 | 0.0000 | +/-0.50 | |
| **GW0064 (1105217-01 )** | | | Lab File ID: 0521701.D | | | Analyzed: 05/29/11 00:03 | | | |
| 1,4-Dichlorobenzene-d4 | 510308 | 5.737 | 540057 | 5.746 | 94 | 50 - 200 | -0.0090 | +/-0.50 | |
| Naphthalene-d8 | 1349522 | 7.231 | 1645830 | 7.236 | 82 | 50 - 200 | -0.0050 | +/-0.50 | |
| Acenaphthene-d10 | 755882 | 9.351 | 934398 | 9.354 | 81 | 50 - 200 | -0.0030 | +/-0.50 | |
| Phenanthrene-d10 | 1201742 | 11.152 | 1412340 | 11.161 | 85 | 50 - 200 | -0.0090 | +/-0.50 | |
| Chrysene-d12 | 907532 | 14.356 | 1095697 | 14.372 | 83 | 50 - 200 | -0.0160 | +/-0.50 | |
| Perylene-d12 | 580593 | 16.067 | 697659 | 16.07 | 83 | 50 - 200 | -0.0030 | +/-0.50 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E15110 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **GW0065 (1105225-01 )** | | | Lab File ID: 0522501.D | | | Analyzed: 05/29/11 00:32 | | | |
| 1,4-Dichlorobenzene-d4 | 513386 | 5.74 | 540057 | 5.746 | 95 | 50 - 200 | -0.0060 | +/-0.50 | |
| Naphthalene-d8 | 1343457 | 7.23 | 1645830 | 7.236 | 82 | 50 - 200 | -0.0060 | +/-0.50 | |
| Acenaphthene-d10 | 783034 | 9.352 | 934398 | 9.354 | 84 | 50 - 200 | -0.0020 | +/-0.50 | |
| Phenanthrene-d10 | 1233699 | 11.151 | 1412340 | 11.161 | 87 | 50 - 200 | -0.0100 | +/-0.50 | |
| Chrysene-d12 | 895072 | 14.358 | 1095697 | 14.372 | 82 | 50 - 200 | -0.0140 | +/-0.50 | |
| Perylene-d12 | 582551 | 16.066 | 697659 | 16.07 | 84 | 50 - 200 | -0.0040 | +/-0.50 | |
| **GW0066 (1105225-03 )** | | | Lab File ID: 0522503.D | | | Analyzed: 05/29/11 01:01 | | | |
| 1,4-Dichlorobenzene-d4 | 620005 | 5.742 | 540057 | 5.746 | 115 | 50 - 200 | -0.0040 | +/-0.50 | |
| Naphthalene-d8 | 1832844 | 7.234 | 1645830 | 7.236 | 111 | 50 - 200 | -0.0020 | +/-0.50 | |
| Acenaphthene-d10 | 1046437 | 9.349 | 934398 | 9.354 | 112 | 50 - 200 | -0.0050 | +/-0.50 | |
| Phenanthrene-d10 | 1543899 | 11.15 | 1412340 | 11.161 | 109 | 50 - 200 | -0.0110 | +/-0.50 | |
| Chrysene-d12 | 1109996 | 14.362 | 1095697 | 14.372 | 101 | 50 - 200 | -0.0100 | +/-0.50 | |
| Perylene-d12 | 869790 | 16.067 | 697659 | 16.07 | 125 | 50 - 200 | -0.0030 | +/-0.50 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15808 | Instrument: | MS-BNA1 |
| | | Calibration: | 1032006 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F15808-CCV1 )** | | | Lab File ID: SEQ-CCV1.D | | | Analyzed: 06/04/11 22:15 | | | |
| 1,4-Dichlorobenzene-d4 | 487468 | 5.566 | 537968 | 6.172 | 91 | 50 - 200 | -0.6060 | +/-0.50 | |
| Naphthalene-d8 | 1390678 | 7.064 | 1642233 | 7.653 | 85 | 50 - 200 | -0.5890 | +/-0.50 | |
| Acenaphthene-d10 | 831154 | 9.175 | 783714 | 9.779 | 106 | 50 - 200 | -0.6040 | +/-0.50 | |
| Phenanthrene-d10 | 1271338 | 10.971 | 1089157 | 11.597 | 117 | 50 - 200 | -0.6260 | +/-0.50 | |
| Chrysene-d12 | 939120 | 14.169 | 993474 | 14.84 | 95 | 50 - 200 | -0.6710 | +/-0.50 | |
| Perylene-d12 | 899640 | 15.853 | 932715 | 16.597 | 96 | 50 - 200 | -0.7440 | +/-0.50 | |
| **GW0064 (1105217-01RE1 )** | | | Lab File ID: 0521701R.D | | | Analyzed: 06/05/11 04:57 | | | |
| 1,4-Dichlorobenzene-d4 | 483079 | 5.566 | 487468 | 5.566 | 99 | 50 - 200 | 0.0000 | +/-0.50 | |
| Naphthalene-d8 | 1417852 | 7.056 | 1390678 | 7.064 | 102 | 50 - 200 | -0.0080 | +/-0.50 | |
| Acenaphthene-d10 | 813422 | 9.172 | 831154 | 9.175 | 98 | 50 - 200 | -0.0030 | +/-0.50 | |
| Phenanthrene-d10 | 1241450 | 10.962 | 1271338 | 10.971 | 98 | 50 - 200 | -0.0090 | +/-0.50 | |
| Chrysene-d12 | 976400 | 14.162 | 939120 | 14.169 | 104 | 50 - 200 | -0.0070 | +/-0.50 | |
| Perylene-d12 | 908813 | 15.85 | 899640 | 15.853 | 101 | 50 - 200 | -0.0030 | +/-0.50 | |
| **GW0065 (1105225-01RE1 )** | | | Lab File ID: 0522501R.D | | | Analyzed: 06/05/11 05:26 | | | |
| 1,4-Dichlorobenzene-d4 | 402497 | 5.569 | 487468 | 5.566 | 83 | 50 - 200 | 0.0030 | +/-0.50 | |
| Naphthalene-d8 | 1137784 | 7.061 | 1390678 | 7.064 | 82 | 50 - 200 | -0.0030 | +/-0.50 | |
| Acenaphthene-d10 | 593833 | 9.166 | 831154 | 9.175 | 71 | 50 - 200 | -0.0090 | +/-0.50 | |
| Phenanthrene-d10 | 986975 | 10.959 | 1271338 | 10.971 | 78 | 50 - 200 | -0.0120 | +/-0.50 | |
| Chrysene-d12 | 801879 | 14.166 | 939120 | 14.169 | 85 | 50 - 200 | -0.0030 | +/-0.50 | |
| Perylene-d12 | 643737 | 15.849 | 899640 | 15.853 | 72 | 50 - 200 | -0.0040 | +/-0.50 | |
| **GW0066 (1105225-03RE1 )** | | | Lab File ID: 0522503R.D | | | Analyzed: 06/05/11 05:55 | | | |
| 1,4-Dichlorobenzene-d4 | 487166 | 5.564 | 487468 | 5.566 | 100 | 50 - 200 | -0.0020 | +/-0.50 | |
| Naphthalene-d8 | 1379573 | 7.058 | 1390678 | 7.064 | 99 | 50 - 200 | -0.0060 | +/-0.50 | |
| Acenaphthene-d10 | 777919 | 9.168 | 831154 | 9.175 | 94 | 50 - 200 | -0.0070 | +/-0.50 | |
| Phenanthrene-d10 | 1215136 | 10.963 | 1271338 | 10.971 | 96 | 50 - 200 | -0.0080 | +/-0.50 | |
| Chrysene-d12 | 918293 | 14.165 | 939120 | 14.169 | 98 | 50 - 200 | -0.0040 | +/-0.50 | |
| Perylene-d12 | 707418 | 15.856 | 899640 | 15.853 | 79 | 50 - 200 | 0.0030 | +/-0.50 | |

# INTERNAL STANDARD AREA AND RT SUMMARY
## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15812 | Instrument: | MS-BNA3 |
| | | Calibration: | 1122001 |

| Internal Standard | Response | RT | Reference Response | Reference RT | Area % | Area % Limits | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F15812-CCV1 )** | | | Lab File ID: SEQ-CCV1.D | | | Analyzed: 06/02/11 15:44 | | | |
| 1,4-Dichlorobenzene-d4 | 305198 | 6.05 | 564644 | 6.39 | 54 | 50 - 200 | -0.3400 | +/-0.50 | |
| Naphthalene-d8 | 1141586 | 7.701 | 1974331 | 8.03 | 58 | 50 - 200 | -0.3290 | +/-0.50 | |
| Acenaphthene-d10 | 650090 | 9.918 | 1113173 | 10.253 | 58 | 50 - 200 | -0.3350 | +/-0.50 | |
| Phenanthrene-d10 | 1127181 | 11.761 | 1849431 | 12.096 | 61 | 50 - 200 | -0.3350 | +/-0.50 | |
| Chrysene-d12 | 1167933 | 15.783 | 2020225 | 16.268 | 58 | 50 - 200 | -0.4850 | +/-0.50 | |
| Perylene-d12 | 1136589 | 18.487 | 1927021 | 19.014 | 59 | 50 - 200 | -0.5270 | +/-0.50 | |
| **Blank (1F01024-BLK1 )** | | | Lab File ID: F01024B1.D | | | Analyzed: 06/02/11 17:59 | | | |
| 1,4-Dichlorobenzene-d4 | 246799 | 6.052 | 305198 | 6.05 | 81 | 50 - 200 | 0.0020 | +/-0.50 | |
| Naphthalene-d8 | 901276 | 7.692 | 1141586 | 7.701 | 79 | 50 - 200 | -0.0090 | +/-0.50 | |
| Acenaphthene-d10 | 506977 | 9.909 | 650090 | 9.918 | 78 | 50 - 200 | -0.0090 | +/-0.50 | |
| Phenanthrene-d10 | 906542 | 11.752 | 1127181 | 11.761 | 80 | 50 - 200 | -0.0090 | +/-0.50 | |
| Chrysene-d12 | 941814 | 15.769 | 1167933 | 15.783 | 81 | 50 - 200 | -0.0140 | +/-0.50 | |
| Perylene-d12 | 916423 | 18.478 | 1136589 | 18.487 | 81 | 50 - 200 | -0.0090 | +/-0.50 | |
| **LCS (1F01024-BS1 )** | | | Lab File ID: F01024L1.D | | | Analyzed: 06/02/11 19:09 | | | |
| 1,4-Dichlorobenzene-d4 | 271424 | 6.052 | 305198 | 6.05 | 89 | 50 - 200 | 0.0020 | +/-0.50 | |
| Naphthalene-d8 | 1018529 | 7.697 | 1141586 | 7.701 | 89 | 50 - 200 | -0.0040 | +/-0.50 | |
| Acenaphthene-d10 | 572874 | 9.914 | 650090 | 9.918 | 88 | 50 - 200 | -0.0040 | +/-0.50 | |
| Phenanthrene-d10 | 1046297 | 11.757 | 1127181 | 11.761 | 93 | 50 - 200 | -0.0040 | +/-0.50 | |
| Chrysene-d12 | 1068221 | 15.78 | 1167933 | 15.783 | 91 | 50 - 200 | -0.0030 | +/-0.50 | |
| Perylene-d12 | 1013739 | 18.483 | 1136589 | 18.487 | 89 | 50 - 200 | -0.0040 | +/-0.50 | |

# INITIAL CALIBRATION DATA

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1032006 | Instrument: | MS-BNA1 |
| Matrix: | Water | Calibration Dates: | 1/26/11_15:40 1/26/11_22:49 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3,3'-Dichlorobenzidine | 5 | 0.345776 | 10 | 0.3735446 | 20 | 0.3383405 | 40 | 0.4092793 | 50 | 0.4022903 | 60 | 0.4065189 |
| Acenaphthene | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | |
| Acetophenone | 5 | 1.718495 | 10 | 1.63753 | 20 | 1.524418 | 40 | 1.571136 | 50 | 1.546064 | 60 | 1.573002 |
| Aniline | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | |
| Atrazine | 5 | 0.1907566 | 10 | 0.1974337 | 20 | 0.2066576 | 40 | 0.208239 | 50 | 0.2045953 | 60 | 0.2127531 |
| Benzaldehyde | 5 | 1.141413 | 10 | 1.160982 | 20 | 1.025443 | 40 | 1.064124 | 50 | 0.9565525 | 60 | 0.9552402 |
| Benzidine | 5 | 0.4873597 | 10 | 0.5759976 | 20 | 0.629192 | 40 | 0.6726627 | 50 | 0.6711953 | 60 | 0.6374861 |
| Benzo(a)anthracene | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | |
| Benzoic acid | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | |
| Benzyl alcohol | | | | | | | | | | | | |
| 1,1-Biphenyl | 5 | 1.660318 | 10 | 1.616332 | 20 | 1.415179 | 40 | 1.433678 | 50 | 1.271071 | 60 | 1.516557 |
| 4-Bromophenyl-phenylether | | | | | | | | | | | | |
| Butylbenzylphthalate | | | | | | | | | | | | |
| Caprolactam | 5 | 0.119707 | 10 | 0.1253949 | 20 | 0.1145069 | 40 | 0.1360062 | 50 | 0.1337222 | 60 | 0.1317621 |
| Carbazole | | | | | | | | | | | | |
| 4-Chloro-3-methylphenol | | | | | | | | | | | | |
| 4-Chloroaniline | | | | | | | | | | | | |
| Bis(2-chloroethoxy)methane | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | | | | | | | | | | | | |
| 2,2'-Oxybis-1-chloropropane | | | | | | | | | | | | |
| 2-Chloronaphthalene | | | | | | | | | | | | |
| 2-Chlorophenol | | | | | | | | | | | | |
| 4-Chlorophenyl phenyl ether | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA

## SW8270C

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Calibration: 1032006
Instrument: MS-BNA1
Matrix: Water
Calibration Dates: 1/26/11_15:40 1/26/11_22:49

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Dibenzofuran | | | | | | | | | | | | |
| Di-n-butylphthalate | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | |
| 1,3-Dichlorobenzene | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | |
| 2,6-Dichlorophenol | 5 | 0.3378312 | 10 | 0.327105 | 20 | 0.2967903 | 40 | 0.2951475 | 50 | 0.3247614 | 60 | 0.3152692 |
| 2,4-Dichlorophenol | | | | | | | | | | | | |
| Diethylphthalate | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | |
| Dimethyl phthalate | | | | | | | | | | | | |
| 4,6-Dinitro-2-methylphenol | | | | | | | | | | | | |
| 2,4-Dinitrophenol | | | | | | | | | | | | |
| 2,4-Dinitrotoluene | | | | | | | | | | | | |
| 2,6-Dinitrotoluene | | | | | | | | | | | | |
| Di-n-octylphthalate | | | | | | | | | | | | |
| 1,4-Dioxane | 5 | 0.7076939 | 10 | 0.7115041 | 20 | 0.6327187 | 40 | 0.6201284 | 50 | 0.572512 | 60 | 0.6466837 |
| 1,2-Diphenylhydrazine | | | | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | |
| 2-Fluorobiphenyl | | | | | | | | | | | | |
| 2-Fluorophenol | | | | | | | | | | | | |
| Hexachlorobenzene | | | | | | | | | | | | |
| Hexachlorobutadiene | | | | | | | | | | | | |
| Hexachlorocyclopentadiene | | | | | | | | | | | | |
| Hexachloroethane | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | |
| Isophorone | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | |
| 2-Methylphenol | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1032006 | Instrument: | MS-BNA1 |
| Matrix: | Water | Calibration Dates: | 1/26/11_15:40 1/26/11_22:49 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3+4-Methylphenol | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | |
| 4-Nitroaniline | | | | | | | | | | | | |
| 3-Nitroaniline | | | | | | | | | | | | |
| 2-Nitroaniline | | | | | | | | | | | | |
| Nitrobenzene | | | | | | | | | | | | |
| Nitrobenzene-d5 | | | | | | | | | | | | |
| 4-Nitrophenol | | | | | | | | | | | | |
| 2-Nitrophenol | | | | | | | | | | | | |
| N-Nitrosodimethylamine | | | | | | | | | | | | |
| N-Nitrosodiphenylamine | | | | | | | | | | | | |
| N-Nitroso-di-n-propylamine | | | | | | | | | | | | |
| Pentachlorophenol | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | |
| Phenol-d6 | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | |
| Pyridine | | | | | | | | | | | | |
| Terphenyl-d14 | | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | 5 | 0.3041409 | 10 | 0.2738675 | 20 | 0.2545837 | 40 | 0.3138555 | 50 | 0.3096277 | 60 | 0.285836 |
| 2,3,4,6-Tetrachlorophenol | | | | | | | | | | | | |
| 2,4,6-Tribromophenol | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | |
| 2,4,6-Trichlorophenol | | | | | | | | | | | | |
| 2,4,5-Trichlorophenol | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1032006 | Instrument: | MS-BNA1 |
| Matrix: | Water | Calibration Dates: | 1/26/11 15:40 1/26/11 22:49 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3,3'-Dichlorobenzidine | 80 | 0.4043308 | 100 | 0.3922965 | | | | | | | | |
| Acenaphthene | | | | | 5 | 1.220878 | 10 | 1.118627 | 20 | 1.212567 | 40 | 1.085046 |
| Acenaphthylene | | | | | 5 | 1.94982 | 10 | 2.146404 | 20 | 1.823227 | 40 | 1.68579 |
| Acetophenone | 80 | 1.455533 | 100 | 1.415772 | | | | | | | | |
| Aniline | | | | | 5 | 2.02499 | 10 | 2.162058 | 20 | 1.966631 | 40 | 2.001997 |
| Anthracene | | | | | 5 | 1.184955 | 10 | 1.081563 | 20 | 1.164455 | 40 | 1.091871 |
| Atrazine | 80 | 0.205928 | 100 | 0.2134976 | | | | | | | | |
| Benzaldehyde | 80 | 0.9441259 | 100 | 0.8525288 | | | | | | | | |
| Benzidine | 80 | 0.6973172 | 100 | 0.6804112 | | | | | | | | |
| Benzo(a)anthracene | | | | | 5 | 1.162396 | 10 | 1.11186 | 20 | 1.213411 | 40 | 1.172758 |
| Benzo(a)pyrene | | | | | 5 | 1.028759 | 10 | 0.9828043 | 20 | 1.100819 | 40 | 1.122026 |
| Benzo(b)fluoranthene | | | | | 5 | 1.077629 | 10 | 1.039558 | 20 | 1.096949 | 40 | 1.152977 |
| Benzo(g,h,i)perylene | | | | | 5 | 0.8224602 | 10 | 0.7987842 | 20 | 0.8059861 | 40 | 0.7816645 |
| Benzoic acid | | | | | 5 | 0.1331081 | 10 | 0.1669506 | 20 | 0.2293678 | 40 | 0.2308795 |
| Benzo(k)fluoranthene | | | | | 5 | 1.29056 | 10 | 1.251448 | 20 | 1.316401 | 40 | 1.277549 |
| Benzyl alcohol | | | | | 5 | 0.8918595 | 10 | 0.9057471 | 20 | 0.8810121 | 40 | 0.8683949 |
| 1,1-Biphenyl | 80 | 1.359401 | 100 | 1.268587 | | | | | | | | |
| 4-Bromophenyl-phenylether | | | | | 5 | 0.231972 | 10 | 0.2409782 | 20 | 0.260483 | 40 | 0.2108992 |
| Butylbenzylphthalate | | | | | 5 | 0.7540163 | 10 | 0.7862457 | 20 | 0.8246928 | 40 | 0.8176434 |
| Caprolactam | 80 | 0.1321053 | 100 | 0.1188764 | | | | | | | | |
| Carbazole | | | | | 5 | 1.128219 | 10 | 1.02969 | 20 | 1.000536 | 40 | 0.8835432 |
| 4-Chloro-3-methylphenol | | | | | 5 | 0.310694 | 10 | 0.2887984 | 20 | 0.2948105 | 40 | 0.2876101 |
| 4-Chloroaniline | | | | | 5 | 0.4857113 | 10 | 0.4592316 | 20 | 0.4857785 | 40 | 0.4309516 |
| Bis(2-chloroethoxy)methane | | | | | 5 | 0.5100818 | 10 | 0.4912081 | 20 | 0.5153237 | 40 | 0.445233 |
| Bis(2-chloroethyl)ether | | | | | 5 | 1.442472 | 10 | 1.590034 | 20 | 1.374359 | 40 | 1.269574 |
| 2,2'-Oxybis-1-chloropropane | | | | | 5 | 2.184818 | 10 | 2.306427 | 20 | 2.189966 | 40 | 2.011674 |
| 2-Chloronaphthalene | | | | | 5 | 1.247416 | 10 | 1.208501 | 20 | 1.26931 | 40 | 1.16149 |
| 2-Chlorophenol | | | | | 5 | 1.438581 | 10 | 1.288788 | 20 | 1.365938 | 40 | 1.295661 |
| 4-Chlorophenyl phenyl ether | | | | | 5 | 0.5713084 | 10 | 0.574376 | 20 | 0.5688825 | 40 | 0.5386735 |
| Chrysene | | | | | 5 | 1.181379 | 10 | 1.170608 | 20 | 1.189425 | 40 | 1.176048 |
| Dibenz(a,h)anthracene | | | | | 5 | 0.7898291 | 10 | 0.7836814 | 20 | 0.7617359 | 40 | 0.8067768 |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Calibration: 1032006
Instrument: MS-BNA1
Matrix: Water
Calibration Dates: 1/26/11 15:40 1/26/11 22:49

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Dibenzofuran | | | | | 5 | 1.576125 | 10 | 1.695587 | 20 | 1.726036 | 40 | 1.527336 |
| Di-n-butylphthalate | | | | | 5 | 1.469552 | 10 | 1.493537 | 20 | 1.485016 | 40 | 1.459402 |
| 1,4-Dichlorobenzene | | | | | 5 | 1.565822 | 10 | 1.580467 | 20 | 1.482342 | 40 | 1.374248 |
| 1,3-Dichlorobenzene | | | | | 5 | 1.564366 | 10 | 1.550635 | 20 | 1.466796 | 40 | 1.395741 |
| 1,2-Dichlorobenzene | | | | | 5 | 1.485698 | 10 | 1.514043 | 20 | 1.430022 | 40 | 1.33701 |
| 2,6-Dichlorophenol | 80 | 0.3067876 | 100 | 0.3061151 | | | | | | | | |
| 2,4-Dichlorophenol | | | | | 5 | 0.318596 | 10 | 0.3480627 | 20 | 0.326904 | 40 | 0.2954511 |
| Diethylphthalate | | | | | 5 | 1.66071 | 10 | 1.577697 | 20 | 1.524236 | 40 | 1.261 |
| 2,4-Dimethylphenol | | | | | 5 | 0.3868736 | 10 | 0.3553646 | 20 | 0.3612512 | 40 | 0.3462765 |
| Dimethyl phthalate | | | | | 5 | 1.371102 | 10 | 1.473182 | 20 | 1.50951 | 40 | 1.243328 |
| 4,6-Dinitro-2-methylphenol | | | | | 5 | 5.478294E-02 | 10 | 6.840982E-02 | 20 | 0.1071133 | 40 | 0.1333907 |
| 2,4-Dinitrophenol | | | | | 5 | ~~5.062163E-02~~ | 10 | 6.237037E-02 | 20 | 0.1011521 | 40 | 0.1317647 |
| 2,4-Dinitrotoluene | | | | | 5 | 0.3090174 | 10 | 0.3793169 | 20 | 0.4185296 | 40 | 0.3974313 |
| 2,6-Dinitrotoluene | | | | | 5 | 0.3183163 | 10 | 0.3493131 | 20 | 0.3754144 | 40 | 0.3444299 |
| Di-n-octylphthalate | | | | | 5 | 1.6316 | 10 | 1.635798 | 20 | 1.910787 | 40 | 1.92312 |
| 1,4-Dioxane | 80 | 0.6451679 | 100 | 0.6224177 | | | | | | | | |
| 1,2-Diphenylhydrazine | | | | | 5 | 0.9580609 | 10 | 1.008812 | 20 | 0.8802152 | 40 | 0.8420501 |
| Bis(2-ethylhexyl)phthalate | | | | | 5 | 0.9781605 | 10 | 1.042781 | 20 | 1.141739 | 40 | 1.073501 |
| Fluoranthene | | | | | 5 | 1.174554 | 10 | 1.119604 | 20 | 1.158582 | 40 | 1.010021 |
| Fluorene | | | | | 5 | 1.293421 | 10 | 1.21811 | 20 | 1.266726 | 40 | 1.122978 |
| 2-Fluorobiphenyl | | | | | 5 | 1.345385 | 10 | 1.322831 | 20 | 1.520308 | 40 | 1.324401 |
| 2-Fluorophenol | | | | | 10 | 1.351626 | 20 | 1.413124 | 40 | 1.336365 | 80 | 1.187975 |
| Hexachlorobenzene | | | | | 5 | 0.2665323 | 10 | 0.2655703 | 20 | 0.2697611 | 40 | 0.2648784 |
| Hexachlorobutadiene | | | | | 5 | 0.2026878 | 10 | 0.1856802 | 20 | 0.1853857 | 40 | 0.1781549 |
| Hexachlorocyclopentadiene | | | | | 5 | 0.2904279 | 10 | 0.3291612 | 20 | 0.3651913 | 40 | 0.3514916 |
| Hexachloroethane | | | | | 5 | 0.6518942 | 10 | 0.6308284 | 20 | 0.5940863 | 40 | 0.5416978 |
| Indeno(1,2,3-cd)pyrene | | | | | 5 | 0.9892853 | 10 | 0.9494004 | 20 | 0.9327697 | 40 | 0.9464554 |
| Isophorone | | | | | 5 | 0.8217078 | 10 | 0.8399116 | 20 | 0.7783914 | 40 | 0.749957 |
| 1-Methylnaphthalene | | | | | 5 | 0.5974456 | 10 | 0.5823433 | 20 | 0.5405367 | 40 | 0.4803757 |
| 2-Methylnaphthalene | | | | | 5 | 0.5430144 | 10 | 0.5513543 | 20 | 0.5312456 | 40 | 0.4988653 |
| 2-Methylphenol | | | | | 5 | 1.286482 | 10 | 1.250346 | 20 | 1.247537 | 40 | 1.126521 |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1032006 | Instrument: | MS-BNA1 |
| Matrix: | Water | Calibration Dates: | 1/26/11 15:40 1/26/11 22:49 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3+4-Methylphenol | | | | | 5 | 1.253529 | 10 | 1.307357 | 20 | 1.301847 | 40 | 1.200152 |
| Naphthalene | | | | | 5 | 1.116486 | 10 | 1.119735 | 20 | 1.067584 | 40 | 0.9710557 |
| 4-Nitroaniline | | | | | 5 | 0.2224683 | 10 | 0.2128799 | 20 | 0.1693595 | 40 | 0.2175572 |
| 3-Nitroaniline | | | | | 5 | 0.3255846 | 10 | 0.3423936 | 20 | 0.370489 | 40 | 0.3366752 |
| 2-Nitroaniline | | | | | 5 | 0.2654652 | 10 | 0.3352421 | 20 | 0.3339656 | 40 | 0.3505404 |
| Nitrobenzene | | | | | 5 | 0.3891568 | 10 | 0.4016634 | 20 | 0.3673868 | 40 | 0.3628202 |
| Nitrobenzene-d5 | | | | | 5 | 0.3956987 | 10 | 0.3972185 | 20 | 0.3663041 | 40 | 0.3665365 |
| 4-Nitrophenol | | | | | 5 | 0.1497267 | 10 | 0.1860405 | 20 | 0.2060501 | 40 | 0.1954678 |
| 2-Nitrophenol | | | | | 5 | 0.2103668 | 10 | 0.2175712 | 20 | 0.2231657 | 40 | 0.2457888 |
| N-Nitrosodimethylamine | | | | | 5 | 0.4875362 | 10 | 0.5489131 | 20 | 0.5766275 | 40 | 0.6186587 |
| N-Nitrosodiphenylamine | | | | | 5 | 0.692447 | 10 | 0.7515103 | 20 | 0.7118897 | 40 | 0.6351698 |
| N-Nitroso-di-n-propylamine | | | | | 5 | 0.9311666 | 10 | 0.9269374 | 20 | 0.9262252 | 40 | 0.819147 |
| Pentachlorophenol | | | | | 5 | 0.1241727 | 10 | 0.1201355 | 20 | 0.1663006 | 40 | 0.1612227 |
| Phenanthrene | | | | | 5 | 1.200445 | 10 | 1.166657 | 20 | 1.130055 | 40 | 1.056359 |
| Phenol | | | | | 5 | 1.751446 | 10 | 1.879768 | 20 | 1.637272 | 40 | 1.637659 |
| Phenol-d6 | | | | | 10 | 1.647681 | 20 | 1.763422 | 40 | 1.626008 | 80 | 1.603414 |
| Pyrene | | | | | 5 | 1.419325 | 10 | 1.399579 | 20 | 1.383023 | 40 | 1.359213 |
| Pyridine | | | | | 5 | 1.537536 | 10 | 1.635782 | 20 | 1.541409 | 40 | 1.602552 |
| Terphenyl-d14 | | | | | 5 | 0.7926602 | 10 | 0.8057548 | 20 | 0.8474803 | 40 | 0.8784666 |
| 1,2,4,5-Tetrachlorobenzene | 80 | 0.2829317 | 100 | 0.2756055 | | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | | | | | 5 | 0.2994616 | 10 | 0.3272414 | 20 | 0.3682806 | 40 | 0.3554998 |
| 2,4,6-Tribromophenol | | | | | 10 | 0.1431756 | 20 | 0.1442165 | 40 | 0.1561332 | 80 | 0.1413181 |
| 1,2,4-Trichlorobenzene | | | | | 5 | 0.3682245 | 10 | 0.3577617 | 20 | 0.3747519 | 40 | 0.3449513 |
| 2,4,6-Trichlorophenol | | | | | 5 | 0.3758167 | 10 | 0.3963889 | 20 | 0.4193174 | 40 | 0.4066011 |
| 2,4,5-Trichlorophenol | | | | | 5 | 0.4069373 | 10 | 0.4358068 | 20 | 0.4686353 | 40 | 0.4421245 |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1032006 | Instrument: | MS-BNA1 |
| Matrix: | Water | Calibration Dates: | 1/26/11 15:40 1/26/11 22:49 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3,3'-Dichlorobenzidine | | | | | | | | | | | | |
| Acenaphthene | 50 | 1.043914 | 60 | 1.052242 | 80 | 1.018418 | 100 | 0.9095531 | | | | |
| Acenaphthylene | 50 | 1.661411 | 60 | 1.69419 | 80 | 1.475834 | 100 | 1.517921 | | | | |
| Acetophenone | | | | | | | | | | | | |
| Aniline | 50 | 1.898633 | 60 | 1.897488 | 80 | 1.838443 | 100 | 1.811652 | | | | |
| Anthracene | 50 | 1.040675 | 60 | 0.9601388 | 80 | 0.986327 | 100 | 0.9420685 | | | | |
| Atrazine | | | | | | | | | | | | |
| Benzaldehyde | | | | | | | | | | | | |
| Benzidine | | | | | | | | | | | | |
| Benzo(a)anthracene | 50 | 1.123439 | 60 | 1.17446 | 80 | 1.085961 | 100 | 1.065421 | | | | |
| Benzo(a)pyrene | 50 | 1.01213 | 60 | 1.049306 | 80 | 1.049837 | 100 | 1.00649 | | | | |
| Benzo(b)fluoranthene | 50 | 1.139324 | 60 | 1.106174 | 80 | 1.072877 | 100 | 1.114459 | | | | |
| Benzo(g,h,i)perylene | 50 | 0.7444304 | 60 | 0.6702291 | 80 | 0.781589 | 100 | 0.6663042 | | | | |
| Benzoic acid | 50 | 0.2778284 | 60 | 0.2809271 | 80 | 0.2779468 | 100 | 0.2820542 | | | | |
| Benzo(k)fluoranthene | 50 | 1.091518 | 60 | 1.245353 | 80 | 1.178262 | 100 | 1.066763 | | | | |
| Benzyl alcohol | 50 | 0.8673854 | 60 | 0.8174535 | 80 | 0.7987832 | 100 | 0.7636324 | | | | |
| 1,1-Biphenyl | | | | | | | | | | | | |
| 4-Bromophenyl-phenylether | 50 | 0.239031 | 60 | 0.2319426 | 80 | 0.2214796 | 100 | 0.2055715 | | | | |
| Butylbenzylphthalate | 50 | 0.7199546 | 60 | 0.8287041 | 80 | 0.732991 | 100 | 0.6918112 | | | | |
| Caprolactam | | | | | | | | | | | | |
| Carbazole | 50 | 0.8901069 | 60 | 0.8548234 | 80 | 0.7878224 | 100 | 0.7760328 | | | | |
| 4-Chloro-3-methylphenol | 50 | 0.2892545 | 60 | 0.2792311 | 80 | 0.2602546 | 100 | 0.2512146 | | | | |
| 4-Chloroaniline | 50 | 0.4412442 | 60 | 0.4082374 | 80 | 0.4006734 | 100 | 0.4141308 | | | | |
| Bis(2-chloroethoxy)methane | 50 | 0.4453259 | 60 | 0.4436365 | 80 | 0.4141729 | 100 | 0.4082329 | | | | |
| Bis(2-chloroethyl)ether | 50 | 1.300273 | 60 | 1.297892 | 80 | 1.290856 | 100 | 1.209098 | | | | |
| 2,2'-Oxybis-1-chloropropane | 50 | 1.717134 | 60 | 1.712654 | 80 | 1.555193 | 100 | 1.808949 | | | | |
| 2-Chloronaphthalene | 50 | 1.088393 | 60 | 1.064578 | 80 | 1.019875 | 100 | 1.06234 | | | | |
| 2-Chlorophenol | 50 | 1.283665 | 60 | 1.204709 | 80 | 1.275381 | 100 | 1.260114 | | | | |
| 4-Chlorophenyl phenyl ether | 50 | 0.5253523 | 60 | 0.5281174 | 80 | 0.5055696 | 100 | 0.4550214 | | | | |
| Chrysene | 50 | 1.091368 | 60 | 1.142452 | 80 | 1.03431 | 100 | 0.996392 | | | | |
| Dibenz(a,h)anthracene | 50 | 0.7553903 | 60 | 0.6819198 | 80 | 0.8216482 | 100 | 0.7302443 | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Calibration: 1032006
Instrument: MS-BNA1
Matrix: Water
Calibration Dates: 1/26/11 15:40 1/26/11 22:49

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Dibenzofuran | 50 | 1.475582 | 60 | 1.426709 | 80 | 1.272312 | 100 | 1.282609 | | | | |
| Di-n-butylphthalate | 50 | 1.385354 | 60 | 1.243875 | 80 | 1.25377 | 100 | 1.212919 | | | | |
| 1,4-Dichlorobenzene | 50 | 1.327094 | 60 | 1.312307 | 80 | 1.202188 | 100 | 1.192058 | | | | |
| 1,3-Dichlorobenzene | 50 | 1.410471 | 60 | 1.324776 | 80 | 1.268259 | 100 | 1.304134 | | | | |
| 1,2-Dichlorobenzene | 50 | 1.283084 | 60 | 1.19311 | 80 | 1.152838 | 100 | 1.120647 | | | | |
| 2,6-Dichlorophenol | | | | | | | | | | | | |
| 2,4-Dichlorophenol | 50 | 0.3200354 | 60 | 0.319605 | 80 | 0.3094633 | 100 | 0.3044136 | | | | |
| Diethylphthalate | 50 | 1.233003 | 60 | 1.223311 | 80 | 1.164583 | 100 | 1.135723 | | | | |
| 2,4-Dimethylphenol | 50 | 0.3329041 | 60 | 0.3471536 | 80 | 0.310377 | 100 | 0.2939744 | | | | |
| Dimethyl phthalate | 50 | 1.313868 | 60 | 1.251818 | 80 | 1.246383 | 100 | 1.163514 | | | | |
| 4,6-Dinitro-2-methylphenol | 50 | 0.1503998 | 60 | 0.1421705 | 80 | 0.141276 | 100 | 0.1458094 | | | | |
| 2,4-Dinitrophenol | 50 | 0.1515695 | 60 | 0.1605612 | 80 | 0.1730286 | 100 | 0.1784883 | | | | |
| 2,4-Dinitrotoluene | 50 | 0.3875191 | 60 | 0.3787391 | 80 | 0.3429866 | 100 | 0.3779481 | | | | |
| 2,6-Dinitrotoluene | 50 | 0.3554451 | 60 | 0.3624102 | 80 | 0.3355308 | 100 | 0.3457358 | | | | |
| Di-n-octylphthalate | 50 | 1.690144 | 60 | 1.92358 | 80 | 1.727296 | 100 | 1.901108 | | | | |
| 1,4-Dioxane | | | | | | | | | | | | |
| 1,2-Diphenylhydrazine | 50 | 0.8308116 | 60 | 0.7998217 | 80 | 0.7293861 | 100 | 0.6287272 | | | | |
| Bis(2-ethylhexyl)phthalate | 50 | 1.024078 | 60 | 1.086512 | 80 | 0.9241547 | 100 | 0.9297745 | | | | |
| Fluoranthene | 50 | 1.108267 | 60 | 1.002067 | 80 | 1.007233 | 100 | 1.002433 | | | | |
| Fluorene | 50 | 1.117687 | 60 | 1.11628 | 80 | 1.079617 | 100 | 0.961522 | | | | |
| 2-Fluorobiphenyl | 50 | 1.225178 | 60 | 1.232052 | 80 | 1.237633 | 100 | 1.19141 | | | | |
| 2-Fluorophenol | 100 | 1.20463 | 120 | 1.147633 | 160 | 1.052205 | 200 | 1.104915 | | | | |
| Hexachlorobenzene | 50 | 0.2590678 | 60 | 0.2544472 | 80 | 0.2593156 | 100 | 0.2389274 | | | | |
| Hexachlorobutadiene | 50 | 0.170282 | 60 | 0.1647461 | 80 | 0.1585373 | 100 | 0.1651874 | | | | |
| Hexachlorocyclopentadiene | 50 | 0.367711 | 60 | 0.3489062 | 80 | 0.3745824 | 100 | 0.3733203 | | | | |
| Hexachloroethane | 50 | 0.5772956 | 60 | 0.5438372 | 80 | 0.5195182 | 100 | 0.5209373 | | | | |
| Indeno(1,2,3-cd)pyrene | 50 | 0.9040208 | 60 | 0.8189074 | 80 | 0.9751703 | 100 | 0.8667418 | | | | |
| Isophorone | 50 | 0.7902478 | 60 | 0.746112 | 80 | 0.7366049 | 100 | 0.7091168 | | | | |
| 1-Methylnaphthalene | 50 | 0.4934924 | 60 | 0.4820733 | 80 | 0.4428706 | 100 | 0.4445212 | | | | |
| 2-Methylnaphthalene | 50 | 0.4906804 | 60 | 0.4548918 | 80 | 0.4483581 | 100 | 0.4288413 | | | | |
| 2-Methylphenol | 50 | 1.096435 | 60 | 1.008644 | 80 | 1.011912 | 100 | 1.054777 | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1032006 | Instrument: | MS-BNA1 |
| Matrix: | Water | Calibration Dates: | 1/26/11 15:40 1/26/11 22:49 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3+4-Methylphenol | 50 | 1.183712 | 60 | 1.087107 | 80 | 1.08938 | 100 | 1.065014 | | | | |
| Naphthalene | 50 | 0.9156539 | 60 | 0.8994825 | 80 | 0.803674 | 100 | 0.8087121 | | | | |
| 4-Nitroaniline | 50 | 0.2554806 | 60 | 0.2397759 | 80 | 0.265351 | 100 | 0.2644746 | | | | |
| 3-Nitroaniline | 50 | 0.3401997 | 60 | 0.3519287 | 80 | 0.3683457 | 100 | 0.3506128 | | | | |
| 2-Nitroaniline | 50 | 0.3128571 | 60 | 0.3442502 | 80 | 0.3309131 | 100 | 0.3278767 | | | | |
| Nitrobenzene | 50 | 0.3639734 | 60 | 0.3552985 | 80 | 0.316403 | 100 | 0.3115827 | | | | |
| Nitrobenzene-d5 | 50 | 0.3848744 | 60 | 0.3536817 | 80 | 0.3468868 | 100 | 0.3422753 | | | | |
| 4-Nitrophenol | 50 | 0.2163265 | 60 | 0.210757 | 80 | 0.2207467 | 100 | 0.1969781 | | | | |
| 2-Nitrophenol | 50 | 0.2287002 | 60 | 0.2342643 | 80 | 0.2149201 | 100 | 0.2181142 | | | | |
| N-Nitrosodimethylamine | 50 | 0.5975275 | 60 | 0.5849924 | 80 | 0.5484751 | 100 | 0.6183085 | | | | |
| N-Nitrosodiphenylamine | 50 | 0.6608435 | 60 | 0.6252076 | 80 | 0.6238943 | 100 | 0.5782682 | | | | |
| N-Nitroso-di-n-propylamine | 50 | 0.8173453 | 60 | 0.7504894 | 80 | 0.7585171 | 100 | 0.743702 | | | | |
| Pentachlorophenol | 50 | 0.1801354 | 60 | 0.1769821 | 80 | 0.1807552 | 100 | 0.1820394 | | | | |
| Phenanthrene | 50 | 1.059757 | 60 | 0.986977 | 80 | 0.9344506 | 100 | 0.9248322 | | | | |
| Phenol | 50 | 1.575537 | 60 | 1.559301 | 80 | 1.423146 | 100 | 1.454171 | | | | |
| Phenol-d6 | 100 | 1.524433 | 120 | 1.494738 | 160 | 1.34971 | 200 | 1.445646 | | | | |
| Pyrene | 50 | 1.24653 | 60 | 1.29918 | 80 | 1.21817 | 100 | 1.066224 | | | | |
| Pyridine | 50 | 1.575985 | 60 | 1.509723 | 80 | 1.577055 | 100 | 1.61602 | | | | |
| Terphenyl-d14 | 50 | 0.8111087 | 60 | 0.848248 | 80 | 0.7819749 | 100 | 0.7308348 | | | | |
| 1,2,4,5-Tetrachlorobenzene | | | | | | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | 50 | 0.3512989 | 60 | 0.3437278 | 80 | 0.317592 | 100 | 0.3289565 | | | | |
| 2,4,6-Tribromophenol | 100 | 0.1487108 | 120 | 0.1437723 | 160 | 0.1452231 | 200 | 0.1366756 | | | | |
| 1,2,4-Trichlorobenzene | 50 | 0.3420562 | 60 | 0.3493295 | 80 | 0.3106524 | 100 | 0.3076826 | | | | |
| 2,4,6-Trichlorophenol | 50 | 0.3828678 | 60 | 0.38452 | 80 | 0.4245115 | 100 | 0.4173965 | | | | |
| 2,4,5-Trichlorophenol | 50 | 0.4433099 | 60 | 0.420189 | 80 | 0.429527 | 100 | 0.4083834 | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1032006 | Instrument: | MS-BNA1 |
| Matrix: | Water | Calibration Dates: | 1/26/11 15:40 1/26/11 22:49 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 3,3'-Dichlorobenzidine | 0.3840471 | 7.376638 | 14.80975 | 2.744989E-02 | | | 15 | |
| Acenaphthene | 1.082656 | 9.483861 | 9.821625 | 5.657461E-02 | | | CCC (30) | |
| Acenaphthylene | 1.744325 | 12.75083 | 9.605125 | 6.858755E-02 | | | 15 | |
| Acetophenone | 1.555244 | 6.168212 | 6.634375 | 7.218448E-02 | | | 15 | |
| Aniline | 1.950237 | 5.831973 | 5.807375 | 0.1033171 | | | 15 | |
| Anthracene | 1.056507 | 8.585155 | 11.68625 | 5.730172E-02 | | | 15 | |
| Atrazine | 0.2049826 | 3.718523 | 11.27987 | 9.895935E-02 | | | 15 | |
| Benzaldehyde | 1.012551 | 10.43666 | 5.684375 | 9.183361E-02 | | | 15 | |
| Benzidine | 0.6314527 | 11.01948 | 13.25575 | 3.711405E-02 | | | 15 | |
| Benzo(a)anthracene | 1.138713 | 4.414255 | 14.83125 | 3.720446E-02 | | | 15 | |
| Benzo(a)pyrene | 1.044021 | 4.547513 | 16.52988 | 3.873379E-02 | | | CCC (30) | |
| Benzo(b)fluoranthene | 1.099993 | 3.348838 | 16.14687 | 3.650013E-02 | | | 15 | |
| Benzo(g,h,i)perylene | 0.758931 | 7.956935 | 18.3315 | 6.411751E-02 | | | 15 | |
| Benzoic acid | 0.2348828 | 24.43774 | 7.4215 | 0.7447993 | 0.9967614 | | 0.995 | |
| Benzo(k)fluoranthene | 1.214732 | 7.667493 | 16.18175 | 5.256876E-02 | | | 15 | |
| Benzyl alcohol | 0.8492835 | 5.904117 | 6.339625 | 0.134646 | | | 15 | |
| 1,1-Biphenyl | 1.44264 | 10.16426 | 9.0865 | 7.580724E-02 | | | 15 | |
| 4-Bromophenyl-phenylether | 0.2302946 | 7.64967 | 11.058 | 3.698206E-02 | | | 15 | |
| Butylbenzylphthalate | 0.7695074 | 6.808174 | 14.17538 | 0.0181131 | | | 15 | |
| Caprolactam | 0.1265101 | 6.344437 | 8.16975 | 0.2428858 | | | 15 | |
| Carbazole | 0.9188467 | 13.42596 | 11.88687 | 4.735667E-02 | | | 15 | |
| 4-Chloro-3-methylphenol | 0.2827335 | 6.739682 | 8.335875 | 5.589678E-02 | | | CCC (30) | |
| 4-Chloroaniline | 0.4407449 | 7.602189 | 7.752375 | 5.839612E-02 | | | 15 | |
| Bis(2-chloroethoxy)methane | 0.4591519 | 9.024322 | 7.3845 | 9.015245E-02 | | | 15 | |
| Bis(2-chloroethyl)ether | 1.34682 | 8.949026 | 5.887375 | 0.1010167 | | | 15 | |
| 2,2'-Oxybis-1-chloropropane | 1.935852 | 14.19111 | 6.495 | 7.787477E-02 | | | 15 | |
| 2-Chloronaphthalene | 1.140238 | 8.268771 | 9.102 | 5.514584E-02 | | | 15 | |
| 2-Chlorophenol | 1.301605 | 5.44966 | 5.93325 | 0.0640218 | | | 15 | |
| 4-Chlorophenyl phenyl ether | 0.5334126 | 7.569953 | 10.46213 | 3.392237E-02 | | | 15 | |
| Chrysene | 1.122748 | 6.577449 | 14.87787 | 4.224206E-02 | | | 15 | |
| Dibenz(a,h)anthracene | 0.7664032 | 5.859635 | 17.97362 | 4.666747E-02 | | | 15 | |
| Dibenzofuran | 1.497787 | 11.31125 | 10.03125 | 6.286963E-02 | | | 15 | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1032006 | Instrument: | MS-BNA1 |
| Matrix: | Water | Calibration Dates: | 1/26/11 15:40 1/26/11 22:49 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Di-n-butylphthalate | 1.375428 | 8.7109 | 12.34463 | 0.0340847 | | | 15 | |
| 1,4-Dichlorobenzene | 1.379566 | 10.94327 | 6.191375 | 6.203767E-02 | | | CCC (30) | |
| 1,3-Dichlorobenzene | 1.410647 | 7.838891 | 6.106 | 5.463781E-02 | | | 15 | |
| 1,2-Dichlorobenzene | 1.314556 | 11.58735 | 6.360125 | 4.155267E-02 | | | 15 | |
| 2,6-Dichlorophenol | 0.3137259 | 4.852462 | 7.75425 | 4.420223E-02 | | | 15 | |
| 2,4-Dichlorophenol | 0.3178164 | 4.983195 | 7.490125 | 8.883757E-02 | | | CCC (30) | |
| Diethylphthalate | 1.347533 | 15.27684 | 10.34412 | 9.254366E-02 | 0.9972915 | | 0.995 | |
| 2,4-Dimethylphenol | 0.3417719 | 8.563737 | 7.26575 | 0.1065429 | | | 15 | |
| Dimethyl phthalate | 1.321588 | 9.153659 | 9.484625 | 0.1434108 | | | 15 | |
| 4,6-Dinitro-2-methylphenol | 0.1179191 | 31.66593 | 10.527 | 0.1204279 | 0.9973104 | | 0.995 | |
| 2,4-Dinitrophenol | 0.1369907 | 30.78159 | 9.873571 | 9.653076E-02 | 0.9960785 | | SPCC (0.05) | |
| 2,4-Dinitrotoluene | 0.373936 | 9.021128 | 10.03375 | 9.903814E-02 | | | 15 | |
| 2,6-Dinitrotoluene | 0.3483244 | 4.936864 | 9.545375 | 0.1119241 | | | 15 | |
| Di-n-octylphthalate | 1.792929 | 7.459237 | 15.71263 | 0.024866 | | | CCC (30) | |
| 1,4-Dioxane | 0.6448533 | 7.152144 | 3.019375 | 0.1113753 | | | 15 | |
| 1,2-Diphenylhydrazine | 0.8347356 | 14.48987 | 10.65375 | 4.850528E-02 | | | 15 | |
| Bis(2-ethylhexyl)phthalate | 1.025088 | 7.512426 | 14.90587 | 0.0193314 | | | 15 | |
| Fluoranthene | 1.072845 | 6.98906 | 13.07425 | 4.253064E-02 | | | CCC (30) | |
| Fluorene | 1.147043 | 9.444569 | 10.45175 | 5.284617E-02 | | | 15 | |
| 2-Fluorobiphenyl | 1.2999 | 8.100212 | 8.967125 | 3.987571E-02 | | | 15 | |
| 2-Fluorophenol | 1.224809 | 10.50463 | 4.742625 | 0.1316694 | | | 15 | |
| Hexachlorobenzene | 0.2598125 | 3.761925 | 11.1185 | 4.707497E-02 | | | 15 | |
| Hexachlorobutadiene | 0.1763327 | 8.243307 | 7.8355 | 4.165048E-02 | | | CCC (30) | |
| Hexachlorocyclopentadiene | 0.350099 | 8.135736 | 8.706625 | 3.605388E-02 | | | SPCC (0.05) | |
| Hexachloroethane | 0.5725119 | 8.716146 | 6.7485 | 3.321397E-02 | | | 15 | |
| Indeno(1,2,3-cd)pyrene | 0.9228439 | 6.186788 | 17.94762 | 5.505283E-02 | | | 15 | |
| Isophorone | 0.7715062 | 5.758819 | 7.1245 | 0.1880514 | | | 15 | |
| 1-Methylnaphthalene | 0.5079573 | 11.64757 | 8.633 | 4.208229E-02 | | | 15 | |
| 2-Methylnaphthalene | 0.4934064 | 9.372333 | 8.513125 | 5.344917E-02 | | | 15 | |
| 2-Methylphenol | 1.135332 | 9.877222 | 6.461875 | 0.1007337 | | | 15 | |
| 3+4-Methylphenol | 1.186012 | 8.228414 | 6.647625 | 0.1700502 | | | 15 | |
| Naphthalene | 0.9627979 | 13.28902 | 7.679625 | 6.733623E-02 | | | 15 | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1032006 | | Instrument: | MS-BNA1 | |
| Matrix: | Water | | Calibration Dates: | 1/26/11 15:40 | 1/26/11 22:49 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 4-Nitroaniline | 0.2309184 | 14.04035 | 10.48912 | 0.1289535 | | | 15 | |
| 3-Nitroaniline | 0.3482787 | 4.427347 | 9.746125 | 0.1226337 | | | 15 | |
| 2-Nitroaniline | 0.3251388 | 8.173008 | 9.237625 | 6.849578E-02 | | | 15 | |
| Nitrobenzene | 0.3585356 | 8.765722 | 6.833875 | 0.1095103 | | | 15 | |
| Nitrobenzene-d5 | 0.3691845 | 5.802246 | 6.809875 | 9.945623E-02 | | | 15 | |
| 4-Nitrophenol | 0.1977617 | 11.40524 | 9.955125 | 0.1174457 | | | SPCC (0.05) | |
| 2-Nitrophenol | 0.2241114 | 5.190145 | 7.205375 | 6.189121E-02 | | | CCC (30) | |
| N-Nitrosodimethylamine | 0.5726299 | 7.635147 | 3.346125 | 0.1829083 | | | 15 | |
| N-Nitrosodiphenylamine | 0.6599038 | 8.482011 | 10.61075 | 6.517892E-02 | | | CCC (30) | |
| N-Nitroso-di-n-propylamine | 0.8341912 | 9.917143 | 6.653625 | 0.1894353 | | | SPCC (0.05) | |
| Pentachlorophenol | 0.1614679 | 15.71491 | 11.36463 | 3.521819E-02 | 0.9986717 | | CCC (30) | |
| Phenanthrene | 1.057442 | 9.810503 | 11.62413 | 4.673016E-02 | | | 15 | |
| Phenol | 1.614787 | 9.276235 | 5.7815 | 0.2208323 | | | CCC (30) | |
| Phenol-d6 | 1.556882 | 8.341379 | 5.768125 | 0.2252886 | | | 15 | |
| Pyrene | 1.298906 | 9.144153 | 13.35137 | 4.721813E-02 | | | 15 | |
| Pyridine | 1.574508 | 2.729928 | 3.381875 | 0.3664935 | | | 15 | |
| Terphenyl-d14 | 0.812066 | 5.680172 | 13.56038 | 3.188842E-02 | | | 15 | |
| 1,2,4,5-Tetrachlorobenzene | 0.2875561 | 7.072892 | 8.715 | 4.094783E-02 | | | 15 | |
| 2,3,4,6-Tetrachlorophenol | 0.3365073 | 6.658431 | 10.18512 | 5.841319E-02 | | | 15 | |
| 2,4,6-Tribromophenol | 0.1449031 | 3.921225 | 10.74725 | 8.448053E-02 | | | 15 | |
| 1,2,4-Trichlorobenzene | 0.3444263 | 7.098695 | 7.588375 | 0.0361532 | | | 15 | |
| 2,4,6-Trichlorophenol | 0.4009275 | 4.66083 | 8.857625 | 4.361742E-02 | | | CCC (30) | |
| 2,4,5-Trichlorophenol | 0.4318641 | 4.727981 | 8.89625 | 5.449523E-02 | | | 15 | |

# INITIAL CALIBRATION DATA

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Acenaphthene | 5 | 1.200562 | 10 | 1.152068 | 20 | 1.149698 | 40 | 1.01509 | 50 | 1.06599 | 60 | 1.118857 |
| Acenaphthylene | 5 | 1.910563 | 10 | 1.856652 | 20 | 1.834023 | 40 | 1.577506 | 50 | 1.649651 | 60 | 1.70743 |
| Acetophenone | | | | | | | | | | | | |
| Aniline | 5 | 2.209836 | 10 | 2.190225 | 20 | 2.226457 | 40 | 1.982043 | 50 | 1.974254 | 60 | 2.113941 |
| Anthracene | 5 | 1.235784 | 10 | 1.151973 | 20 | 1.14753 | 40 | 1.011014 | 50 | 1.041804 | 60 | 1.073498 |
| Atrazine | | | | | | | | | | | | |
| Benzaldehyde | | | | | | | | | | | | |
| Benzidine | | | | | | | | | | | | |
| Benzo(a)anthracene | 5 | 1.168873 | 10 | 1.137636 | 20 | 1.197714 | 40 | 1.06755 | 50 | 1.06548 | 60 | 1.128806 |
| Benzo(a)pyrene | 5 | 1.036259 | 10 | 1.04972 | 20 | 1.089412 | 40 | 0.978414 | 50 | 1.01499 | 60 | 1.072439 |
| Benzo(b)fluoranthene | 5 | 1.078112 | 10 | 1.060484 | 20 | 1.153792 | 40 | 1.054294 | 50 | 1.040864 | 60 | 1.109427 |
| Benzo(g,h,i)perylene | 5 | 1.006605 | 10 | 1.027385 | 20 | 1.089672 | 40 | 0.9762424 | 50 | 0.9956835 | 60 | 1.072671 |
| Benzoic acid | 5 | ~~0.1631144~~ | 10 | 0.2066539 | 20 | 0.2735507 | 40 | 0.2647946 | 50 | 0.2615823 | 60 | 0.2878177 |
| Benzo(k)fluoranthene | 5 | 1.172096 | 10 | 1.160073 | 20 | 1.151865 | 40 | 1.001281 | 50 | 1.065575 | 60 | 1.126634 |
| Benzyl alcohol | 5 | 0.8617163 | 10 | 0.8673336 | 20 | 0.9412286 | 40 | 0.808192 | 50 | 0.8346686 | 60 | 0.8710511 |
| 1,1-Biphenyl | | | | | | | | | | | | |
| 4-Bromophenyl-phenylether | 5 | 0.2469078 | 10 | 0.2344633 | 20 | 0.2370065 | 40 | 0.2123191 | 50 | 0.2163411 | 60 | 0.2281563 |
| Butylbenzylphthalate | 5 | 0.5079049 | 10 | 0.5154742 | 20 | 0.5455854 | 40 | 0.4854733 | 50 | 0.5006547 | 60 | 0.5266863 |
| Caprolactam | | | | | | | | | | | | |
| Carbazole | 5 | 1.169471 | 10 | 1.105756 | 20 | 1.083785 | 40 | 0.9685984 | 50 | 0.99038 | 60 | 1.035201 |
| 4-Chloro-3-methylphenol | 5 | 0.3271885 | 10 | 0.3156005 | 20 | 0.3315254 | 40 | 0.2968659 | 50 | 0.2942781 | 60 | 0.3089769 |
| 4-Chloroaniline | 5 | 0.4539725 | 10 | 0.4453658 | 20 | 0.4574864 | 40 | 0.3980506 | 50 | 0.4035257 | 60 | 0.4178278 |
| Bis(2-chloroethoxy)methane | 5 | 0.4611163 | 10 | 0.4509887 | 20 | 0.460769 | 40 | 0.4019167 | 50 | 0.4004393 | 60 | 0.4227313 |
| Bis(2-chloroethyl)ether | 5 | 1.398969 | 10 | 1.365362 | 20 | 1.373354 | 40 | 1.207943 | 50 | 1.239815 | 60 | 1.295529 |
| 2,2'-Oxybis-1-chloropropane | 5 | 2.104681 | 10 | 2.038633 | 20 | 2.090222 | 40 | 1.80177 | 50 | 1.872962 | 60 | 1.941936 |
| 2-Chloronaphthalene | 5 | 1.200232 | 10 | 1.154849 | 20 | 1.147532 | 40 | 0.9888028 | 50 | 1.039189 | 60 | 1.079545 |
| 2-Chlorophenol | 5 | 1.387384 | 10 | 1.360711 | 20 | 1.391404 | 40 | 1.228533 | 50 | 1.258319 | 60 | 1.325553 |
| 4-Chlorophenyl phenyl ether | 5 | 0.6722867 | 10 | 0.629193 | 20 | 0.6336897 | 40 | 0.5730243 | 50 | 0.5907893 | 60 | 0.627927 |
| Chrysene | 5 | 1.151174 | 10 | 1.091951 | 20 | 1.107031 | 40 | 0.961258 | 50 | 1.014375 | 60 | 1.04624 |
| Dibenz(a,h)anthracene | 5 | 0.946806 | 10 | 0.9506035 | 20 | 1.063357 | 40 | 0.9536154 | 50 | 0.9816955 | 60 | 1.050817 |
| Dibenzofuran | 5 | 1.690636 | 10 | 1.625618 | 20 | 1.605227 | 40 | 1.390488 | 50 | 1.466559 | 60 | 1.521719 |

# INITIAL CALIBRATION DATA

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Di-n-butylphthalate | 5 | 1.291838 | 10 | 1.2633 | 20 | 1.265435 | 40 | 1.093081 | 50 | 1.140461 | 60 | 1.174317 |
| 1,4-Dichlorobenzene | 5 | 1.568025 | 10 | 1.509793 | 20 | 1.523558 | 40 | 1.3491 | 50 | 1.379529 | 60 | 1.434978 |
| 1,3-Dichlorobenzene | 5 | 1.574354 | 10 | 1.479601 | 20 | 1.519922 | 40 | 1.320874 | 50 | 1.355106 | 60 | 1.4173 |
| 1,2-Dichlorobenzene | 5 | 1.465806 | 10 | 1.434433 | 20 | 1.426883 | 40 | 1.255848 | 50 | 1.293523 | 60 | 1.343582 |
| 3,3'-Dichlorobenzidine | | | | | | | | | | | | |
| 2,6-Dichlorophenol | | | | | | | | | | | | |
| 2,4-Dichlorophenol | 5 | 0.3169391 | 10 | 0.3145317 | 20 | 0.322702 | 40 | 0.288284 | 50 | 0.289789 | 60 | 0.3069296 |
| Diethylphthalate | 5 | 1.32063 | 10 | 1.261619 | 20 | 1.254918 | 40 | 1.085716 | 50 | 1.152411 | 60 | 1.190047 |
| 2,4-Dimethylphenol | 5 | 0.3841369 | 10 | 0.3702076 | 20 | 0.3829536 | 40 | 0.3415762 | 50 | 0.3440076 | 60 | 0.3643064 |
| Dimethyl phthalate | 5 | 1.355168 | 10 | 1.307581 | 20 | 1.304618 | 40 | 1.153295 | 50 | 1.191277 | 60 | 1.235793 |
| 4,6-Dinitro-2-methylphenol | 5 | 0.1210854 | 10 | 0.1305908 | 20 | 0.1540064 | 40 | 0.145401 | 50 | 0.1462314 | 60 | 0.1562021 |
| 2,4-Dinitrophenol | 5 | ~~0.1243362~~ | 10 | 0.141284 | 20 | 0.1848834 | 40 | 0.1803434 | 50 | 0.1820099 | 60 | 0.2006313 |
| 2,4-Dinitrotoluene | 5 | 0.3918149 | 10 | 0.3987171 | 20 | 0.4082577 | 40 | 0.3613843 | 50 | 0.3748928 | 60 | 0.3995306 |
| 2,6-Dinitrotoluene | 5 | 0.3173778 | 10 | 0.3102615 | 20 | 0.3152494 | 40 | 0.2767322 | 50 | 0.2875841 | 60 | 0.301629 |
| Di-n-octylphthalate | 5 | 1.129653 | 10 | 1.174165 | 20 | 1.286397 | 40 | 1.152356 | 50 | 1.187184 | 60 | 1.252792 |
| 1,4-Dioxane | | | | | | | | | | | | |
| 1,2-Diphenylhydrazine | 5 | 0.9395803 | 10 | 0.8941122 | 20 | 0.9022896 | 40 | 0.7910616 | 50 | 0.8117722 | 60 | 0.8483397 |
| Bis(2-ethylhexyl)phthalate | 5 | 0.6809116 | 10 | 0.696049 | 20 | 0.7240521 | 40 | 0.6392159 | 50 | 0.667684 | 60 | 0.6908073 |
| Fluoranthene | 5 | 1.315024 | 10 | 1.285888 | 20 | 1.299553 | 40 | 1.150257 | 50 | 1.178525 | 60 | 1.237456 |
| Fluorene | 5 | 1.427943 | 10 | 1.37776 | 20 | 1.393796 | 40 | 1.23256 | 50 | 1.283604 | 60 | 1.352245 |
| 2-Fluorobiphenyl | 5 | 1.379787 | 10 | 1.332113 | 20 | 1.323566 | 40 | 1.162246 | 50 | 1.222403 | 60 | 1.258599 |
| 2-Fluorophenol | 10 | 1.214211 | 20 | 1.184901 | 40 | 1.215741 | 80 | 1.07233 | 100 | 1.096515 | 120 | 1.1412 |
| Hexachlorobenzene | 5 | 0.2642514 | 10 | 0.2518966 | 20 | 0.2524031 | 40 | 0.2278087 | 50 | 0.2304762 | 60 | 0.2443057 |
| Hexachlorobutadiene | 5 | 0.1958535 | 10 | 0.1924169 | 20 | 0.197703 | 40 | 0.1758159 | 50 | 0.1782143 | 60 | 0.1853061 |
| Hexachlorocyclopentadiene | 5 | 0.3479271 | 10 | 0.3459221 | 20 | 0.3868304 | 40 | 0.357985 | 50 | 0.3703015 | 60 | 0.3962933 |
| Hexachloroethane | 5 | 0.5846331 | 10 | 0.56404 | 20 | 0.5729063 | 40 | 0.5094484 | 50 | 0.5215085 | 60 | 0.5497472 |
| Indeno(1,2,3-cd)pyrene | 5 | 0.9329214 | 10 | 0.9621318 | 20 | 1.063819 | 40 | 1.008596 | 50 | 0.9848949 | 60 | 1.105305 |
| Isophorone | 5 | 0.7896668 | 10 | 0.7714455 | 20 | 0.7883782 | 40 | 0.7034726 | 50 | 0.7013248 | 60 | 0.7443144 |
| 1-Methylnaphthalene | 5 | 0.6441305 | 10 | 0.6180163 | 20 | 0.6239926 | 40 | 0.54737 | 50 | 0.5549955 | 60 | 0.5772563 |
| 2-Methylnaphthalene | 5 | 0.6435821 | 10 | 0.6278223 | 20 | 0.6404808 | 40 | 0.5564928 | 50 | 0.5627111 | 60 | 0.5897258 |
| 2-Methylphenol | 5 | 1.260273 | 10 | 1.251825 | 20 | 1.277152 | 40 | 1.131961 | 50 | 1.167884 | 60 | 1.218514 |

# INITIAL CALIBRATION DATA

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3+4-Methylphenol | 5 | 1.331706 | 10 | 1.290792 | 20 | 1.346713 | 40 | 1.190219 | 50 | 1.206537 | 60 | 1.281773 |
| Naphthalene | 5 | 1.122107 | 10 | 1.071727 | 20 | 1.07583 | 40 | 0.9265709 | 50 | 0.94301 | 60 | 0.973957 |
| 4-Nitroaniline | 5 | 0.3430184 | 10 | 0.3360743 | 20 | 0.3479662 | 40 | 0.3116398 | 50 | 0.3255681 | 60 | 0.3397148 |
| 3-Nitroaniline | 5 | 0.3309603 | 10 | 0.3378271 | 20 | 0.3400208 | 40 | 0.3008812 | 50 | 0.3121727 | 60 | 0.3258531 |
| 2-Nitroaniline | 5 | 0.3665605 | 10 | 0.3700264 | 20 | 0.3853216 | 40 | 0.3493316 | 50 | 0.3598085 | 60 | 0.3803924 |
| Nitrobenzene | 5 | 0.4362066 | 10 | 0.4207695 | 20 | 0.4376126 | 40 | 0.3908491 | 50 | 0.3913832 | 60 | 0.4109914 |
| Nitrobenzene-d5 | 5 | 0.4225447 | 10 | 0.4166832 | 20 | 0.4326009 | 40 | 0.3896115 | 50 | 0.3855663 | 60 | 0.4106561 |
| 4-Nitrophenol | 5 | 0.229719 | 10 | 0.2494493 | 20 | 0.2828897 | 40 | 0.265577 | 50 | 0.2743758 | 60 | 0.2955233 |
| 2-Nitrophenol | 5 | 0.1962052 | 10 | 0.1951651 | 20 | 0.2085142 | 40 | 0.1870232 | 50 | 0.1859271 | 60 | 0.198001 |
| N-Nitrosodimethylamine | 5 | 0.7020853 | 10 | 0.6974494 | 20 | 0.7179495 | 40 | 0.6502823 | 50 | 0.6591353 | 60 | 0.6915263 |
| N-Nitrosodiphenylamine | 5 | 0.7447467 | 10 | 0.702659 | 20 | 0.7022588 | 40 | 0.6229357 | 50 | 0.6399909 | 60 | 0.6681725 |
| N-Nitroso-di-n-propylamine | 5 | 1.084962 | 10 | 1.067234 | 20 | 1.095671 | 40 | 0.964017 | 50 | 0.9910933 | 60 | 1.042096 |
| Pentachlorophenol | 5 | 0.1466429 | 10 | 0.1458785 | 20 | 0.1722191 | 40 | 0.1555052 | 50 | 0.1599187 | 60 | 0.1729039 |
| Phenanthrene | 5 | 1.199467 | 10 | 1.144802 | 20 | 1.134825 | 40 | 0.990132 | 50 | 1.022705 | 60 | 1.064225 |
| Phenol | 5 | 1.763803 | 10 | 1.739868 | 20 | 1.780402 | 40 | 1.57708 | 50 | 1.605923 | 60 | 1.698477 |
| Phenol-d6 | 10 | 1.662802 | 20 | 1.633678 | 40 | 1.679837 | 80 | 1.464852 | 100 | 1.513167 | 120 | 1.571116 |
| Pyrene | 5 | 1.262746 | 10 | 1.222088 | 20 | 1.241454 | 40 | 1.08272 | 50 | 1.115517 | 60 | 1.160478 |
| Pyridine | 5 | 1.508911 | 10 | 1.473681 | 20 | 1.566124 | 40 | 1.419584 | 50 | 1.429577 | 60 | 1.495931 |
| Terphenyl-d14 | 5 | 0.7819621 | 10 | 0.7712491 | 20 | 0.7866967 | 40 | 0.6961461 | 50 | 0.7143354 | 60 | 0.753249 |
| 1,2,4,5-Tetrachlorobenzene | | | | | | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | 5 | 0.3424646 | 10 | 0.3390161 | 20 | 0.3503973 | 40 | 0.3066535 | 50 | 0.3206907 | 60 | 0.3389603 |
| 2,4,6-Tribromophenol | 10 | 0.1109002 | 20 | 0.1068303 | 40 | 0.1114174 | 80 | 0.1032482 | 100 | 0.1035542 | 120 | 0.1120766 |
| 1,2,4-Trichlorobenzene | 5 | 0.3746386 | 10 | 0.3584824 | 20 | 0.362458 | 40 | 0.320971 | 50 | 0.3209222 | 60 | 0.3385883 |
| 2,4,6-Trichlorophenol | 5 | 0.3830191 | 10 | 0.3817827 | 20 | 0.3990224 | 40 | 0.3592382 | 50 | 0.3644658 | 60 | 0.395434 |
| 2,4,5-Trichlorophenol | 5 | 0.4211802 | 10 | 0.4132209 | 20 | 0.4400895 | 40 | 0.3862672 | 50 | 0.4032646 | 60 | 0.4189467 |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Acenaphthene | 80 | 1.070428 | 100 | 1.110154 | | | | | | | | |
| Acenaphthylene | 80 | 1.618735 | 100 | 1.647107 | | | | | | | | |
| Acetophenone | | | | | 5 | 1.880226 | 10 | 1.843684 | 20 | 1.726817 | 40 | 1.816985 |
| Aniline | 80 | 2.054588 | 100 | 2.043831 | | | | | | | | |
| Anthracene | 80 | 1.035715 | 100 | 1.04405 | | | | | | | | |
| Atrazine | | | | | 5 | 0.2382708 | 10 | 0.2429518 | 20 | 0.2278142 | 40 | 0.233576 |
| Benzaldehyde | | | | | 5 | 1.135886 | 10 | 1.104348 | 20 | 1.01959 | 40 | 1.026186 |
| Benzidine | | | | | 5 | 0.6324675 | 10 | 0.6598514 | 20 | 0.6461027 | 40 | 0.6640134 |
| Benzo(a)anthracene | 80 | 1.085495 | 100 | 1.102825 | | | | | | | | |
| Benzo(a)pyrene | 80 | 1.043055 | 100 | 1.082603 | | | | | | | | |
| Benzo(b)fluoranthene | 80 | 1.094292 | 100 | 1.158321 | | | | | | | | |
| Benzo(g,h,i)perylene | 80 | 1.029641 | 100 | 1.06721 | | | | | | | | |
| Benzoic acid | 80 | 0.2818719 | 100 | 0.2993054 | | | | | | | | |
| Benzo(k)fluoranthene | 80 | 1.086365 | 100 | 1.097945 | | | | | | | | |
| Benzyl alcohol | 80 | 0.8753887 | 100 | 0.8745454 | | | | | | | | |
| 1,1-Biphenyl | | | | | 5 | 1.527091 | 10 | 1.51435 | 20 | 1.38327 | 40 | 1.425931 |
| 4-Bromophenyl-phenylether | 80 | 0.2212953 | 100 | 0.2313328 | | | | | | | | |
| Butylbenzylphthalate | 80 | 0.506124 | 100 | 0.5159519 | | | | | | | | |
| Caprolactam | | | | | 5 | 9.990739E-02 | 10 | 0.1104282 | 20 | 0.1119224 | 40 | 0.1178965 |
| Carbazole | 80 | 0.9981409 | 100 | 1.003717 | | | | | | | | |
| 4-Chloro-3-methylphenol | 80 | 0.3086181 | 100 | 0.3077652 | | | | | | | | |
| 4-Chloroaniline | 80 | 0.4023406 | 100 | 0.4016907 | | | | | | | | |
| Bis(2-chloroethoxy)methane | 80 | 0.4085309 | 100 | 0.4094061 | | | | | | | | |
| Bis(2-chloroethyl)ether | 80 | 1.257639 | 100 | 1.244128 | | | | | | | | |
| 2,2'-Oxybis-1-chloropropane | 80 | 1.890831 | 100 | 1.835877 | | | | | | | | |
| 2-Chloronaphthalene | 80 | 1.026935 | 100 | 1.065042 | | | | | | | | |
| 2-Chlorophenol | 80 | 1.285464 | 100 | 1.282664 | | | | | | | | |
| 4-Chlorophenyl phenyl ether | 80 | 0.6214753 | 100 | 0.6384061 | | | | | | | | |
| Chrysene | 80 | 0.9983804 | 100 | 1.012507 | | | | | | | | |
| Dibenz(a,h)anthracene | 80 | 1.023862 | 100 | 1.065065 | | | | | | | | |
| Dibenzofuran | 80 | 1.474077 | 100 | 1.5066 | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Di-n-butylphthalate | 80 | 1.11586 | 100 | 1.111806 | | | | | | | | |
| 1,4-Dichlorobenzene | 80 | 1.392334 | 100 | 1.402334 | | | | | | | | |
| 1,3-Dichlorobenzene | 80 | 1.374133 | 100 | 1.380718 | | | | | | | | |
| 1,2-Dichlorobenzene | 80 | 1.303595 | 100 | 1.306451 | | | | | | | | |
| 3,3'-Dichlorobenzidine | | | | | 5 | 0.3885638 | 10 | 0.4002254 | 20 | 0.3955931 | 40 | 0.4201307 |
| 2,6-Dichlorophenol | | | | | 5 | 0.2969206 | 10 | 0.3013649 | 20 | 0.291966 | 40 | 0.3082091 |
| 2,4-Dichlorophenol | 80 | 0.2966112 | 100 | 0.3015958 | | | | | | | | |
| Diethylphthalate | 80 | 1.134853 | 100 | 1.157654 | | | | | | | | |
| 2,4-Dimethylphenol | 80 | 0.3587442 | 100 | 0.3633549 | | | | | | | | |
| Dimethyl phthalate | 80 | 1.185465 | 100 | 1.222328 | | | | | | | | |
| 4,6-Dinitro-2-methylphenol | 80 | 0.1522534 | 100 | 0.1575479 | | | | | | | | |
| 2,4-Dinitrophenol | 80 | 0.2006293 | 100 | 0.2082968 | | | | | | | | |
| 2,4-Dinitrotoluene | 80 | 0.395113 | 100 | 0.4141599 | | | | | | | | |
| 2,6-Dinitrotoluene | 80 | 0.2878134 | 100 | 0.2968419 | | | | | | | | |
| Di-n-octylphthalate | 80 | 1.208456 | 100 | 1.243757 | | | | | | | | |
| 1,4-Dioxane | | | | | 5 | 0.562493 | 10 | 0.5588019 | 20 | 0.5235447 | 40 | 0.5233689 |
| 1,2-Diphenylhydrazine | 80 | 0.8016431 | 100 | 0.8168839 | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | 80 | 0.6617696 | 100 | 0.6739699 | | | | | | | | |
| Fluoranthene | 80 | 1.192481 | 100 | 1.211512 | | | | | | | | |
| Fluorene | 80 | 1.305665 | 100 | 1.326577 | | | | | | | | |
| 2-Fluorobiphenyl | 80 | 1.204291 | 100 | 1.24033 | | | | | | | | |
| 2-Fluorophenol | 160 | 1.101251 | 200 | 1.111221 | | | | | | | | |
| Hexachlorobenzene | 80 | 0.2366873 | 100 | 0.2470671 | | | | | | | | |
| Hexachlorobutadiene | 80 | 0.1811536 | 100 | 0.1883923 | | | | | | | | |
| Hexachlorocyclopentadiene | 80 | 0.3839658 | 100 | 0.4105745 | | | | | | | | |
| Hexachloroethane | 80 | 0.5306981 | 100 | 0.5387239 | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | 80 | 1.075263 | 100 | 1.17113 | | | | | | | | |
| Isophorone | 80 | 0.7247781 | 100 | 0.7308301 | | | | | | | | |
| 1-Methylnaphthalene | 80 | 0.5632671 | 100 | 0.5691244 | | | | | | | | |
| 2-Methylnaphthalene | 80 | 0.577124 | 100 | 0.5814146 | | | | | | | | |
| 2-Methylphenol | 80 | 1.186174 | 100 | 1.175301 | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3+4-Methylphenol | 80 | 1.25282 | 100 | 1.246708 | | | | | | | | |
| Naphthalene | 80 | 0.929288 | 100 | 0.9247047 | | | | | | | | |
| 4-Nitroaniline | 80 | 0.3041842 | 100 | 0.3101441 | | | | | | | | |
| 3-Nitroaniline | 80 | 0.3160066 | 100 | 0.3209305 | | | | | | | | |
| 2-Nitroaniline | 80 | 0.3679269 | 100 | 0.3808217 | | | | | | | | |
| Nitrobenzene | 80 | 0.3959025 | 100 | 0.4026269 | | | | | | | | |
| Nitrobenzene-d5 | 80 | 0.3956873 | 100 | 0.4070452 | | | | | | | | |
| 4-Nitrophenol | 80 | 0.2875644 | 100 | 0.2922439 | | | | | | | | |
| 2-Nitrophenol | 80 | 0.1898848 | 100 | 0.1924385 | | | | | | | | |
| N-Nitrosodimethylamine | 80 | 0.6770774 | 100 | 0.6814722 | | | | | | | | |
| N-Nitrosodiphenylamine | 80 | 0.6421856 | 100 | 0.6601622 | | | | | | | | |
| N-Nitroso-di-n-propylamine | 80 | 1.01735 | 100 | 1.009302 | | | | | | | | |
| Pentachlorophenol | 80 | 0.1689527 | 100 | 0.1764541 | | | | | | | | |
| Phenanthrene | 80 | 1.02087 | 100 | 1.029906 | | | | | | | | |
| Phenol | 80 | 1.657873 | 100 | 1.678155 | | | | | | | | |
| Phenol-d6 | 160 | 1.528019 | 200 | 1.530415 | | | | | | | | |
| Pyrene | 80 | 1.10517 | 100 | 1.119951 | | | | | | | | |
| Pyridine | 80 | 1.469181 | 100 | 1.49947 | | | | | | | | |
| Terphenyl-d14 | 80 | 0.7229046 | 100 | 0.7432138 | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | | | | | 5 | 0.3479122 | 10 | 0.3558868 | 20 | 0.3284806 | 40 | 0.3388667 |
| 2,3,4,6-Tetrachlorophenol | 80 | 0.3293547 | 100 | 0.3450346 | | | | | | | | |
| 2,4,6-Tribromophenol | 160 | 0.1116489 | 200 | 0.1192761 | | | | | | | | |
| 1,2,4-Trichlorobenzene | 80 | 0.3260549 | 100 | 0.3352601 | | | | | | | | |
| 2,4,6-Trichlorophenol | 80 | 0.3790248 | 100 | 0.3940451 | | | | | | | | |
| 2,4,5-Trichlorophenol | 80 | 0.4068398 | 100 | 0.4243071 | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Acenaphthene | | | | | | | | | | | | |
| Acenaphthylene | | | | | | | | | | | | |
| Acetophenone | 50 | 1.789068 | 60 | 1.770735 | 80 | 1.812049 | 100 | 1.776326 | | | | |
| Aniline | | | | | | | | | | | | |
| Anthracene | | | | | | | | | | | | |
| Atrazine | 50 | 0.2359177 | 60 | 0.2321698 | 80 | 0.234271 | 100 | 0.2307739 | | | | |
| Benzaldehyde | 50 | 0.9817363 | 60 | 0.9635899 | 80 | 0.9526789 | 100 | 0.8968237 | | | | |
| Benzidine | 50 | 0.6420753 | 60 | 0.6442256 | 80 | 0.6312912 | 100 | 0.6103486 | | | | |
| Benzo(a)anthracene | | | | | | | | | | | | |
| Benzo(a)pyrene | | | | | | | | | | | | |
| Benzo(b)fluoranthene | | | | | | | | | | | | |
| Benzo(g,h,i)perylene | | | | | | | | | | | | |
| Benzoic acid | | | | | | | | | | | | |
| Benzo(k)fluoranthene | | | | | | | | | | | | |
| Benzyl alcohol | | | | | | | | | | | | |
| 1,1-Biphenyl | 50 | 1.43195 | 60 | 1.402475 | 80 | 1.465295 | 100 | 1.405265 | | | | |
| 4-Bromophenyl-phenylether | | | | | | | | | | | | |
| Butylbenzylphthalate | | | | | | | | | | | | |
| Caprolactam | 50 | 0.1144193 | 60 | 0.1176165 | 80 | 0.1139048 | 100 | 0.1166416 | | | | |
| Carbazole | | | | | | | | | | | | |
| 4-Chloro-3-methylphenol | | | | | | | | | | | | |
| 4-Chloroaniline | | | | | | | | | | | | |
| Bis(2-chloroethoxy)methane | | | | | | | | | | | | |
| Bis(2-chloroethyl)ether | | | | | | | | | | | | |
| 2,2'-Oxybis-1-chloropropane | | | | | | | | | | | | |
| 2-Chloronaphthalene | | | | | | | | | | | | |
| 2-Chlorophenol | | | | | | | | | | | | |
| 4-Chlorophenyl phenyl ether | | | | | | | | | | | | |
| Chrysene | | | | | | | | | | | | |
| Dibenz(a,h)anthracene | | | | | | | | | | | | |
| Dibenzofuran | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Di-n-butylphthalate | | | | | | | | | | | | |
| 1,4-Dichlorobenzene | | | | | | | | | | | | |
| 1,3-Dichlorobenzene | | | | | | | | | | | | |
| 1,2-Dichlorobenzene | | | | | | | | | | | | |
| 3,3'-Dichlorobenzidine | 50 | 0.412504 | 60 | 0.4101255 | 80 | 0.4135013 | 100 | 0.4131389 | | | | |
| 2,6-Dichlorophenol | 50 | 0.2904992 | 60 | 0.3021215 | 80 | 0.2987647 | 100 | 0.297978 | | | | |
| 2,4-Dichlorophenol | | | | | | | | | | | | |
| Diethylphthalate | | | | | | | | | | | | |
| 2,4-Dimethylphenol | | | | | | | | | | | | |
| Dimethyl phthalate | | | | | | | | | | | | |
| 4,6-Dinitro-2-methylphenol | | | | | | | | | | | | |
| 2,4-Dinitrophenol | | | | | | | | | | | | |
| 2,4-Dinitrotoluene | | | | | | | | | | | | |
| 2,6-Dinitrotoluene | | | | | | | | | | | | |
| Di-n-octylphthalate | | | | | | | | | | | | |
| 1,4-Dioxane | 50 | 0.5272408 | 60 | 0.5401001 | 80 | 0.5695672 | 100 | 0.5195493 | | | | |
| 1,2-Diphenylhydrazine | | | | | | | | | | | | |
| Bis(2-ethylhexyl)phthalate | | | | | | | | | | | | |
| Fluoranthene | | | | | | | | | | | | |
| Fluorene | | | | | | | | | | | | |
| 2-Fluorobiphenyl | | | | | | | | | | | | |
| 2-Fluorophenol | | | | | | | | | | | | |
| Hexachlorobenzene | | | | | | | | | | | | |
| Hexachlorobutadiene | | | | | | | | | | | | |
| Hexachlorocyclopentadiene | | | | | | | | | | | | |
| Hexachloroethane | | | | | | | | | | | | |
| Indeno(1,2,3-cd)pyrene | | | | | | | | | | | | |
| Isophorone | | | | | | | | | | | | |
| 1-Methylnaphthalene | | | | | | | | | | | | |
| 2-Methylnaphthalene | | | | | | | | | | | | |
| 2-Methylphenol | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Level 13 | | Level 14 | | Level 15 | | Level 16 | | Level 17 | | Level 18 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| 3+4-Methylphenol | | | | | | | | | | | | |
| Naphthalene | | | | | | | | | | | | |
| 4-Nitroaniline | | | | | | | | | | | | |
| 3-Nitroaniline | | | | | | | | | | | | |
| 2-Nitroaniline | | | | | | | | | | | | |
| Nitrobenzene | | | | | | | | | | | | |
| Nitrobenzene-d5 | | | | | | | | | | | | |
| 4-Nitrophenol | | | | | | | | | | | | |
| 2-Nitrophenol | | | | | | | | | | | | |
| N-Nitrosodimethylamine | | | | | | | | | | | | |
| N-Nitrosodiphenylamine | | | | | | | | | | | | |
| N-Nitroso-di-n-propylamine | | | | | | | | | | | | |
| Pentachlorophenol | | | | | | | | | | | | |
| Phenanthrene | | | | | | | | | | | | |
| Phenol | | | | | | | | | | | | |
| Phenol-d6 | | | | | | | | | | | | |
| Pyrene | | | | | | | | | | | | |
| Pyridine | | | | | | | | | | | | |
| Terphenyl-d14 | | | | | | | | | | | | |
| 1,2,4,5-Tetrachlorobenzene | 50 | 0.3278198 | 60 | 0.3307788 | 80 | 0.3290598 | 100 | 0.3234578 | | | | |
| 2,3,4,6-Tetrachlorophenol | | | | | | | | | | | | |
| 2,4,6-Tribromophenol | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | | | | | | | | | | | |
| 2,4,6-Trichlorophenol | | | | | | | | | | | | |
| 2,4,5-Trichlorophenol | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1122001 | Instrument: | MS-BNA3 |
| Matrix: | Water | Calibration Dates: | 4/29/11 17:45 4/30/11 1:58 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Acenaphthene | 1.110356 | 5.288294 | 10.29162 | 9.343479E-02 | | | CCC (30) | |
| Acenaphthylene | 1.725208 | 7.224824 | 10.072 | 8.837624E-02 | | | 15 | |
| Acetophenone | 1.801986 | 2.623006 | 6.9 | 0.0512758 | | | 15 | |
| Aniline | 2.099397 | 4.80832 | 5.967 | 0.2001409 | | | 15 | |
| Anthracene | 1.092671 | 7.109126 | 12.18775 | 7.884876E-02 | | | 15 | |
| Atrazine | 0.2344682 | 1.991174 | 11.74575 | 4.943708E-02 | | | 15 | |
| Benzaldehyde | 1.010105 | 7.8623 | 5.825625 | 7.236361E-02 | | | 15 | |
| Benzidine | 0.641297 | 2.654444 | 13.97425 | 4.038824E-02 | | | 15 | |
| Benzo(a)anthracene | 1.119297 | 4.274256 | 16.23525 | 0.0816524 | | | 15 | |
| Benzo(a)pyrene | 1.045862 | 3.535372 | 18.9035 | 0.1146499 | | | CCC (30) | |
| Benzo(b)fluoranthene | 1.093698 | 4.048684 | 18.29662 | 0.1113231 | | | 15 | |
| Benzo(g,h,i)perylene | 1.033139 | 3.890507 | 21.8865 | 0.2082456 | | | 15 | |
| Benzoic acid | 0.2679395 | 11.20774 | 7.781571 | 0.6947302 | | | 15 | |
| Benzo(k)fluoranthene | 1.107729 | 5.157608 | 18.3555 | 0.1297645 | | | 15 | |
| Benzyl alcohol | 0.8667655 | 4.400746 | 6.566875 | 0.2166256 | | | 15 | |
| 1,1-Biphenyl | 1.444453 | 3.67168 | 9.52625 | 3.810599E-02 | | | 15 | |
| 4-Bromophenyl-phenylether | 0.2284778 | 5.008023 | 11.5395 | 7.035777E-02 | | | 15 | |
| Butylbenzylphthalate | 0.5129818 | 3.492852 | 15.25225 | 6.767508E-02 | | | 15 | |
| Caprolactam | 0.1128421 | 5.193073 | 8.55075 | 0.1563915 | | | 15 | |
| Carbazole | 1.044381 | 6.624112 | 12.39137 | 8.639464E-02 | | | 15 | |
| 4-Chloro-3-methylphenol | 0.3113523 | 4.210752 | 8.736125 | 0.1038012 | | | CCC (30) | |
| 4-Chloroaniline | 0.4225325 | 6.03815 | 8.122625 | 0.1175516 | | | 15 | |
| Bis(2-chloroethoxy)methane | 0.4269873 | 6.185735 | 7.725875 | 0.1308561 | | | 15 | |
| Bis(2-chloroethyl)ether | 1.297842 | 5.559542 | 6.0525 | 0.1902114 | | | 15 | |
| 2,2'-Oxybis-1-chloropropane | 1.947114 | 6.010514 | 6.7435 | 0.131801 | | | 15 | |
| 2-Chloronaphthalene | 1.087766 | 6.697993 | 9.5495 | 8.079271E-02 | | | 15 | |
| 2-Chlorophenol | 1.315004 | 4.624341 | 6.11375 | 0.1645746 | | | 15 | |
| 4-Chlorophenyl phenyl ether | 0.6233489 | 4.843106 | 10.93262 | 7.540016E-02 | | | 15 | |
| Chrysene | 1.047865 | 6.082994 | 16.30862 | 0.1078386 | | | 15 | |
| Dibenz(a,h)anthracene | 1.004478 | 5.185987 | 21.30563 | 0.1755433 | | | 15 | |
| Dibenzofuran | 1.535116 | 6.402871 | 10.50525 | 9.099792E-02 | | | 15 | |
| Di-n-butylphthalate | 1.182012 | 6.755144 | 12.86425 | 6.288496E-02 | | | 15 | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1122001 | | Instrument: | MS-BNA3 | |
| Matrix: | Water | | Calibration Dates: | 4/29/11 17:45 | 4/30/11 1:58 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dichlorobenzene | 1.444956 | 5.466992 | 6.410625 | 0.1248613 | | | CCC (30) | |
| 1,3-Dichlorobenzene | 1.427751 | 6.184247 | 6.312875 | 0.105711 | | | 15 | |
| 1,2-Dichlorobenzene | 1.353765 | 5.754592 | 6.6015 | 9.658535E-02 | | | 15 | |
| 3,3'-Dichlorobenzidine | 0.4067228 | 2.64104 | 16.20337 | 3.259867E-02 | | | 15 | |
| 2,6-Dichlorophenol | 0.298478 | 1.900014 | 8.1265 | 4.341722E-02 | | | 15 | |
| 2,4-Dichlorophenol | 0.3046728 | 4.192991 | 7.844125 | 0.1362117 | | | CCC (30) | |
| Diethylphthalate | 1.194731 | 6.529918 | 10.80025 | 0.1137489 | | | 15 | |
| 2,4-Dimethylphenol | 0.3636609 | 4.326675 | 7.594375 | 0.1603634 | | | 15 | |
| Dimethyl phthalate | 1.244441 | 5.685728 | 9.930375 | 0.1671862 | | | 15 | |
| 4,6-Dinitro-2-methylphenol | 0.1454148 | 8.990807 | 11.00038 | 0.1679983 | | | 15 | |
| 2,4-Dinitrophenol | 0.1854397 | 12.00123 | 10.33129 | 0.1179144 | | | SPCC (0.05) | |
| 2,4-Dinitrotoluene | 0.3929838 | 4.396053 | 10.49525 | 0.1523157 | | | 15 | |
| 2,6-Dinitrotoluene | 0.2991862 | 4.878435 | 9.996875 | 0.1438581 | | | 15 | |
| Di-n-octylphthalate | 1.204345 | 4.453456 | 17.67838 | 7.317373E-02 | | | CCC (30) | |
| 1,4-Dioxane | 0.5405832 | 3.738713 | 2.966125 | 0.8455495 | | | 15 | |
| 1,2-Diphenylhydrazine | 0.8507103 | 6.449686 | 11.13088 | 9.327424E-02 | | | 15 | |
| Bis(2-ethylhexyl)phthalate | 0.6793074 | 3.730629 | 16.37963 | 6.115675E-02 | | | 15 | |
| Fluoranthene | 1.233837 | 4.928638 | 13.7625 | 9.359244E-02 | | | CCC (30) | |
| Fluorene | 1.337519 | 4.748586 | 10.932 | 9.604146E-02 | | | 15 | |
| 2-Fluorobiphenyl | 1.265417 | 5.80845 | 9.402 | 7.848969E-02 | | | 15 | |
| 2-Fluorophenol | 1.142171 | 4.910943 | 4.735625 | 0.2045971 | | | 15 | |
| Hexachlorobenzene | 0.244362 | 5.01217 | 11.60775 | 8.043427E-02 | | | 15 | |
| Hexachlorobutadiene | 0.1868569 | 4.354219 | 8.211375 | 6.390464E-02 | | | CCC (30) | |
| Hexachlorocyclopentadiene | 0.374975 | 6.237495 | 9.13225 | 6.029786E-02 | | | SPCC (0.05) | |
| Hexachloroethane | 0.5464632 | 4.780526 | 7.037625 | 8.255052E-02 | | | 15 | |
| Indeno(1,2,3-cd)pyrene | 1.038008 | 7.706288 | 21.23487 | 0.170273 | | | 15 | |
| Isophorone | 0.7442763 | 4.76768 | 7.447 | 0.2320769 | | | 15 | |
| 1-Methylnaphthalene | 0.5872691 | 6.161853 | 9.060125 | 8.180225E-02 | | | 15 | |
| 2-Methylnaphthalene | 0.5974192 | 5.83852 | 8.935875 | 7.367129E-02 | | | 15 | |
| 2-Methylphenol | 1.208635 | 4.251053 | 6.698875 | 0.1714391 | | | 15 | |
| 3+4-Methylphenol | 1.268409 | 4.36657 | 6.9085 | 0.2477057 | | | 15 | |
| Naphthalene | 0.9958993 | 8.109498 | 8.05525 | 8.805836E-02 | | | 15 | |

# INITIAL CALIBRATION DATA (Continued)

## SW8270C

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1122001 | | Instrument: | MS-BNA3 | |
| Matrix: | Water | | Calibration Dates: | 4/29/11 17:45 | 4/30/11 1:58 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 4-Nitroaniline | 0.3272887 | 5.141513 | 10.96663 | 0.2298598 | | | 15 | |
| 3-Nitroaniline | 0.3230815 | 4.120647 | 10.20188 | 0.1592925 | | | 15 | |
| 2-Nitroaniline | 0.3700237 | 3.241451 | 9.68 | 0.1125277 | | | 15 | |
| Nitrobenzene | 0.4107927 | 4.625764 | 7.1275 | 0.1614281 | | | 15 | |
| Nitrobenzene-d5 | 0.4075494 | 4.033432 | 7.1015 | 0.150497 | | | 15 | |
| 4-Nitrophenol | 0.2721678 | 8.409362 | 10.40112 | 0.1699928 | | | SPCC (0.05) | |
| 2-Nitrophenol | 0.1941449 | 3.724196 | 7.534125 | 0.1204379 | | | CCC (30) | |
| N-Nitrosodimethylamine | 0.6846222 | 3.277107 | 3.268625 | 0.4561992 | | | 15 | |
| N-Nitrosodiphenylamine | 0.6728889 | 6.054145 | 11.08487 | 0.122818 | | | CCC (30) | |
| N-Nitroso-di-n-propylamine | 1.033966 | 4.50625 | 6.924 | 0.341437 | | | SPCC (0.05) | |
| Pentachlorophenol | 0.1623094 | 7.444736 | 11.84938 | 7.159059E-02 | | | CCC (30) | |
| Phenanthrene | 1.075866 | 6.933794 | 12.12375 | 8.032742E-02 | | | 15 | |
| Phenol | 1.687698 | 4.315264 | 5.922875 | 0.2981099 | | | CCC (30) | |
| Phenol-d6 | 1.572986 | 4.940565 | 5.90625 | 0.2878739 | | | 15 | |
| Pyrene | 1.163766 | 5.943883 | 14.11538 | 0.0929633 | | | 15 | |
| Pyridine | 1.482807 | 3.139741 | 3.313875 | 0.4229696 | | | 15 | |
| Terphenyl-d14 | 0.7462196 | 4.435474 | 14.37887 | 7.151091E-02 | | | 15 | |
| 1,2,4,5-Tetrachlorobenzene | 0.3352828 | 3.377528 | 9.142125 | 3.575815E-02 | | | 15 | |
| 2,3,4,6-Tetrachlorophenol | 0.3340715 | 4.320893 | 10.65287 | 9.534642E-02 | | | 15 | |
| 2,4,6-Tribromophenol | 0.109869 | 4.778459 | 11.23037 | 0.1037614 | | | 15 | |
| 1,2,4-Trichlorobenzene | 0.3421719 | 6.002622 | 7.953 | 8.322603E-02 | | | 15 | |
| 2,4,6-Trichlorophenol | 0.382004 | 3.768651 | 9.2885 | 6.754752E-02 | | | CCC (30) | |
| 2,4,5-Trichlorophenol | 0.4142645 | 3.869366 | 9.329125 | 9.747652E-02 | | | 15 | |

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-ICV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1B03208 | Injection Date: | 01/26/11 |
| Lab Sample ID: | 1B03208-ICV1 | Injection Time: | 23:17 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Acenaphthene | A | 50.00 | 48.86 | 1.082656 | 1.057895 | | -2.3 | 20 |
| Acenaphthylene | A | 50.00 | 53.91 | 1.744325 | 1.88061 | | 7.8 | 20 |
| Anthracene | A | 50.00 | 54.49 | 1.056507 | 1.151439 | | 9.0 | 20 |
| Benzo(a)anthracene | A | 50.00 | 48.79 | 1.138713 | 1.111173 | | -2.4 | 20 |
| Benzo(a)pyrene | A | 50.00 | 51.01 | 1.044021 | 1.065141 | | 2.0 | 20 |
| Benzo(b)fluoranthene | A | 50.00 | 53.46 | 1.099993 | 1.176117 | | 6.9 | 20 |
| Benzo(g,h,i)perylene | A | 50.00 | 48.22 | 0.758931 | 0.7319486 | | -3.6 | 20 |
| Benzoic acid | L | 50.00 | 49.49 | 0.2348828 | 0.2661538 | | -1.0 | 20 |
| Benzo(k)fluoranthene | A | 50.00 | 51.57 | 1.214732 | 1.252919 | | 3.1 | 20 |
| 4-Bromophenyl-phenylether | A | 50.00 | 50.34 | 0.2302946 | 0.2318677 | | 0.7 | 20 |
| Butylbenzylphthalate | A | 50.00 | 48.50 | 0.7695074 | 0.7463976 | | -3.0 | 20 |
| Carbazole | A | 50.00 | 49.83 | 0.9188467 | 0.9156435 | | -0.3 | 20 |
| 4-Chloro-3-methylphenol | A | 50.00 | 48.88 | 0.2827335 | 0.2763814 | | -2.2 | 20 |
| 4-Chloroaniline | A | 50.00 | 48.88 | 0.4407449 | 0.4308957 | | -2.2 | 20 |
| Bis(2-chloroethoxy)methane | A | 50.00 | 48.87 | 0.4591519 | 0.4488008 | | -2.3 | 20 |
| Bis(2-chloroethyl)ether | A | 50.00 | 51.95 | 1.34682 | 1.39927 | | 3.9 | 20 |
| 2,2'-Oxybis-1-chloropropane | A | 50.00 | 52.78 | 1.935852 | 2.04349 | | 5.6 | 20 |
| 2-Chloronaphthalene | A | 50.00 | 54.43 | 1.140238 | 1.241253 | | 8.9 | 20 |
| 2-Chlorophenol | A | 50.00 | 55.87 | 1.301605 | 1.45441 | | 11.7 | 20 |
| 4-Chlorophenyl phenyl ether | A | 50.00 | 53.91 | 0.5334126 | 0.5751643 | | 7.8 | 20 |
| Chrysene | A | 50.00 | 49.81 | 1.122748 | 1.118473 | | -0.4 | 20 |
| Dibenz(a,h)anthracene | A | 50.00 | 51.54 | 0.7664032 | 0.7899782 | | 3.1 | 20 |
| Dibenzofuran | A | 50.00 | 53.13 | 1.497787 | 1.591559 | | 6.3 | 20 |
| Di-n-butylphthalate | A | 50.00 | 53.06 | 1.375428 | 1.459543 | | 6.1 | 20 |
| 2,4-Dichlorophenol | A | 50.00 | 50.78 | 0.3178164 | 0.3228019 | | 1.6 | 20 |
| 2,4-Dimethylphenol | A | 50.00 | 53.12 | 0.3417719 | 0.363117 | | 6.2 | 20 |
| Dimethyl phthalate | A | 50.00 | 46.62 | 1.321588 | 1.232204 | | -6.8 | 20 |
| 4,6-Dinitro-2-methylphenol | L | 50.00 | 57.23 | 0.1179191 | 0.1614366 | | 14.5 | 20 |
| 2,4-Dinitrotoluene | A | 50.00 | 56.52 | 0.373936 | 0.4227034 | | 13.0 | 20 |

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-ICV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1B03208 | Injection Date: | 01/26/11 |
| Lab Sample ID: | 1B03208-ICV1 | Injection Time: | 23:17 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| 2,6-Dinitrotoluene | A | 50.00 | 56.02 | 0.3483244 | 0.3902734 | | 12.0 | 20 |
| Di-n-octylphthalate | A | 50.00 | 54.25 | 1.792929 | 1.945241 | | 8.5 | 20 |
| 1,2-Diphenylhydrazine | A | 50.00 | 55.94 | 0.8347356 | 0.9339785 | | 11.9 | 20 |
| Bis(2-ethylhexyl)phthalate | A | 50.00 | 48.68 | 1.025088 | 0.9980238 | | -2.6 | 20 |
| Fluoranthene | A | 50.00 | 53.77 | 1.072845 | 1.153832 | | 7.5 | 20 |
| Fluorene | A | 50.00 | 54.89 | 1.147043 | 1.25925 | | 9.8 | 20 |
| Hexachlorobenzene | A | 50.00 | 52.99 | 0.2598125 | 0.2753324 | | 6.0 | 20 |
| Hexachlorobutadiene | A | 50.00 | 50.82 | 0.1763327 | 0.1792089 | | 1.6 | 20 |
| Hexachlorocyclopentadiene | A | 50.00 | 53.52 | 0.350099 | 0.3747613 | 0.05 | 7.0 | 20 |
| Hexachloroethane | A | 50.00 | 51.75 | 0.5725119 | 0.5925988 | | 3.5 | 20 |
| Indeno(1,2,3-cd)pyrene | A | 50.00 | 50.45 | 0.9228439 | 0.9311681 | | 0.9 | 20 |
| Isophorone | A | 50.00 | 44.69 | 0.7715062 | 0.6895249 | | -10.6 | 20 |
| 1-Methylnaphthalene | A | 50.00 | 47.14 | 0.5079573 | 0.4789479 | | -5.7 | 20 |
| 2-Methylnaphthalene | A | 50.00 | 47.28 | 0.4934064 | 0.4665976 | | -5.4 | 20 |
| 2-Methylphenol | A | 50.00 | 55.42 | 1.135332 | 1.258309 | | 10.8 | 20 |
| 3+4-Methylphenol | A | 50.00 | 48.86 | 1.186012 | 1.158893 | | -2.3 | 20 |
| 3-Nitroaniline | A | 50.00 | 56.90 | 0.3482787 | 0.3963161 | | 13.8 | 20 |
| 2-Nitroaniline | A | 50.00 | 53.24 | 0.3251388 | 0.3462363 | | 6.5 | 20 |
| Nitrobenzene | A | 50.00 | 45.58 | 0.3585356 | 0.3268608 | | -8.8 | 20 |
| 4-Nitrophenol | A | 50.00 | 55.39 | 0.1977617 | 0.2190963 | 0.05 | 10.8 | 20 |
| 2-Nitrophenol | A | 50.00 | 54.79 | 0.2241114 | 0.2455745 | | 9.6 | 20 |
| N-Nitrosodiphenylamine | A | 50.00 | 56.39 | 0.6599038 | 0.7442938 | | 12.8 | 20 |
| N-Nitroso-di-n-propylamine | A | 50.00 | 49.68 | 0.8341912 | 0.8288013 | 0.05 | -0.6 | 20 |
| Phenanthrene | A | 50.00 | 56.16 | 1.057442 | 1.187789 | | 12.3 | 20 |
| Phenol | A | 50.00 | 56.47 | 1.614787 | 1.823722 | | 12.9 | 20 |
| Pyrene | A | 50.00 | 48.44 | 1.298906 | 1.258473 | | -3.1 | 20 |
| 2,4,6-Trichlorophenol | A | 50.00 | 54.97 | 0.4009275 | 0.440817 | | 9.9 | 20 |
| 2,4,5-Trichlorophenol | A | 50.00 | 53.87 | 0.4318641 | 0.4652694 | | 7.7 | 20 |
| 2-Fluorobiphenyl | A | 50.00 | 56.18 | 1.2999 | 1.460568 | | 12.4 | 20 |

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-ICV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1B03208 | Injection Date: | 01/26/11 |
| Lab Sample ID: | 1B03208-ICV1 | Injection Time: | 23:17 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| 2-Fluorophenol | A | 100.0 | 113.8 | 1.224809 | 1.394017 | | 13.8 | 20 |
| Nitrobenzene-d5 | A | 50.00 | 51.69 | 0.3691845 | 0.3816462 | | 3.4 | 20 |
| Terphenyl-d14 | A | 50.00 | 45.39 | 0.812066 | 0.7371136 | | -9.2 | 20 |
| 2,4,6-Tribromophenol | A | 100.0 | 118.8 | 0.1449031 | 0.1721949 | | 18.8 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-ICV2.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1B03208 | Injection Date: | 01/26/11 |
| Lab Sample ID: | 1B03208-ICV2 | Injection Time: | 23:45 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| 3,3'-Dichlorobenzidine | A | 50.00 | 51.60 | 0.3840471 | 0.3963298 | | 3.2 | 20 |
| Acetophenone | A | 50.00 | 51.76 | 1.555244 | 1.609954 | | 3.5 | 20 |
| Atrazine | A | 50.00 | 52.28 | 0.2049826 | 0.214327 | | 4.6 | 20 |
| Benzaldehyde | A | 50.00 | 43.46 | 1.012551 | 0.8801513 | | -13.1 | 20 |
| Benzidine | A | 50.00 | 50.30 | 0.6314527 | 0.6352446 | | 0.6 | 20 |
| 1,1-Biphenyl | A | 50.00 | 55.15 | 1.44264 | 1.591358 | | 10.3 | 20 |
| Caprolactam | A | 50.00 | 55.66 | 0.1265101 | 0.1408405 | | 11.3 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-ICV3.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1B03208 | Injection Date: | 01/27/11 |
| Lab Sample ID: | 1B03208-ICV3 | Injection Time: | 00:13 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Diethylphthalate | L | 50.00 | 48.25 | 1.347533 | 1.174754 | | -3.5 | 20 |
| 2,4-Dinitrophenol | L | 50.00 | 57.52 | 0.1369907 | 0.1861539 | 0.05 | 15.0 | 20 |
| Pentachlorophenol | L | 50.00 | 58.37 | 0.1614679 | 0.2074009 | | 16.7 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-ICV4.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1B03208 | Injection Date: | 01/28/11 |
| Lab Sample ID: | 1B03208-ICV4 | Injection Time: | 10:25 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| 4-Nitroaniline | A | 50.00 | 42.68 | 0.2309184 | 0.1971107 | | -14.6 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-ICV1.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1E12203 | Injection Date: | 04/30/11 |
| Lab Sample ID: | 1E12203-ICV1 | Injection Time: | 15:07 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Acenaphthene | A | 50.00 | 50.99 | 1.110356 | 1.132237 | | 2.0 | 20 |
| Acenaphthylene | A | 50.00 | 52.08 | 1.725208 | 1.796804 | | 4.1 | 20 |
| Anthracene | A | 50.00 | 53.21 | 1.092671 | 1.162801 | | 6.4 | 20 |
| Benzo(a)anthracene | A | 50.00 | 53.94 | 1.119297 | 1.207582 | | 7.9 | 20 |
| Benzo(a)pyrene | A | 50.00 | 54.76 | 1.045862 | 1.145479 | | 9.5 | 20 |
| Benzo(b)fluoranthene | A | 50.00 | 53.30 | 1.093698 | 1.165866 | | 6.6 | 20 |
| Benzo(g,h,i)perylene | A | 50.00 | 55.29 | 1.033139 | 1.142352 | | 10.6 | 20 |
| Benzoic acid | A | 50.00 | 56.42 | 0.2679395 | 0.302351 | | 12.8 | 20 |
| Benzo(k)fluoranthene | A | 50.00 | 54.50 | 1.107729 | 1.207431 | | 9.0 | 20 |
| 4-Bromophenyl-phenylether | A | 50.00 | 52.91 | 0.2284778 | 0.2417889 | | 5.8 | 20 |
| Butylbenzylphthalate | A | 50.00 | 56.82 | 0.5129818 | 0.582953 | | 13.6 | 20 |
| Carbazole | A | 50.00 | 51.29 | 1.044381 | 1.071248 | | 2.6 | 20 |
| 4-Chloro-3-methylphenol | A | 50.00 | 52.69 | 0.3113523 | 0.3281338 | | 5.4 | 20 |
| 4-Chloroaniline | A | 50.00 | 50.78 | 0.4225325 | 0.4291082 | | 1.6 | 20 |
| Bis(2-chloroethoxy)methane | A | 50.00 | 54.60 | 0.4269873 | 0.4662333 | | 9.2 | 20 |
| Bis(2-chloroethyl)ether | A | 50.00 | 52.57 | 1.297842 | 1.3646 | | 5.1 | 20 |
| 2,2'-Oxybis-1-chloropropane | A | 50.00 | 51.93 | 1.947114 | 2.022377 | | 3.9 | 20 |
| 2-Chloronaphthalene | A | 50.00 | 52.76 | 1.087766 | 1.147861 | | 5.5 | 20 |
| 2-Chlorophenol | A | 50.00 | 53.41 | 1.315004 | 1.404776 | | 6.8 | 20 |
| 4-Chlorophenyl phenyl ether | A | 50.00 | 51.82 | 0.6233489 | 0.6461009 | | 3.6 | 20 |
| Chrysene | A | 50.00 | 53.37 | 1.047865 | 1.118417 | | 6.7 | 20 |
| Dibenz(a,h)anthracene | A | 50.00 | 56.42 | 1.004478 | 1.133417 | | 12.8 | 20 |
| Dibenzofuran | A | 50.00 | 53.17 | 1.535116 | 1.632439 | | 6.3 | 20 |
| Di-n-butylphthalate | A | 50.00 | 52.16 | 1.182012 | 1.233187 | | 4.3 | 20 |
| 2,4-Dichlorophenol | A | 50.00 | 52.27 | 0.3046728 | 0.3185106 | | 4.5 | 20 |
| Diethylphthalate | A | 50.00 | 52.18 | 1.194731 | 1.246888 | | 4.4 | 20 |
| 2,4-Dimethylphenol | A | 50.00 | 53.80 | 0.3636609 | 0.3913226 | | 7.6 | 20 |
| Dimethyl phthalate | A | 50.00 | 52.08 | 1.244441 | 1.296196 | | 4.2 | 20 |
| 2,4-Dinitrotoluene | A | 50.00 | 52.99 | 0.3929838 | 0.4165004 | | 6.0 | 20 |

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-ICV1.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1E12203 | Injection Date: | 04/30/11 |
| Lab Sample ID: | 1E12203-ICV1 | Injection Time: | 15:07 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| 2,6-Dinitrotoluene | A | 50.00 | 53.60 | 0.2991862 | 0.3207071 | | 7.2 | 20 |
| Di-n-octylphthalate | A | 50.00 | 55.56 | 1.204345 | 1.338299 | | 11.1 | 20 |
| 1,2-Diphenylhydrazine | A | 50.00 | 51.69 | 0.8507103 | 0.8794004 | | 3.4 | 20 |
| Bis(2-ethylhexyl)phthalate | A | 50.00 | 54.80 | 0.6793074 | 0.7445394 | | 9.6 | 20 |
| Fluoranthene | A | 50.00 | 52.70 | 1.233837 | 1.300481 | | 5.4 | 20 |
| Fluorene | A | 50.00 | 52.74 | 1.337519 | 1.410746 | | 5.5 | 20 |
| Hexachlorobenzene | A | 50.00 | 53.53 | 0.244362 | 0.2616019 | | 7.1 | 20 |
| Hexachlorobutadiene | A | 50.00 | 56.62 | 0.1868569 | 0.2116138 | | 13.2 | 20 |
| Hexachlorocyclopentadiene | A | 50.00 | 50.51 | 0.374975 | 0.3787812 | 0.05 | 1.0 | 20 |
| Hexachloroethane | A | 50.00 | 53.43 | 0.5464632 | 0.5839846 | | 6.9 | 20 |
| Indeno(1,2,3-cd)pyrene | A | 50.00 | 55.78 | 1.038008 | 1.157962 | | 11.6 | 20 |
| Isophorone | A | 50.00 | 51.26 | 0.7442763 | 0.7630284 | | 2.5 | 20 |
| 1-Methylnaphthalene | A | 50.00 | 50.47 | 0.5872691 | 0.5928174 | | 0.9 | 20 |
| 2-Methylnaphthalene | A | 50.00 | 52.21 | 0.5974192 | 0.6238767 | | 4.4 | 20 |
| 2-Methylphenol | A | 50.00 | 52.67 | 1.208635 | 1.273291 | | 5.3 | 20 |
| 3+4-Methylphenol | A | 50.00 | 51.20 | 1.268409 | 1.298786 | | 2.4 | 20 |
| 4-Nitroaniline | A | 50.00 | 53.01 | 0.3272887 | 0.3469818 | | 6.0 | 20 |
| 3-Nitroaniline | A | 50.00 | 53.20 | 0.3230815 | 0.3437513 | | 6.4 | 20 |
| 2-Nitroaniline | A | 50.00 | 53.86 | 0.3700237 | 0.3985975 | | 7.7 | 20 |
| Nitrobenzene | A | 50.00 | 52.75 | 0.4107927 | 0.4333935 | | 5.5 | 20 |
| 4-Nitrophenol | A | 50.00 | 53.70 | 0.2721678 | 0.292285 | 0.05 | 7.4 | 20 |
| 2-Nitrophenol | A | 50.00 | 53.57 | 0.1941449 | 0.2080171 | | 7.1 | 20 |
| N-Nitrosodiphenylamine | A | 50.00 | 53.24 | 0.6728889 | 0.7164793 | | 6.5 | 20 |
| N-Nitroso-di-n-propylamine | A | 50.00 | 54.25 | 1.033966 | 1.12186 | 0.05 | 8.5 | 20 |
| Phenanthrene | A | 50.00 | 53.38 | 1.075866 | 1.148675 | | 6.8 | 20 |
| Phenol | A | 50.00 | 52.06 | 1.687698 | 1.757079 | | 4.1 | 20 |
| Pyrene | A | 50.00 | 54.76 | 1.163766 | 1.274472 | | 9.5 | 20 |
| 2,4,6-Trichlorophenol | A | 50.00 | 53.68 | 0.382004 | 0.4101383 | | 7.4 | 20 |
| 2,4,5-Trichlorophenol | A | 50.00 | 52.48 | 0.4142645 | 0.4348178 | | 5.0 | 20 |

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-ICV1.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1E12203 | Injection Date: | 04/30/11 |
| Lab Sample ID: | 1E12203-ICV1 | Injection Time: | 15:07 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| 2-Fluorobiphenyl | A | 50.00 | 54.11 | 1.265417 | 1.369371 | | 8.2 | 20 |
| 2-Fluorophenol | A | 100.0 | 114.6 | 1.142171 | 1.308424 | | 14.6 | 20 |
| Nitrobenzene-d5 | A | 50.00 | 55.94 | 0.4075494 | 0.4559688 | | 11.9 | 20 |
| Terphenyl-d14 | A | 50.00 | 54.87 | 0.7462196 | 0.8189273 | | 9.7 | 20 |
| 2,4,6-Tribromophenol | A | 100.0 | 109.2 | 0.109869 | 0.1200227 | | 9.2 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-ICV2.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1E12203 | Injection Date: | 04/30/11 |
| Lab Sample ID: | 1E12203-ICV2 | Injection Time: | 15:40 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Acetophenone | A | 50.00 | 48.88 | 1.801986 | 1.761675 | | -2.2 | 20 |
| Atrazine | A | 50.00 | 50.39 | 0.2344682 | 0.2362964 | | 0.8 | 20 |
| Benzidine | A | 50.00 | 49.05 | 0.641297 | 0.6290564 | | -1.9 | 20 |
| 1,1-Biphenyl | A | 50.00 | 51.20 | 1.444453 | 1.479098 | | 2.4 | 20 |
| Caprolactam | A | 50.00 | 56.58 | 0.1128421 | 0.1276823 | | 13.2 | 20 |
| 3,3'-Dichlorobenzidine | A | 50.00 | 52.77 | 0.4067228 | 0.4292329 | | 5.5 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-ICV5.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1E12203 | Injection Date: | 04/30/11 |
| Lab Sample ID: | 1E12203-ICV3 | Injection Time: | 17:19 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| 4,6-Dinitro-2-methylphenol | A | 50.00 | 53.45 | 0.1454148 | 0.1554342 | | 6.9 | 20 |
| 2,4-Dinitrophenol | A | 50.00 | 61.89 | 0.1854397 | 0.2295477 | 0.05 | 23.8 | 20 * |
| Pentachlorophenol | A | 50.00 | 56.14 | 0.1623094 | 0.1822508 | | 12.3 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-ICV4.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1E12203 | Injection Date: | 05/02/11 |
| Lab Sample ID: | 1E12203-ICV4 | Injection Time: | 14:16 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Benzaldehyde | A | 50.00 | 50.85 | 1.010105 | 1.027374 | | 1.7 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E14710 | Injection Date: | 05/26/11 |
| Lab Sample ID: | 1E14710-CCV1 | Injection Time: | 16:45 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 3,3'-Dichlorobenzidine | A | 50.00 | 39.74 | 0.3840471 | 0.3052402 | | -20.5 | 20 * |
| Acenaphthene | A | 50.00 | 49.83 | 1.082656 | 1.079056 | | -0.3 | 20 |
| Acenaphthylene | A | 50.00 | 50.32 | 1.744325 | 1.755314 | | 0.6 | 20 |
| Acetophenone | A | 50.00 | 47.14 | 1.555244 | 1.46629 | | -5.7 | 20 |
| Anthracene | A | 50.00 | 56.90 | 1.056507 | 1.202291 | | 13.8 | 20 |
| Atrazine | A | 50.00 | 45.84 | 0.2049826 | 0.1879229 | | -8.3 | 20 |
| Benzaldehyde | A | 50.00 | 40.30 | 1.012551 | 0.8162123 | | -19.4 | 20 |
| Benzidine | A | 50.00 | 61.77 | 0.6314527 | 0.7800575 | | 23.5 | 20 * |
| Benzo(a)anthracene | A | 50.00 | 52.28 | 1.138713 | 1.190732 | | 4.6 | 20 |
| Benzo(a)pyrene | A | 50.00 | 73.62 | 1.044021 | 1.537196 | | 47.2 | 20 * |
| Benzo(b)fluoranthene | A | 50.00 | 79.24 | 1.099993 | 1.74327 | | 58.5 | 20 * |
| Benzo(g,h,i)perylene | A | 50.00 | 73.89 | 0.758931 | 1.121511 | | 47.8 | 20 * |
| Benzoic acid | L | 50.00 | 47.78 | 0.2348828 | 0.2561045 | | -4.4 | 20 |
| Benzo(k)fluoranthene | A | 50.00 | 71.02 | 1.214732 | 1.72535 | | 42.0 | 20 * |
| 1,1-Biphenyl | A | 50.00 | 47.43 | 1.44264 | 1.368386 | | -5.1 | 20 |
| 4-Bromophenyl-phenylether | A | 50.00 | 53.15 | 0.2302946 | 0.2447819 | | 6.3 | 20 |
| Butylbenzylphthalate | A | 50.00 | 53.03 | 0.7695074 | 0.8160967 | | 6.1 | 20 |
| Caprolactam | A | 50.00 | 52.58 | 0.1265101 | 0.1330365 | | 5.2 | 20 |
| Carbazole | A | 50.00 | 58.17 | 0.9188467 | 1.068899 | | 16.3 | 20 |
| 4-Chloro-3-methylphenol | A | 50.00 | 51.98 | 0.2827335 | 0.2939129 | | 4.0 | 20 |
| 4-Chloroaniline | A | 50.00 | 48.20 | 0.4407449 | 0.4249084 | | -3.6 | 20 |
| Bis(2-chloroethoxy)methane | A | 50.00 | 56.96 | 0.4591519 | 0.5230759 | | 13.9 | 20 |
| Bis(2-chloroethyl)ether | A | 50.00 | 50.96 | 1.34682 | 1.372683 | | 1.9 | 20 |
| 2,2'-Oxybis-1-chloropropane | A | 50.00 | 40.49 | 1.935852 | 1.567539 | | -19.0 | 20 |
| 2-Chloronaphthalene | A | 50.00 | 59.11 | 1.140238 | 1.348029 | | 18.2 | 20 |
| 2-Chlorophenol | A | 50.00 | 55.22 | 1.301605 | 1.437376 | | 10.4 | 20 |
| 4-Chlorophenyl phenyl ether | A | 50.00 | 54.93 | 0.5334126 | 0.5860065 | | 9.9 | 20 |
| Chrysene | A | 50.00 | 46.78 | 1.122748 | 1.050418 | | -6.4 | 20 |
| Dibenz(a,h)anthracene | A | 50.00 | 72.09 | 0.7664032 | 1.105031 | | 44.2 | 20 * |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E14710 | Injection Date: | 05/26/11 |
| Lab Sample ID: | 1E14710-CCV1 | Injection Time: | 16:45 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Dibenzofuran | A | 50.00 | 54.22 | 1.497787 | 1.624197 | | 8.4 | 20 |
| Di-n-butylphthalate | A | 50.00 | 53.61 | 1.375428 | 1.474858 | | 7.2 | 20 |
| 2,4-Dichlorophenol | A | 50.00 | 56.38 | 0.3178164 | 0.3583984 | | 12.8 | 20 |
| Diethylphthalate | L | 50.00 | 55.64 | 1.347533 | 1.337127 | | 11.3 | 20 |
| 2,4-Dimethylphenol | A | 50.00 | 55.54 | 0.3417719 | 0.3796272 | | 11.1 | 20 |
| Dimethyl phthalate | A | 50.00 | 52.66 | 1.321588 | 1.391777 | | 5.3 | 20 |
| 4,6-Dinitro-2-methylphenol | L | 50.00 | 66.71 | 0.1179191 | 0.1904434 | | 33.4 | 20 * |
| 2,4-Dinitrophenol | L | 50.00 | 60.67 | 0.1369907 | 0.1984639 | 0.05 | 21.3 | 20 * |
| 2,4-Dinitrotoluene | A | 50.00 | 59.57 | 0.373936 | 0.4454861 | | 19.1 | 20 |
| 2,6-Dinitrotoluene | A | 50.00 | 58.22 | 0.3483244 | 0.4056141 | | 16.4 | 20 |
| Di-n-octylphthalate | A | 50.00 | 71.50 | 1.792929 | 2.563778 | | 43.0 | 20 * |
| 1,2-Diphenylhydrazine | A | 50.00 | 50.99 | 0.8347356 | 0.8512844 | | 2.0 | 20 |
| Bis(2-ethylhexyl)phthalate | A | 50.00 | 48.00 | 1.025088 | 0.9841254 | | -4.0 | 20 |
| Fluoranthene | A | 50.00 | 52.32 | 1.072845 | 1.122707 | | 4.6 | 20 |
| Fluorene | A | 50.00 | 62.07 | 1.147043 | 1.423933 | | 24.1 | 20 * |
| Hexachlorobenzene | A | 50.00 | 58.04 | 0.2598125 | 0.3016046 | | 16.1 | 20 |
| Hexachlorobutadiene | A | 50.00 | 53.01 | 0.1763327 | 0.1869633 | | 6.0 | 20 |
| Hexachlorocyclopentadiene | A | 50.00 | 54.14 | 0.350099 | 0.3791196 | 0.05 | 8.3 | 20 |
| Hexachloroethane | A | 50.00 | 55.95 | 0.5725119 | 0.6406634 | | 11.9 | 20 |
| Indeno(1,2,3-cd)pyrene | A | 50.00 | 72.54 | 0.9228439 | 1.338928 | | 45.1 | 20 * |
| Isophorone | A | 50.00 | 49.74 | 0.7715062 | 0.7674561 | | -0.5 | 20 |
| 1-Methylnaphthalene | A | 50.00 | 51.58 | 0.5079573 | 0.524049 | | 3.2 | 20 |
| 2-Methylnaphthalene | A | 50.00 | 47.61 | 0.4934064 | 0.4698353 | | -4.8 | 20 |
| 2-Methylphenol | A | 50.00 | 53.78 | 1.135332 | 1.221185 | | 7.6 | 20 |
| 3+4-Methylphenol | A | 50.00 | 51.02 | 1.186012 | 1.210271 | | 2.0 | 20 |
| 4-Nitroaniline | A | 50.00 | 68.19 | 0.2309184 | 0.314945 | | 36.4 | 20 * |
| 3-Nitroaniline | A | 50.00 | 51.85 | 0.3482787 | 0.3611684 | | 3.7 | 20 |
| 2-Nitroaniline | A | 50.00 | 51.61 | 0.3251388 | 0.3356086 | | 3.2 | 20 |
| Nitrobenzene | A | 50.00 | 51.74 | 0.3585356 | 0.370986 | | 3.5 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E14710 | Injection Date: | 05/26/11 |
| Lab Sample ID: | 1E14710-CCV1 | Injection Time: | 16:45 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 4-Nitrophenol | A | 50.00 | 48.24 | 0.1977617 | 0.1907838 | 0.05 | -3.5 | 20 |
| 2-Nitrophenol | A | 50.00 | 52.23 | 0.2241114 | 0.2341012 | | 4.5 | 20 |
| N-Nitrosodiphenylamine | A | 50.00 | 58.59 | 0.6599038 | 0.7732565 | | 17.2 | 20 |
| N-Nitroso-di-n-propylamine | A | 50.00 | 45.48 | 0.8341912 | 0.7587379 | 0.05 | -9.0 | 20 |
| Pentachlorophenol | L | 50.00 | 58.79 | 0.1614679 | 0.2089653 | | 17.6 | 20 |
| Phenanthrene | A | 50.00 | 58.34 | 1.057442 | 1.233763 | | 16.7 | 20 |
| Phenol | A | 50.00 | 50.72 | 1.614787 | 1.638081 | | 1.4 | 20 |
| Pyrene | A | 50.00 | 56.58 | 1.298906 | 1.469866 | | 13.2 | 20 |
| 2,4,6-Trichlorophenol | A | 50.00 | 48.38 | 0.4009275 | 0.387963 | | -3.2 | 20 |
| 2,4,5-Trichlorophenol | A | 50.00 | 51.20 | 0.4318641 | 0.4422624 | | 2.4 | 20 |
| 2-Fluorobiphenyl | A | 50.00 | 55.11 | 1.2999 | 1.432652 | | 10.2 | 20 |
| 2-Fluorophenol | A | 100.0 | 114.4 | 1.224809 | 1.401079 | | 14.4 | 20 |
| Nitrobenzene-d5 | A | 50.00 | 47.83 | 0.3691845 | 0.3531772 | | -4.3 | 20 |
| Phenol-d6 | A | 100.0 | 96.02 | 1.556882 | 1.494943 | | -4.0 | 20 |
| Terphenyl-d14 | A | 50.00 | 57.87 | 0.812066 | 0.9398086 | | 15.7 | 20 |
| 2,4,6-Tribromophenol | A | 100.0 | 116.9 | 0.1449031 | 0.1693374 | | 16.9 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E15103 | Injection Date: | 05/27/11 |
| Lab Sample ID: | 1E15103-CCV1 | Injection Time: | 20:08 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 3,3'-Dichlorobenzidine | A | 50.00 | 47.93 | 0.3840471 | 0.3681486 | | -4.1 | 20 |
| Acenaphthene | A | 50.00 | 53.40 | 1.082656 | 1.15621 | | 6.8 | 20 |
| Acenaphthylene | A | 50.00 | 55.49 | 1.744325 | 1.935886 | | 11.0 | 20 |
| Acetophenone | A | 50.00 | 45.90 | 1.555244 | 1.427589 | | -8.2 | 20 |
| Anthracene | A | 50.00 | 53.77 | 1.056507 | 1.136261 | | 7.5 | 20 |
| Atrazine | A | 50.00 | 46.18 | 0.2049826 | 0.1893017 | | -7.6 | 20 |
| Benzaldehyde | A | 50.00 | 46.09 | 1.012551 | 0.9333698 | | -7.8 | 20 |
| Benzidine | A | 50.00 | 48.17 | 0.6314527 | 0.6083924 | | -3.7 | 20 |
| Benzo(a)anthracene | A | 50.00 | 50.61 | 1.138713 | 1.152604 | | 1.2 | 20 |
| Benzo(a)pyrene | A | 50.00 | 67.44 | 1.044021 | 1.408164 | | 34.9 | 20 * |
| Benzo(b)fluoranthene | A | 50.00 | 78.37 | 1.099993 | 1.724214 | | 56.7 | 20 * |
| Benzo(g,h,i)perylene | A | 50.00 | 55.59 | 0.758931 | 0.8437595 | | 11.2 | 20 |
| Benzoic acid | L | 50.00 | 43.72 | 0.2348828 | 0.2321313 | | -12.6 | 20 |
| Benzo(k)fluoranthene | A | 50.00 | 63.39 | 1.214732 | 1.539957 | | 26.8 | 20 * |
| 1,1-Biphenyl | A | 50.00 | 50.61 | 1.44264 | 1.460113 | | 1.2 | 20 |
| 4-Bromophenyl-phenylether | A | 50.00 | 50.74 | 0.2302946 | 0.233695 | | 1.5 | 20 |
| Butylbenzylphthalate | A | 50.00 | 49.48 | 0.7695074 | 0.7614511 | | -1.0 | 20 |
| Caprolactam | A | 50.00 | 54.48 | 0.1265101 | 0.137836 | | 9.0 | 20 |
| Carbazole | A | 50.00 | 49.77 | 0.9188467 | 0.9145671 | | -0.5 | 20 |
| 4-Chloro-3-methylphenol | A | 50.00 | 51.42 | 0.2827335 | 0.2907576 | | 2.8 | 20 |
| 4-Chloroaniline | A | 50.00 | 50.09 | 0.4407449 | 0.4415796 | | 0.2 | 20 |
| Bis(2-chloroethoxy)methane | A | 50.00 | 49.86 | 0.4591519 | 0.4578286 | | -0.3 | 20 |
| Bis(2-chloroethyl)ether | A | 50.00 | 50.92 | 1.34682 | 1.371675 | | 1.8 | 20 |
| 2,2'-Oxybis-1-chloropropane | A | 50.00 | 50.25 | 1.935852 | 1.945353 | | 0.5 | 20 |
| 2-Chloronaphthalene | A | 50.00 | 56.61 | 1.140238 | 1.290866 | | 13.2 | 20 |
| 2-Chlorophenol | A | 50.00 | 57.85 | 1.301605 | 1.506073 | | 15.7 | 20 |
| 4-Chlorophenyl phenyl ether | A | 50.00 | 58.97 | 0.5334126 | 0.6290711 | | 17.9 | 20 |
| Chrysene | A | 50.00 | 44.92 | 1.122748 | 1.008692 | | -10.2 | 20 |
| Dibenz(a,h)anthracene | A | 50.00 | 57.21 | 0.7664032 | 0.8769756 | | 14.4 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E15103 | Injection Date: | 05/27/11 |
| Lab Sample ID: | 1E15103-CCV1 | Injection Time: | 20:08 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Dibenzofuran | A | 50.00 | 57.59 | 1.497787 | 1.72501 | | 15.2 | 20 |
| Di-n-butylphthalate | A | 50.00 | 53.04 | 1.375428 | 1.459062 | | 6.1 | 20 |
| 2,4-Dichlorophenol | A | 50.00 | 50.46 | 0.3178164 | 0.3207171 | | 0.9 | 20 |
| Diethylphthalate | L | 50.00 | 57.48 | 1.347533 | 1.377677 | | 15.0 | 20 |
| 2,4-Dimethylphenol | A | 50.00 | 49.96 | 0.3417719 | 0.3414786 | | -0.09 | 20 |
| Dimethyl phthalate | A | 50.00 | 49.71 | 1.321588 | 1.313909 | | -0.6 | 20 |
| 4,6-Dinitro-2-methylphenol | L | 50.00 | 60.30 | 0.1179191 | 0.1708415 | | 20.6 | 20 * |
| 2,4-Dinitrophenol | L | 50.00 | 62.07 | 0.1369907 | 0.2039364 | 0.05 | 24.1 | 20 * |
| 2,4-Dinitrotoluene | A | 50.00 | 65.47 | 0.373936 | 0.489668 | | 30.9 | 20 * |
| 2,6-Dinitrotoluene | A | 50.00 | 52.40 | 0.3483244 | 0.3650409 | | 4.8 | 20 |
| Di-n-octylphthalate | A | 50.00 | 66.05 | 1.792929 | 2.368401 | | 32.1 | 20 * |
| 1,2-Diphenylhydrazine | A | 50.00 | 58.66 | 0.8347356 | 0.9793885 | | 17.3 | 20 |
| Bis(2-ethylhexyl)phthalate | A | 50.00 | 44.81 | 1.025088 | 0.9186847 | | -10.4 | 20 |
| Fluoranthene | A | 50.00 | 49.42 | 1.072845 | 1.06032 | | -1.2 | 20 |
| Fluorene | A | 50.00 | 51.91 | 1.147043 | 1.190851 | | 3.8 | 20 |
| Hexachlorobenzene | A | 50.00 | 51.05 | 0.2598125 | 0.2652501 | | 2.1 | 20 |
| Hexachlorobutadiene | A | 50.00 | 50.56 | 0.1763327 | 0.1783086 | | 1.1 | 20 |
| Hexachlorocyclopentadiene | A | 50.00 | 66.84 | 0.350099 | 0.4680191 | 0.05 | 33.7 | 20 * |
| Hexachloroethane | A | 50.00 | 53.89 | 0.5725119 | 0.6171035 | | 7.8 | 20 |
| Indeno(1,2,3-cd)pyrene | A | 50.00 | 56.76 | 0.9228439 | 1.047637 | | 13.5 | 20 |
| Isophorone | A | 50.00 | 46.49 | 0.7715062 | 0.7173368 | | -7.0 | 20 |
| 1-Methylnaphthalene | A | 50.00 | 53.33 | 0.5079573 | 0.5417517 | | 6.7 | 20 |
| 2-Methylnaphthalene | A | 50.00 | 56.07 | 0.4934064 | 0.5533104 | | 12.1 | 20 |
| 2-Methylphenol | A | 50.00 | 47.17 | 1.135332 | 1.071177 | | -5.7 | 20 |
| 3+4-Methylphenol | A | 50.00 | 44.03 | 1.186012 | 1.044379 | | -11.9 | 20 |
| 4-Nitroaniline | A | 50.00 | 76.05 | 0.2309184 | 0.3512207 | | 52.1 | 20 * |
| 3-Nitroaniline | A | 50.00 | 61.01 | 0.3482787 | 0.4249769 | | 22.0 | 20 * |
| 2-Nitroaniline | A | 50.00 | 72.27 | 0.3251388 | 0.4699466 | | 44.5 | 20 * |
| Nitrobenzene | A | 50.00 | 52.94 | 0.3585356 | 0.3795941 | | 5.9 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E15103 | Injection Date: | 05/27/11 |
| Lab Sample ID: | 1E15103-CCV1 | Injection Time: | 20:08 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 4-Nitrophenol | A | 50.00 | 61.65 | 0.1977617 | 0.2438461 | 0.05 | 23.3 | 20 * |
| 2-Nitrophenol | A | 50.00 | 54.96 | 0.2241114 | 0.2463618 | | 9.9 | 20 |
| N-Nitrosodiphenylamine | A | 50.00 | 54.86 | 0.6599038 | 0.7240767 | | 9.7 | 20 |
| N-Nitroso-di-n-propylamine | A | 50.00 | 45.17 | 0.8341912 | 0.7536206 | 0.05 | -9.7 | 20 |
| Pentachlorophenol | L | 50.00 | 58.90 | 0.1614679 | 0.209384 | | 17.8 | 20 |
| Phenanthrene | A | 50.00 | 51.83 | 1.057442 | 1.096058 | | 3.7 | 20 |
| Phenol | A | 50.00 | 50.03 | 1.614787 | 1.615766 | | 0.06 | 20 |
| Pyrene | A | 50.00 | 49.07 | 1.298906 | 1.274771 | | -1.9 | 20 |
| 2,4,6-Trichlorophenol | A | 50.00 | 62.63 | 0.4009275 | 0.5022369 | | 25.3 | 20 * |
| 2,4,5-Trichlorophenol | A | 50.00 | 61.23 | 0.4318641 | 0.5288363 | | 22.5 | 20 * |
| 2-Fluorobiphenyl | A | 50.00 | 50.50 | 1.2999 | 1.312843 | | 1.0 | 20 |
| 2-Fluorophenol | A | 100.0 | 107.7 | 1.224809 | 1.31912 | | 7.7 | 20 |
| Nitrobenzene-d5 | A | 50.00 | 45.95 | 0.3691845 | 0.3392675 | | -8.1 | 20 |
| Phenol-d6 | A | 100.0 | 95.38 | 1.556882 | 1.484901 | | -4.6 | 20 |
| Terphenyl-d14 | A | 50.00 | 53.60 | 0.812066 | 0.8704932 | | 7.2 | 20 |
| 2,4,6-Tribromophenol | A | 100.0 | 108.7 | 0.1449031 | 0.1575308 | | 8.7 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E15110 | Injection Date: | 05/28/11 |
| Lab Sample ID: | 1E15110-CCV1 | Injection Time: | 18:31 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 3,3'-Dichlorobenzidine | A | 50.00 | 48.01 | 0.3840471 | 0.3687874 | | -4.0 | 20 |
| Acenaphthene | A | 50.00 | 46.28 | 1.082656 | 1.002127 | | -7.4 | 20 |
| Acenaphthylene | A | 50.00 | 51.30 | 1.744325 | 1.789671 | | 2.6 | 20 |
| Acetophenone | A | 50.00 | 53.72 | 1.555244 | 1.671018 | | 7.4 | 20 |
| Anthracene | A | 50.00 | 52.01 | 1.056507 | 1.098935 | | 4.0 | 20 |
| Atrazine | A | 50.00 | 52.73 | 0.2049826 | 0.2161548 | | 5.5 | 20 |
| Benzaldehyde | A | 50.00 | 38.94 | 1.012551 | 0.7885686 | | -22.1 | 20 * |
| Benzidine | A | 50.00 | 64.73 | 0.6314527 | 0.8174997 | | 29.5 | 20 * |
| Benzo(a)anthracene | A | 50.00 | 47.09 | 1.138713 | 1.072504 | | -5.8 | 20 |
| Benzo(a)pyrene | A | 50.00 | 66.35 | 1.044021 | 1.385442 | | 32.7 | 20 * |
| Benzo(b)fluoranthene | A | 50.00 | 73.25 | 1.099993 | 1.611388 | | 46.5 | 20 * |
| Benzo(g,h,i)perylene | A | 50.00 | 66.72 | 0.758931 | 1.012753 | | 33.4 | 20 * |
| Benzoic acid | L | 50.00 | 43.25 | 0.2348828 | 0.2293384 | | -13.5 | 20 |
| Benzo(k)fluoranthene | A | 50.00 | 65.60 | 1.214732 | 1.593675 | | 31.2 | 20 * |
| 1,1-Biphenyl | A | 50.00 | 41.84 | 1.44264 | 1.207231 | | -16.3 | 20 |
| 4-Bromophenyl-phenylether | A | 50.00 | 49.63 | 0.2302946 | 0.2286078 | | -0.7 | 20 |
| Butylbenzylphthalate | A | 50.00 | 53.75 | 0.7695074 | 0.827209 | | 7.5 | 20 |
| Caprolactam | A | 50.00 | 48.73 | 0.1265101 | 0.123307 | | -2.5 | 20 |
| Carbazole | A | 50.00 | 56.46 | 0.9188467 | 1.037637 | | 12.9 | 20 |
| 4-Chloro-3-methylphenol | A | 50.00 | 55.34 | 0.2827335 | 0.3129329 | | 10.7 | 20 |
| 4-Chloroaniline | A | 50.00 | 47.73 | 0.4407449 | 0.4207725 | | -4.5 | 20 |
| Bis(2-chloroethoxy)methane | A | 50.00 | 42.31 | 0.4591519 | 0.3885101 | | -15.4 | 20 |
| Bis(2-chloroethyl)ether | A | 50.00 | 45.00 | 1.34682 | 1.212059 | | -10.0 | 20 |
| 2,2'-Oxybis-1-chloropropane | A | 50.00 | 36.14 | 1.935852 | 1.399246 | | -27.7 | 20 * |
| 2-Chloronaphthalene | A | 50.00 | 52.42 | 1.140238 | 1.19542 | | 4.8 | 20 |
| 2-Chlorophenol | A | 50.00 | 48.27 | 1.301605 | 1.256536 | | -3.5 | 20 |
| 4-Chlorophenyl phenyl ether | A | 50.00 | 50.79 | 0.5334126 | 0.5418376 | | 1.6 | 20 |
| Chrysene | A | 50.00 | 54.55 | 1.122748 | 1.224906 | | 9.1 | 20 |
| Dibenz(a,h)anthracene | A | 50.00 | 68.74 | 0.7664032 | 1.053582 | | 37.5 | 20 * |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E15110 | Injection Date: | 05/28/11 |
| Lab Sample ID: | 1E15110-CCV1 | Injection Time: | 18:31 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Dibenzofuran | A | 50.00 | 51.34 | 1.497787 | 1.537956 | | 2.7 | 20 |
| Di-n-butylphthalate | A | 50.00 | 48.60 | 1.375428 | 1.336826 | | -2.8 | 20 |
| 2,4-Dichlorophenol | A | 50.00 | 57.06 | 0.3178164 | 0.3626776 | | 14.1 | 20 |
| Diethylphthalate | L | 50.00 | 51.69 | 1.347533 | 1.250214 | | 3.4 | 20 |
| 2,4-Dimethylphenol | A | 50.00 | 58.26 | 0.3417719 | 0.3981991 | | 16.5 | 20 |
| Dimethyl phthalate | A | 50.00 | 49.80 | 1.321588 | 1.316303 | | -0.4 | 20 |
| 4,6-Dinitro-2-methylphenol | L | 50.00 | 56.29 | 0.1179191 | 0.1585533 | | 12.6 | 20 |
| 2,4-Dinitrophenol | L | 50.00 | 58.04 | 0.1369907 | 0.1881828 | 0.05 | 16.1 | 20 |
| 2,4-Dinitrotoluene | A | 50.00 | 55.70 | 0.373936 | 0.4165351 | | 11.4 | 20 |
| 2,6-Dinitrotoluene | A | 50.00 | 53.56 | 0.3483244 | 0.3731335 | | 7.1 | 20 |
| Di-n-octylphthalate | A | 50.00 | 72.44 | 1.792929 | 2.597471 | | 44.9 | 20 * |
| 1,2-Diphenylhydrazine | A | 50.00 | 39.67 | 0.8347356 | 0.6623261 | | -20.7 | 20 * |
| Bis(2-ethylhexyl)phthalate | A | 50.00 | 48.26 | 1.025088 | 0.9895115 | | -3.5 | 20 |
| Fluoranthene | A | 50.00 | 56.98 | 1.072845 | 1.222604 | | 14.0 | 20 |
| Fluorene | A | 50.00 | 51.60 | 1.147043 | 1.183774 | | 3.2 | 20 |
| Hexachlorobenzene | A | 50.00 | 53.64 | 0.2598125 | 0.2787142 | | 7.3 | 20 |
| Hexachlorobutadiene | A | 50.00 | 56.71 | 0.1763327 | 0.1999852 | | 13.4 | 20 |
| Hexachlorocyclopentadiene | A | 50.00 | 52.43 | 0.350099 | 0.3670864 | 0.05 | 4.9 | 20 |
| Hexachloroethane | A | 50.00 | 51.32 | 0.5725119 | 0.5876757 | | 2.6 | 20 |
| Indeno(1,2,3-cd)pyrene | A | 50.00 | 70.41 | 0.9228439 | 1.299499 | | 40.8 | 20 * |
| Isophorone | A | 50.00 | 44.30 | 0.7715062 | 0.6835131 | | -11.4 | 20 |
| 1-Methylnaphthalene | A | 50.00 | 51.03 | 0.5079573 | 0.5184322 | | 2.1 | 20 |
| 2-Methylnaphthalene | A | 50.00 | 51.76 | 0.4934064 | 0.5107784 | | 3.5 | 20 |
| 2-Methylphenol | A | 50.00 | 48.20 | 1.135332 | 1.094399 | | -3.6 | 20 |
| 3+4-Methylphenol | A | 50.00 | 43.33 | 1.186012 | 1.027906 | | -13.3 | 20 |
| 4-Nitroaniline | A | 50.00 | 66.95 | 0.2309184 | 0.3091822 | | 33.9 | 20 * |
| 3-Nitroaniline | A | 50.00 | 48.20 | 0.3482787 | 0.3357747 | | -3.6 | 20 |
| 2-Nitroaniline | A | 50.00 | 49.73 | 0.3251388 | 0.3234048 | | -0.5 | 20 |
| Nitrobenzene | A | 50.00 | 49.45 | 0.3585356 | 0.3545601 | | -1.1 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1E15110 | Injection Date: | 05/28/11 |
| Lab Sample ID: | 1E15110-CCV1 | Injection Time: | 18:31 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 4-Nitrophenol | A | 50.00 | 42.88 | 0.1977617 | 0.1696031 | 0.05 | -14.2 | 20 |
| 2-Nitrophenol | A | 50.00 | 52.48 | 0.2241114 | 0.2352467 | | 5.0 | 20 |
| N-Nitrosodiphenylamine | A | 50.00 | 52.25 | 0.6599038 | 0.6895773 | | 4.5 | 20 |
| N-Nitroso-di-n-propylamine | A | 50.00 | 40.31 | 0.8341912 | 0.6724772 | 0.05 | -19.4 | 20 |
| Pentachlorophenol | L | 50.00 | 57.58 | 0.1614679 | 0.2044584 | | 15.2 | 20 |
| Phenanthrene | A | 50.00 | 50.34 | 1.057442 | 1.064599 | | 0.7 | 20 |
| Phenol | A | 50.00 | 45.79 | 1.614787 | 1.478719 | | -8.4 | 20 |
| Pyrene | A | 50.00 | 53.23 | 1.298906 | 1.38278 | | 6.5 | 20 |
| 2,4,6-Trichlorophenol | A | 50.00 | 55.21 | 0.4009275 | 0.442685 | | 10.4 | 20 |
| 2,4,5-Trichlorophenol | A | 50.00 | 49.73 | 0.4318641 | 0.4295026 | | -0.5 | 20 |
| 2-Fluorobiphenyl | A | 50.00 | 46.50 | 1.2999 | 1.208905 | | -7.0 | 20 |
| 2-Fluorophenol | A | 100.0 | 94.88 | 1.224809 | 1.16214 | | -5.1 | 20 |
| Nitrobenzene-d5 | A | 50.00 | 48.87 | 0.3691845 | 0.3608188 | | -2.3 | 20 |
| Phenol-d6 | A | 100.0 | 83.49 | 1.556882 | 1.299832 | | -16.5 | 20 |
| Terphenyl-d14 | A | 50.00 | 54.35 | 0.812066 | 0.882782 | | 8.7 | 20 |
| 2,4,6-Tribromophenol | A | 100.0 | 112.0 | 0.1449031 | 0.1623348 | | 12.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1F15808 | Injection Date: | 06/04/11 |
| Lab Sample ID: | 1F15808-CCV1 | Injection Time: | 22:15 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 3,3'-Dichlorobenzidine | A | 50.00 | 45.32 | 0.3840471 | 0.3481165 | | -9.4 | 20 |
| Acenaphthene | A | 50.00 | 46.04 | 1.082656 | 0.9970071 | | -7.9 | 20 |
| Acenaphthylene | A | 50.00 | 43.74 | 1.744325 | 1.526084 | | -12.5 | 20 |
| Acetophenone | A | 50.00 | 50.06 | 1.555244 | 1.556973 | | 0.1 | 20 |
| Anthracene | A | 50.00 | 46.45 | 1.056507 | 0.9814705 | | -7.1 | 20 |
| Atrazine | A | 50.00 | 47.65 | 0.2049826 | 0.1953444 | | -4.7 | 20 |
| Benzaldehyde | A | 50.00 | 41.33 | 1.012551 | 0.8370387 | | -17.3 | 20 |
| Benzidine | A | 50.00 | 66.10 | 0.6314527 | 0.8347278 | | 32.2 | 20 * |
| Benzo(a)anthracene | A | 50.00 | 46.11 | 1.138713 | 1.050147 | | -7.8 | 20 |
| Benzo(a)pyrene | A | 50.00 | 51.33 | 1.044021 | 1.07183 | | 2.7 | 20 |
| Benzo(b)fluoranthene | A | 50.00 | 53.30 | 1.099993 | 1.172631 | | 6.6 | 20 |
| Benzo(g,h,i)perylene | A | 50.00 | 50.47 | 0.758931 | 0.7660531 | | 0.9 | 20 |
| Benzoic acid | L | 50.00 | 57.09 | 0.2348828 | 0.3110621 | | 14.2 | 20 |
| Benzo(k)fluoranthene | A | 50.00 | 46.72 | 1.214732 | 1.135125 | | -6.6 | 20 |
| 1,1-Biphenyl | A | 50.00 | 47.09 | 1.44264 | 1.358735 | | -5.8 | 20 |
| 4-Bromophenyl-phenylether | A | 50.00 | 45.27 | 0.2302946 | 0.2084978 | | -9.5 | 20 |
| Butylbenzylphthalate | A | 50.00 | 46.62 | 0.7695074 | 0.7174947 | | -6.8 | 20 |
| Caprolactam | A | 50.00 | 48.16 | 0.1265101 | 0.1218422 | | -3.7 | 20 |
| Carbazole | A | 50.00 | 50.02 | 0.9188467 | 0.919296 | | 0.05 | 20 |
| 4-Chloro-3-methylphenol | A | 50.00 | 62.91 | 0.2827335 | 0.3557597 | | 25.8 | 20 * |
| 4-Chloroaniline | A | 50.00 | 47.35 | 0.4407449 | 0.4173717 | | -5.3 | 20 |
| Bis(2-chloroethoxy)methane | A | 50.00 | 47.07 | 0.4591519 | 0.4322047 | | -5.9 | 20 |
| Bis(2-chloroethyl)ether | A | 50.00 | 37.46 | 1.34682 | 1.009013 | | -25.1 | 20 * |
| 2,2'-Oxybis-1-chloropropane | A | 50.00 | 26.73 | 1.935852 | 1.035045 | | -46.5 | 20 * |
| 2-Chloronaphthalene | A | 50.00 | 53.58 | 1.140238 | 1.221874 | | 7.2 | 20 |
| 2-Chlorophenol | A | 50.00 | 46.61 | 1.301605 | 1.213365 | | -6.8 | 20 |
| 4-Chlorophenyl phenyl ether | A | 50.00 | 46.03 | 0.5334126 | 0.4910676 | | -7.9 | 20 |
| Chrysene | A | 50.00 | 49.70 | 1.122748 | 1.11604 | | -0.6 | 20 |
| Dibenz(a,h)anthracene | A | 50.00 | 48.72 | 0.7664032 | 0.7467325 | | -2.6 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1F15808 | Injection Date: | 06/04/11 |
| Lab Sample ID: | 1F15808-CCV1 | Injection Time: | 22:15 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Dibenzofuran | A | 50.00 | 50.56 | 1.497787 | 1.514549 | | 1.1 | 20 |
| Di-n-butylphthalate | A | 50.00 | 44.44 | 1.375428 | 1.222558 | | -11.1 | 20 |
| 2,4-Dichlorophenol | A | 50.00 | 60.43 | 0.3178164 | 0.3840832 | | 20.9 | 20 * |
| Diethylphthalate | L | 50.00 | 49.66 | 1.347533 | 1.205648 | | -0.7 | 20 |
| 2,4-Dimethylphenol | A | 50.00 | 65.40 | 0.3417719 | 0.4470102 | | 30.8 | 20 * |
| Dimethyl phthalate | A | 50.00 | 47.41 | 1.321588 | 1.253091 | | -5.2 | 20 |
| 4,6-Dinitro-2-methylphenol | L | 50.00 | 56.67 | 0.1179191 | 0.1597259 | | 13.3 | 20 |
| 2,4-Dinitrophenol | L | 50.00 | 59.44 | 0.1369907 | 0.1936508 | 0.05 | 18.9 | 20 |
| 2,4-Dinitrotoluene | A | 50.00 | 57.33 | 0.373936 | 0.4287369 | | 14.7 | 20 |
| 2,6-Dinitrotoluene | A | 50.00 | 49.37 | 0.3483244 | 0.343916 | | -1.3 | 20 |
| Di-n-octylphthalate | A | 50.00 | 39.69 | 1.792929 | 1.423352 | | -20.6 | 20 * |
| 1,2-Diphenylhydrazine | A | 50.00 | 38.99 | 0.8347356 | 0.6509293 | | -22.0 | 20 * |
| Bis(2-ethylhexyl)phthalate | A | 50.00 | 38.63 | 1.025088 | 0.7919976 | | -22.7 | 20 * |
| Fluoranthene | A | 50.00 | 46.66 | 1.072845 | 1.001244 | | -6.7 | 20 |
| Fluorene | A | 50.00 | 49.40 | 1.147043 | 1.133246 | | -1.2 | 20 |
| Hexachlorobenzene | A | 50.00 | 50.85 | 0.2598125 | 0.264218 | | 1.7 | 20 |
| Hexachlorobutadiene | A | 50.00 | 63.31 | 0.1763327 | 0.223285 | | 26.6 | 20 * |
| Hexachlorocyclopentadiene | A | 50.00 | 55.58 | 0.350099 | 0.3891572 | 0.05 | 11.2 | 20 |
| Hexachloroethane | A | 50.00 | 52.68 | 0.5725119 | 0.6032117 | | 5.4 | 20 |
| Indeno(1,2,3-cd)pyrene | A | 50.00 | 49.66 | 0.9228439 | 0.9165391 | | -0.7 | 20 |
| Isophorone | A | 50.00 | 44.39 | 0.7715062 | 0.684874 | | -11.2 | 20 |
| 1-Methylnaphthalene | A | 50.00 | 51.50 | 0.5079573 | 0.5231486 | | 3.0 | 20 |
| 2-Methylnaphthalene | A | 50.00 | 52.46 | 0.4934064 | 0.5177296 | | 4.9 | 20 |
| 2-Methylphenol | A | 50.00 | 48.72 | 1.135332 | 1.106345 | | -2.6 | 20 |
| 3+4-Methylphenol | A | 50.00 | 43.39 | 1.186012 | 1.029332 | | -13.2 | 20 |
| 4-Nitroaniline | A | 50.00 | 61.12 | 0.2309184 | 0.282261 | | 22.2 | 20 * |
| 3-Nitroaniline | A | 50.00 | 44.00 | 0.3482787 | 0.3064924 | | -12.0 | 20 |
| 2-Nitroaniline | A | 50.00 | 51.40 | 0.3251388 | 0.3342302 | | 2.8 | 20 |
| Nitrobenzene | A | 50.00 | 51.70 | 0.3585356 | 0.3707216 | | 3.4 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA1 | Calibration: | 1032006 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 01/26/11 15:40 |
| Sequence: | 1F15808 | Injection Date: | 06/04/11 |
| Lab Sample ID: | 1F15808-CCV1 | Injection Time: | 22:15 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 4-Nitrophenol | A | 50.00 | 50.08 | 0.1977617 | 0.1980735 | 0.05 | 0.2 | 20 |
| 2-Nitrophenol | A | 50.00 | 53.12 | 0.2241114 | 0.2380899 | | 6.2 | 20 |
| N-Nitrosodiphenylamine | A | 50.00 | 50.48 | 0.6599038 | 0.6662744 | | 1.0 | 20 |
| N-Nitroso-di-n-propylamine | A | 50.00 | 37.91 | 0.8341912 | 0.6324879 | 0.05 | -24.2 | 20 * |
| Pentachlorophenol | L | 50.00 | 54.10 | 0.1614679 | 0.1914267 | | 8.2 | 20 |
| Phenanthrene | A | 50.00 | 52.93 | 1.057442 | 1.119354 | | 5.9 | 20 |
| Phenol | A | 50.00 | 44.53 | 1.614787 | 1.438209 | | -10.9 | 20 |
| Pyrene | A | 50.00 | 52.76 | 1.298906 | 1.37063 | | 5.5 | 20 |
| 2,4,6-Trichlorophenol | A | 50.00 | 48.15 | 0.4009275 | 0.3860676 | | -3.7 | 20 |
| 2,4,5-Trichlorophenol | A | 50.00 | 51.23 | 0.4318641 | 0.4425269 | | 2.5 | 20 |
| 2-Fluorobiphenyl | A | 50.00 | 48.89 | 1.2999 | 1.271156 | | -2.2 | 20 |
| 2-Fluorophenol | A | 100.0 | 97.41 | 1.224809 | 1.193032 | | -2.6 | 20 |
| Nitrobenzene-d5 | A | 50.00 | 51.64 | 0.3691845 | 0.3813006 | | 3.3 | 20 |
| Phenol-d6 | A | 100.0 | 88.57 | 1.556882 | 1.37898 | | -11.4 | 20 |
| Terphenyl-d14 | A | 50.00 | 42.65 | 0.812066 | 0.69276 | | -14.7 | 20 |
| 2,4,6-Tribromophenol | A | 100.0 | 106.5 | 0.1449031 | 0.1543354 | | 6.5 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1F15812 | Injection Date: | 06/02/11 |
| Lab Sample ID: | 1F15812-CCV1 | Injection Time: | 15:44 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Acenaphthene | A | 50.00 | 53.79 | 1.110356 | 1.19452 | | 7.6 | 20 |
| Acenaphthylene | A | 50.00 | 54.52 | 1.725208 | 1.881117 | | 9.0 | 20 |
| Acetophenone | A | 50.00 | 52.21 | 1.801986 | 1.881619 | | 4.4 | 20 |
| Anthracene | A | 50.00 | 52.84 | 1.092671 | 1.154865 | | 5.7 | 20 |
| Atrazine | A | 50.00 | 45.23 | 0.2344682 | 0.212093 | | -9.5 | 20 |
| Benzaldehyde | A | 50.00 | 43.09 | 1.010105 | 0.8705352 | | -13.8 | 20 |
| Benzidine | A | 50.00 | 64.27 | 0.641297 | 0.8243665 | | 28.5 | 20 * |
| Benzo(a)anthracene | A | 50.00 | 53.42 | 1.119297 | 1.195882 | | 6.8 | 20 |
| Benzo(a)pyrene | A | 50.00 | 57.31 | 1.045862 | 1.198738 | | 14.6 | 20 |
| Benzo(b)fluoranthene | A | 50.00 | 57.81 | 1.093698 | 1.26461 | | 15.6 | 20 |
| Benzo(g,h,i)perylene | A | 50.00 | 51.81 | 1.033139 | 1.070582 | | 3.6 | 20 |
| Benzoic acid | A | 50.00 | 40.01 | 0.2679395 | 0.2144196 | | -20.0 | 20 |
| Benzo(k)fluoranthene | A | 50.00 | 58.28 | 1.107729 | 1.291095 | | 16.6 | 20 |
| 1,1-Biphenyl | A | 50.00 | 50.92 | 1.444453 | 1.471149 | | 1.8 | 20 |
| 4-Bromophenyl-phenylether | A | 50.00 | 50.41 | 0.2284778 | 0.230341 | | 0.8 | 20 |
| Butylbenzylphthalate | A | 50.00 | 53.92 | 0.5129818 | 0.5532002 | | 7.8 | 20 |
| Caprolactam | A | 50.00 | 48.88 | 0.1128421 | 0.1103069 | | -2.2 | 20 |
| Carbazole | A | 50.00 | 49.39 | 1.044381 | 1.03159 | | -1.2 | 20 |
| 4-Chloro-3-methylphenol | A | 50.00 | 50.65 | 0.3113523 | 0.3153914 | | 1.3 | 20 |
| 4-Chloroaniline | A | 50.00 | 52.40 | 0.4225325 | 0.4427987 | | 4.8 | 20 |
| Bis(2-chloroethoxy)methane | A | 50.00 | 50.86 | 0.4269873 | 0.4343676 | | 1.7 | 20 |
| Bis(2-chloroethyl)ether | A | 50.00 | 54.24 | 1.297842 | 1.407834 | | 8.5 | 20 |
| 2,2'-Oxybis-1-chloropropane | A | 50.00 | 48.30 | 1.947114 | 1.880869 | | -3.4 | 20 |
| 2-Chloronaphthalene | A | 50.00 | 55.27 | 1.087766 | 1.202519 | | 10.5 | 20 |
| 2-Chlorophenol | A | 50.00 | 53.60 | 1.315004 | 1.409807 | | 7.2 | 20 |
| 4-Chlorophenyl phenyl ether | A | 50.00 | 53.80 | 0.6233489 | 0.670776 | | 7.6 | 20 |
| Chrysene | A | 50.00 | 53.81 | 1.047865 | 1.1277 | | 7.6 | 20 |
| Dibenz(a,h)anthracene | A | 50.00 | 52.79 | 1.004478 | 1.060546 | | 5.6 | 20 |
| Dibenzofuran | A | 50.00 | 52.72 | 1.535116 | 1.618668 | | 5.4 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1F15812 | Injection Date: | 06/02/11 |
| Lab Sample ID: | 1F15812-CCV1 | Injection Time: | 15:44 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Di-n-butylphthalate | A | 50.00 | 52.98 | 1.182012 | 1.25238 | | 6.0 | 20 |
| 3,3'-Dichlorobenzidine | A | 50.00 | 59.68 | 0.4067228 | 0.4854778 | | 19.4 | 20 |
| 2,4-Dichlorophenol | A | 50.00 | 49.23 | 0.3046728 | 0.2999897 | | -1.5 | 20 |
| Diethylphthalate | A | 50.00 | 55.50 | 1.194731 | 1.326215 | | 11.0 | 20 |
| 2,4-Dimethylphenol | A | 50.00 | 49.77 | 0.3636609 | 0.3619652 | | -0.5 | 20 |
| Dimethyl phthalate | A | 50.00 | 52.44 | 1.244441 | 1.305064 | | 4.9 | 20 |
| 4,6-Dinitro-2-methylphenol | A | 50.00 | 51.76 | 0.1454148 | 0.1505192 | | 3.5 | 20 |
| 2,4-Dinitrophenol | A | 50.00 | 50.84 | 0.1854397 | 0.1885364 | 0.05 | 1.7 | 20 |
| 2,4-Dinitrotoluene | A | 50.00 | 52.18 | 0.3929838 | 0.4101426 | | 4.4 | 20 |
| 2,6-Dinitrotoluene | A | 50.00 | 52.73 | 0.2991862 | 0.3155342 | | 5.5 | 20 |
| Di-n-octylphthalate | A | 50.00 | 56.24 | 1.204345 | 1.354562 | | 12.5 | 20 |
| 1,2-Diphenylhydrazine | A | 50.00 | 47.57 | 0.8507103 | 0.8093046 | | -4.9 | 20 |
| Bis(2-ethylhexyl)phthalate | A | 50.00 | 54.82 | 0.6793074 | 0.7447804 | | 9.6 | 20 |
| Fluoranthene | A | 50.00 | 50.87 | 1.233837 | 1.25538 | | 1.7 | 20 |
| Fluorene | A | 50.00 | 51.02 | 1.337519 | 1.364694 | | 2.0 | 20 |
| Hexachlorobenzene | A | 50.00 | 51.47 | 0.244362 | 0.2515436 | | 2.9 | 20 |
| Hexachlorobutadiene | A | 50.00 | 52.10 | 0.1868569 | 0.194694 | | 4.2 | 20 |
| Hexachlorocyclopentadiene | A | 50.00 | 49.73 | 0.374975 | 0.3729576 | 0.05 | -0.5 | 20 |
| Hexachloroethane | A | 50.00 | 52.93 | 0.5464632 | 0.5785228 | | 5.9 | 20 |
| Indeno(1,2,3-cd)pyrene | A | 50.00 | 48.12 | 1.038008 | 0.9989215 | | -3.8 | 20 |
| Isophorone | A | 50.00 | 48.11 | 0.7442763 | 0.71617 | | -3.8 | 20 |
| 1-Methylnaphthalene | A | 50.00 | 51.54 | 0.5872691 | 0.6053151 | | 3.1 | 20 |
| 2-Methylnaphthalene | A | 50.00 | 50.99 | 0.5974192 | 0.6092233 | | 2.0 | 20 |
| 2-Methylphenol | A | 50.00 | 51.60 | 1.208635 | 1.247264 | | 3.2 | 20 |
| 3+4-Methylphenol | A | 50.00 | 51.48 | 1.268409 | 1.305843 | | 3.0 | 20 |
| 4-Nitroaniline | A | 50.00 | 51.02 | 0.3272887 | 0.3340005 | | 2.1 | 20 |
| 3-Nitroaniline | A | 50.00 | 53.66 | 0.3230815 | 0.3467434 | | 7.3 | 20 |
| 2-Nitroaniline | A | 50.00 | 59.91 | 0.3700237 | 0.4433934 | | 19.8 | 20 |
| Nitrobenzene | A | 50.00 | 49.38 | 0.4107927 | 0.4056798 | | -1.2 | 20 |

# CONTINUING CALIBRATION CHECK

## SW8270C

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | MS-BNA3 | Calibration: | 1122001 |
| Lab File ID: | SEQ-CCV1.D | Calibration Date: | 04/29/11 00:00 |
| Sequence: | 1F15812 | Injection Date: | 06/02/11 |
| Lab Sample ID: | 1F15812-CCV1 | Injection Time: | 15:44 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 4-Nitrophenol | A | 50.00 | 47.60 | 0.2721678 | 0.2590952 | 0.05 | -4.8 | 20 |
| 2-Nitrophenol | A | 50.00 | 51.11 | 0.1941449 | 0.1984467 | | 2.2 | 20 |
| N-Nitrosodiphenylamine | A | 50.00 | 50.54 | 0.6728889 | 0.6801513 | | 1.1 | 20 |
| N-Nitroso-di-n-propylamine | A | 50.00 | 51.66 | 1.033966 | 1.068329 | 0.05 | 3.3 | 20 |
| Pentachlorophenol | A | 50.00 | 48.72 | 0.1623094 | 0.1581652 | | -2.6 | 20 |
| Phenanthrene | A | 50.00 | 52.10 | 1.075866 | 1.121057 | | 4.2 | 20 |
| Phenol | A | 50.00 | 51.94 | 1.687698 | 1.753338 | | 3.9 | 20 |
| Pyrene | A | 50.00 | 52.54 | 1.163766 | 1.22291 | | 5.1 | 20 |
| 2,4,6-Trichlorophenol | A | 50.00 | 54.62 | 0.382004 | 0.4173121 | | 9.2 | 20 |
| 2,4,5-Trichlorophenol | A | 50.00 | 52.89 | 0.4142645 | 0.4382347 | | 5.8 | 20 |
| 2-Fluorobiphenyl | A | 50.00 | 50.96 | 1.265417 | 1.289739 | | 1.9 | 20 |
| 2-Fluorophenol | A | 100.0 | 99.05 | 1.142171 | 1.131352 | | -0.9 | 20 |
| Nitrobenzene-d5 | A | 50.00 | 47.03 | 0.4075494 | 0.3833614 | | -5.9 | 20 |
| Phenol-d6 | A | 100.0 | 103.2 | 1.572986 | 1.623244 | | 3.2 | 20 |
| Terphenyl-d14 | A | 50.00 | 52.01 | 0.7462196 | 0.7762116 | | 4.0 | 20 |
| 2,4,6-Tribromophenol | A | 100.0 | 108.8 | 0.109869 | 0.1195581 | | 8.8 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E24013-BLK1 File ID: E24013B1.D

Sampled: Prepared: Analyzed: 05/26/11 18:11

Solids: Preparation: EXT_3510 Dilution:

Batch: 1E24013 Sequence: 1E14710 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.25 | 2.50 | 5.00 | Y, U |
| 83-32-9 | Acenaphthene | | 1.25 | 2.50 | 5.00 | U |
| 208-96-8 | Acenaphthylene | | 1.25 | 2.50 | 5.00 | U |
| 98-86-2 | Acetophenone | | 1.25 | 2.50 | 5.00 | U |
| 120-12-7 | Anthracene | | 1.25 | 2.50 | 5.00 | U |
| 1912-24-9 | Atrazine | | 1.25 | 2.50 | 5.00 | U |
| 100-52-7 | Benzaldehyde | | 1.25 | 2.50 | 5.00 | U |
| 92-87-5 | Benzidine | | 12.5 | 25.0 | 50.0 | X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.25 | 2.50 | 5.00 | U |
| 50-32-8 | Benzo(a)pyrene | | 1.25 | 2.50 | 5.00 | Q, X, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.25 | 2.50 | 5.00 | Q, X, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.25 | 2.50 | 5.00 | Q, X, U |
| 65-85-0 | Benzoic acid | | 12.5 | 25.0 | 50.0 | U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.25 | 2.50 | 5.00 | Q, X, U |
| 92-52-4 | 1,1-Biphenyl | | 1.25 | 2.50 | 5.00 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.25 | 2.50 | 5.00 | Q, U |
| 85-68-7 | Butylbenzylphthalate | | 1.25 | 2.50 | 5.00 | U |
| 105-60-2 | Caprolactam | | 1.25 | 2.50 | 5.00 | Q, U |
| 86-74-8 | Carbazole | | 1.25 | 2.50 | 5.00 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 106-47-8 | 4-Chloroaniline | | 1.25 | 2.50 | 5.00 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.25 | 2.50 | 5.00 | Q, U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.25 | 2.50 | 5.00 | U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.25 | 2.50 | 5.00 | U |
| 91-58-7 | 2-Chloronaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 95-57-8 | 2-Chlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.25 | 2.50 | 5.00 | Q, U |
| 218-01-9 | Chrysene | | 1.25 | 2.50 | 5.00 | U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.25 | 2.50 | 5.00 | X, U |
| 132-64-9 | Dibenzofuran | | 1.25 | 2.50 | 5.00 | Q, U |
| 84-74-2 | Di-n-butylphthalate | | 1.25 | 2.50 | 5.00 | U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 84-66-2 | Diethylphthalate | | 1.25 | 2.50 | 5.00 | Q, U |
| 105-67-9 | 2,4-Dimethylphenol | | 5.00 | 10.0 | 20.0 | U |
| 131-11-3 | Dimethyl phthalate | | 1.25 | 2.50 | 5.00 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 5.00 | 10.0 | 20.0 | Q, X, U |
| 51-28-5 | 2,4-Dinitrophenol | | 12.5 | 25.0 | 50.0 | X, U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.25 | 2.50 | 5.00 | Q, U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.25 | 2.50 | 5.00 | U |
| 117-84-0 | Di-n-octylphthalate | | 1.25 | 2.50 | 5.00 | Q, X, U |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E24013-BLK1 File ID: E24013B1.D

Sampled: Prepared: Analyzed: 05/26/11 18:11

Solids: Preparation: EXT_3510 Dilution:

Batch: 1E24013 Sequence: 1E14710 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.25 | 2.50 | 5.00 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.25 | 2.50 | 5.00 | U |
| 206-44-0 | Fluoranthene | | 1.25 | 2.50 | 5.00 | U |
| 86-73-7 | Fluorene | | 1.25 | 2.50 | 5.00 | X, U |
| 118-74-1 | Hexachlorobenzene | | 1.25 | 2.50 | 5.00 | Q, U |
| 87-68-3 | Hexachlorobutadiene | | 1.25 | 2.50 | 5.00 | U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.25 | 2.50 | 5.00 | U |
| 67-72-1 | Hexachloroethane | | 1.25 | 2.50 | 5.00 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.25 | 2.50 | 5.00 | X, U |
| 78-59-1 | Isophorone | | 1.25 | 2.50 | 5.00 | U |
| 90-12-0 | 1-Methylnaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 91-57-6 | 2-Methylnaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 95-48-7 | 2-Methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 65794-96-9 | 3+4-Methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 100-01-6 | 4-Nitroaniline | | 5.00 | 10.0 | 20.0 | Q, X, U |
| 99-09-2 | 3-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 88-74-4 | 2-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 98-95-3 | Nitrobenzene | | 1.25 | 2.50 | 5.00 | Q, U |
| 100-02-7 | 4-Nitrophenol | | 5.00 | 10.0 | 20.0 | U |
| 88-75-5 | 2-Nitrophenol | | 1.25 | 2.50 | 5.00 | U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.25 | 2.50 | 5.00 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.25 | 2.50 | 5.00 | U |
| 87-86-5 | Pentachlorophenol | | 5.00 | 10.0 | 20.0 | Q, U |
| 85-01-8 | Phenanthrene | | 1.25 | 2.50 | 5.00 | U |
| 108-95-2 | Phenol | | 1.25 | 2.50 | 5.00 | U |
| 129-00-0 | Pyrene | | 1.25 | 2.50 | 5.00 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.25 | 2.50 | 5.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 50.00 | 41.85 | 83.7 | 50 - 110 | |
| 2-Fluorophenol | 100.0 | 35.02 | 35.0 | 20 - 110 | |
| Nitrobenzene-d5 | 50.00 | 47.25 | 94.5 | 40 - 110 | |
| Phenol-d6 | 100.0 | 21.79 | 21.8 | 10 - 110 | |
| Terphenyl-d14 | 50.00 | 57.93 | 116 | 50 - 135 | |
| 2,4,6-Tribromophenol | 100.0 | 96.78 | 96.8 | 40 - 125 | |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC | SDG: Kirtland_014

Client: Shaw E & I (I700) | Project: Kirtland AFB 2011

Matrix: | Laboratory ID: 1E24013-BS1 | File ID: E24013L1.D

Sampled: | Prepared: | Analyzed: 05/27/11 22:12

Solids: | Preparation: EXT_3510 | Dilution:

Batch: 1E24013 | Sequence: 1E15103 | Calibration: 1032006 | Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | 47.85 | 1.25 | 2.50 | 5.00 | |
| 83-32-9 | Acenaphthene | 51.73 | 1.25 | 2.50 | 5.00 | |
| 208-96-8 | Acenaphthylene | 45.46 | 1.25 | 2.50 | 5.00 | |
| 98-86-2 | Acetophenone | 42.69 | 1.25 | 2.50 | 5.00 | |
| 120-12-7 | Anthracene | 49.52 | 1.25 | 2.50 | 5.00 | |
| 1912-24-9 | Atrazine | 52.93 | 1.25 | 2.50 | 5.00 | |
| 100-52-7 | Benzaldehyde | 43.66 | 1.25 | 2.50 | 5.00 | |
| 92-87-5 | Benzidine | | 12.5 | 25.0 | 50.0 | U |
| 56-55-3 | Benzo(a)anthracene | 51.20 | 1.25 | 2.50 | 5.00 | |
| 50-32-8 | Benzo(a)pyrene | 60.62 | 1.25 | 2.50 | 5.00 | X |
| 205-99-2 | Benzo(b)fluoranthene | 71.44 | 1.25 | 2.50 | 5.00 | X |
| 191-24-2 | Benzo(g,h,i)perylene | 66.14 | 1.25 | 2.50 | 5.00 | |
| 65-85-0 | Benzoic acid | | 12.5 | 25.0 | 50.0 | U |
| 207-08-9 | Benzo(k)fluoranthene | 77.82 | 1.25 | 2.50 | 5.00 | X |
| 92-52-4 | 1,1-Biphenyl | 49.89 | 1.25 | 2.50 | 5.00 | |
| 101-55-3 | 4-Bromophenyl-phenylether | 58.94 | 1.25 | 2.50 | 5.00 | |
| 85-68-7 | Butylbenzylphthalate | 54.34 | 1.25 | 2.50 | 5.00 | |
| 105-60-2 | Caprolactam | 9.345 | 1.25 | 2.50 | 5.00 | |
| 86-74-8 | Carbazole | 54.90 | 1.25 | 2.50 | 5.00 | |
| 59-50-7 | 4-Chloro-3-methylphenol | 43.88 | 1.25 | 2.50 | 5.00 | |
| 106-47-8 | 4-Chloroaniline | 36.81 | 1.25 | 2.50 | 5.00 | |
| 111-91-1 | Bis(2-chloroethoxy)methane | 54.39 | 1.25 | 2.50 | 5.00 | |
| 111-44-4 | Bis(2-chloroethyl)ether | 47.99 | 1.25 | 2.50 | 5.00 | |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | 47.69 | 1.25 | 2.50 | 5.00 | |
| 91-58-7 | 2-Chloronaphthalene | 48.01 | 1.25 | 2.50 | 5.00 | |
| 95-57-8 | 2-Chlorophenol | 42.07 | 1.25 | 2.50 | 5.00 | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | 58.68 | 1.25 | 2.50 | 5.00 | |
| 218-01-9 | Chrysene | 48.05 | 1.25 | 2.50 | 5.00 | |
| 53-70-3 | Dibenz(a,h)anthracene | 60.28 | 1.25 | 2.50 | 5.00 | X |
| 132-64-9 | Dibenzofuran | 54.74 | 1.25 | 2.50 | 5.00 | |
| 84-74-2 | Di-n-butylphthalate | 57.39 | 1.25 | 2.50 | 5.00 | |
| 120-83-2 | 2,4-Dichlorophenol | 47.08 | 1.25 | 2.50 | 5.00 | |
| 84-66-2 | Diethylphthalate | 62.16 | 1.25 | 2.50 | 5.00 | |
| 105-67-9 | 2,4-Dimethylphenol | 43.69 | 5.00 | 10.0 | 20.0 | |
| 131-11-3 | Dimethyl phthalate | 54.48 | 1.25 | 2.50 | 5.00 | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 67.53 | 5.00 | 10.0 | 20.0 | X |
| 51-28-5 | 2,4-Dinitrophenol | 58.55 | 12.5 | 25.0 | 50.0 | X |
| 121-14-2 | 2,4-Dinitrotoluene | 63.81 | 1.25 | 2.50 | 5.00 | X |
| 606-20-2 | 2,6-Dinitrotoluene | 55.78 | 1.25 | 2.50 | 5.00 | |
| 117-84-0 | Di-n-octylphthalate | 74.47 | 1.25 | 2.50 | 5.00 | X |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC | SDG: Kirtland_014

Client: Shaw E & I (I700) | Project: Kirtland AFB 2011

Matrix: | Laboratory ID: 1E24013-BS1 | File ID: E24013L1.D

Sampled: | Prepared: | Analyzed: 05/27/11 22:12

Solids: | Preparation: EXT_3510 | Dilution:

Batch: 1E24013 | Sequence: 1E15103 | Calibration: 1032006 | Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | 55.59 | 1.25 | 2.50 | 5.00 | |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 54.33 | 1.25 | 2.50 | 5.00 | |
| 206-44-0 | Fluoranthene | 51.26 | 1.25 | 2.50 | 5.00 | |
| 86-73-7 | Fluorene | 54.45 | 1.25 | 2.50 | 5.00 | |
| 118-74-1 | Hexachlorobenzene | 59.90 | 1.25 | 2.50 | 5.00 | |
| 87-68-3 | Hexachlorobutadiene | 31.67 | 1.25 | 2.50 | 5.00 | |
| 77-47-4 | Hexachlorocyclopentadiene | 18.28 | 1.25 | 2.50 | 5.00 | X |
| 67-72-1 | Hexachloroethane | 21.95 | 1.25 | 2.50 | 5.00 | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 61.90 | 1.25 | 2.50 | 5.00 | X |
| 78-59-1 | Isophorone | 39.74 | 1.25 | 2.50 | 5.00 | |
| 90-12-0 | 1-Methylnaphthalene | 44.58 | 1.25 | 2.50 | 5.00 | |
| 91-57-6 | 2-Methylnaphthalene | 48.18 | 1.25 | 2.50 | 5.00 | |
| 95-48-7 | 2-Methylphenol | 31.57 | 1.25 | 2.50 | 5.00 | |
| 65794-96-9 | 3+4-Methylphenol | 28.01 | 1.25 | 2.50 | 5.00 | |
| 100-01-6 | 4-Nitroaniline | 70.80 | 5.00 | 10.0 | 20.0 | X |
| 99-09-2 | 3-Nitroaniline | 47.45 | 5.00 | 10.0 | 20.0 | X |
| 88-74-4 | 2-Nitroaniline | 57.68 | 5.00 | 10.0 | 20.0 | X |
| 98-95-3 | Nitrobenzene | 55.28 | 1.25 | 2.50 | 5.00 | |
| 100-02-7 | 4-Nitrophenol | 16.68 | 5.00 | 10.0 | 20.0 | X, J |
| 88-75-5 | 2-Nitrophenol | 52.71 | 1.25 | 2.50 | 5.00 | |
| 86-30-6 | N-Nitrosodiphenylamine | 28.78 | 1.25 | 2.50 | 5.00 | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 47.72 | 1.25 | 2.50 | 5.00 | |
| 87-86-5 | Pentachlorophenol | 62.35 | 5.00 | 10.0 | 20.0 | |
| 85-01-8 | Phenanthrene | 47.92 | 1.25 | 2.50 | 5.00 | |
| 108-95-2 | Phenol | 16.71 | 1.25 | 2.50 | 5.00 | |
| 129-00-0 | Pyrene | 50.46 | 1.25 | 2.50 | 5.00 | |
| 88-06-2 | 2,4,6-Trichlorophenol | 52.97 | 1.25 | 2.50 | 5.00 | X |
| 95-95-4 | 2,4,5-Trichlorophenol | 51.58 | 1.25 | 2.50 | 5.00 | X |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 50.00 | 44.12 | 88.2 | 50 - 110 | |
| 2-Fluorophenol | 100.0 | 47.40 | 47.4 | 20 - 110 | |
| Nitrobenzene-d5 | 50.00 | 53.94 | 108 | 40 - 110 | |
| Phenol-d6 | 100.0 | 28.45 | 28.5 | 10 - 110 | |
| Terphenyl-d14 | 50.00 | 55.42 | 111 | 50 - 135 | |
| 2,4,6-Tribromophenol | 100.0 | 109.7 | 110 | 40 - 125 | |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E27018-BLK1 File ID: E27018B1.D

Sampled: Prepared: Analyzed: 05/28/11 20:11

Solids: Preparation: EXT_3510 Dilution:

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.25 | 2.50 | 5.00 | U |
| 83-32-9 | Acenaphthene | | 1.25 | 2.50 | 5.00 | Q, U |
| 208-96-8 | Acenaphthylene | | 1.25 | 2.50 | 5.00 | U |
| 98-86-2 | Acetophenone | | 1.25 | 2.50 | 5.00 | U |
| 120-12-7 | Anthracene | | 1.25 | 2.50 | 5.00 | U |
| 1912-24-9 | Atrazine | | 1.25 | 2.50 | 5.00 | U |
| 100-52-7 | Benzaldehyde | | 1.25 | 2.50 | 5.00 | Y, U |
| 92-87-5 | Benzidine | | 12.5 | 25.0 | 50.0 | X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.25 | 2.50 | 5.00 | U |
| 50-32-8 | Benzo(a)pyrene | | 1.25 | 2.50 | 5.00 | X, U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.25 | 2.50 | 5.00 | Q, X, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.25 | 2.50 | 5.00 | Q, X, U |
| 65-85-0 | Benzoic acid | | 12.5 | 25.0 | 50.0 | U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.25 | 2.50 | 5.00 | Q, X, U |
| 92-52-4 | 1,1-Biphenyl | | 1.25 | 2.50 | 5.00 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.25 | 2.50 | 5.00 | U |
| 85-68-7 | Butylbenzylphthalate | | 1.25 | 2.50 | 5.00 | U |
| 105-60-2 | Caprolactam | | 1.25 | 2.50 | 5.00 | Q, U |
| 86-74-8 | Carbazole | | 1.25 | 2.50 | 5.00 | Q, U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 106-47-8 | 4-Chloroaniline | | 1.25 | 2.50 | 5.00 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.25 | 2.50 | 5.00 | U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.25 | 2.50 | 5.00 | U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.25 | 2.50 | 5.00 | Y, U |
| 91-58-7 | 2-Chloronaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 95-57-8 | 2-Chlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.25 | 2.50 | 5.00 | U |
| 218-01-9 | Chrysene | | 1.25 | 2.50 | 5.00 | U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.25 | 2.50 | 5.00 | X, Q, U |
| 132-64-9 | Dibenzofuran | | 1.25 | 2.50 | 5.00 | U |
| 84-74-2 | Di-n-butylphthalate | | 1.25 | 2.50 | 5.00 | U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 84-66-2 | Diethylphthalate | | 1.25 | 2.50 | 5.00 | U |
| 105-67-9 | 2,4-Dimethylphenol | | 5.00 | 10.0 | 20.0 | U |
| 131-11-3 | Dimethyl phthalate | | 1.25 | 2.50 | 5.00 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 5.00 | 10.0 | 20.0 | U |
| 51-28-5 | 2,4-Dinitrophenol | | 12.5 | 25.0 | 50.0 | U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.25 | 2.50 | 5.00 | U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.25 | 2.50 | 5.00 | U |
| 117-84-0 | Di-n-octylphthalate | | 1.25 | 2.50 | 5.00 | Q, X, U |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E27018-BLK1 File ID: E27018B1.D

Sampled: Prepared: Analyzed: 05/28/11 20:11

Solids: Preparation: EXT_3510 Dilution:

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.25 | 2.50 | 5.00 | Y, U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.25 | 2.50 | 5.00 | U |
| 206-44-0 | Fluoranthene | | 1.25 | 2.50 | 5.00 | U |
| 86-73-7 | Fluorene | | 1.25 | 2.50 | 5.00 | U |
| 118-74-1 | Hexachlorobenzene | | 1.25 | 2.50 | 5.00 | U |
| 87-68-3 | Hexachlorobutadiene | | 1.25 | 2.50 | 5.00 | Q, U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.25 | 2.50 | 5.00 | Q, U |
| 67-72-1 | Hexachloroethane | | 1.25 | 2.50 | 5.00 | Q, U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.25 | 2.50 | 5.00 | X, U |
| 78-59-1 | Isophorone | | 1.25 | 2.50 | 5.00 | U |
| 90-12-0 | 1-Methylnaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 91-57-6 | 2-Methylnaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 95-48-7 | 2-Methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 65794-96-9 | 3+4-Methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 100-01-6 | 4-Nitroaniline | | 5.00 | 10.0 | 20.0 | Q, X, U |
| 99-09-2 | 3-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 88-74-4 | 2-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 98-95-3 | Nitrobenzene | | 1.25 | 2.50 | 5.00 | U |
| 100-02-7 | 4-Nitrophenol | | 5.00 | 10.0 | 20.0 | U |
| 88-75-5 | 2-Nitrophenol | | 1.25 | 2.50 | 5.00 | U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.25 | 2.50 | 5.00 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.25 | 2.50 | 5.00 | U |
| 87-86-5 | Pentachlorophenol | | 5.00 | 10.0 | 20.0 | Q, U |
| 85-01-8 | Phenanthrene | | 1.25 | 2.50 | 5.00 | U |
| 108-95-2 | Phenol | | 1.25 | 2.50 | 5.00 | U |
| 129-00-0 | Pyrene | | 1.25 | 2.50 | 5.00 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.25 | 2.50 | 5.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 50.00 | 29.59 | 59.2 | 50 - 110 | |
| 2-Fluorophenol | 100.0 | 31.20 | 31.2 | 20 - 110 | |
| Nitrobenzene-d5 | 50.00 | 31.31 | 62.6 | 40 - 110 | |
| Phenol-d6 | 100.0 | 18.04 | 18.0 | 10 - 110 | |
| Terphenyl-d14 | 50.00 | 51.68 | 103 | 50 - 135 | |
| 2,4,6-Tribromophenol | 100.0 | 69.74 | 69.7 | 40 - 125 | |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC | SDG: Kirtland_014

Client: Shaw E & I (I700) | Project: Kirtland AFB 2011

Matrix: | Laboratory ID: 1E27018-BS1 | File ID: E27018L1.D

Sampled: | Prepared: | Analyzed: 05/28/11 21:09

Solids: | Preparation: EXT_3510 | Dilution:

Batch: 1E27018 | Sequence: 1E15110 | Calibration: 1032006 | Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | 40.85 | 1.25 | 2.50 | 5.00 | |
| 83-32-9 | Acenaphthene | 30.30 | 1.25 | 2.50 | 5.00 | |
| 208-96-8 | Acenaphthylene | 27.13 | 1.25 | 2.50 | 5.00 | |
| 98-86-2 | Acetophenone | 40.05 | 1.25 | 2.50 | 5.00 | |
| 120-12-7 | Anthracene | 46.53 | 1.25 | 2.50 | 5.00 | |
| 1912-24-9 | Atrazine | 53.17 | 1.25 | 2.50 | 5.00 | |
| 100-52-7 | Benzaldehyde | 39.73 | 1.25 | 2.50 | 5.00 | Y |
| 92-87-5 | Benzidine | | 12.5 | 25.0 | 50.0 | X, U |
| 56-55-3 | Benzo(a)anthracene | 47.35 | 1.25 | 2.50 | 5.00 | |
| 50-32-8 | Benzo(a)pyrene | 54.80 | 1.25 | 2.50 | 5.00 | X |
| 205-99-2 | Benzo(b)fluoranthene | 64.96 | 1.25 | 2.50 | 5.00 | X |
| 191-24-2 | Benzo(g,h,i)perylene | 63.59 | 1.25 | 2.50 | 5.00 | X |
| 65-85-0 | Benzoic acid | | 12.5 | 25.0 | 50.0 | U |
| 207-08-9 | Benzo(k)fluoranthene | 63.46 | 1.25 | 2.50 | 5.00 | X |
| 92-52-4 | 1,1-Biphenyl | 37.98 | 1.25 | 2.50 | 5.00 | |
| 101-55-3 | 4-Bromophenyl-phenylether | 43.93 | 1.25 | 2.50 | 5.00 | |
| 85-68-7 | Butylbenzylphthalate | 57.38 | 1.25 | 2.50 | 5.00 | |
| 105-60-2 | Caprolactam | 7.763 | 1.25 | 2.50 | 5.00 | |
| 86-74-8 | Carbazole | 59.48 | 1.25 | 2.50 | 5.00 | |
| 59-50-7 | 4-Chloro-3-methylphenol | 44.81 | 1.25 | 2.50 | 5.00 | |
| 106-47-8 | 4-Chloroaniline | 30.98 | 1.25 | 2.50 | 5.00 | |
| 111-91-1 | Bis(2-chloroethoxy)methane | 41.07 | 1.25 | 2.50 | 5.00 | |
| 111-44-4 | Bis(2-chloroethyl)ether | 35.71 | 1.25 | 2.50 | 5.00 | |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | 26.95 | 1.25 | 2.50 | 5.00 | Y |
| 91-58-7 | 2-Chloronaphthalene | 27.54 | 1.25 | 2.50 | 5.00 | |
| 95-57-8 | 2-Chlorophenol | 32.99 | 1.25 | 2.50 | 5.00 | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | 36.94 | 1.25 | 2.50 | 5.00 | |
| 218-01-9 | Chrysene | 47.79 | 1.25 | 2.50 | 5.00 | |
| 53-70-3 | Dibenz(a,h)anthracene | 60.69 | 1.25 | 2.50 | 5.00 | X |
| 132-64-9 | Dibenzofuran | 37.49 | 1.25 | 2.50 | 5.00 | |
| 84-74-2 | Di-n-butylphthalate | 53.68 | 1.25 | 2.50 | 5.00 | |
| 120-83-2 | 2,4-Dichlorophenol | 42.50 | 1.25 | 2.50 | 5.00 | |
| 84-66-2 | Diethylphthalate | 56.52 | 1.25 | 2.50 | 5.00 | |
| 105-67-9 | 2,4-Dimethylphenol | 43.58 | 5.00 | 10.0 | 20.0 | |
| 131-11-3 | Dimethyl phthalate | 51.50 | 1.25 | 2.50 | 5.00 | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 60.58 | 5.00 | 10.0 | 20.0 | |
| 51-28-5 | 2,4-Dinitrophenol | 60.94 | 12.5 | 25.0 | 50.0 | |
| 121-14-2 | 2,4-Dinitrotoluene | 59.61 | 1.25 | 2.50 | 5.00 | |
| 606-20-2 | 2,6-Dinitrotoluene | 43.94 | 1.25 | 2.50 | 5.00 | |
| 117-84-0 | Di-n-octylphthalate | 74.32 | 1.25 | 2.50 | 5.00 | X |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC | SDG: Kirtland_014

Client: Shaw E & I (I700) | Project: Kirtland AFB 2011

Matrix: | Laboratory ID: 1E27018-BS1 | File ID: E27018L1.D

Sampled: | Prepared: | Analyzed: 05/28/11 21:09

Solids: | Preparation: EXT_3510 | Dilution:

Batch: 1E27018 | Sequence: 1E15110 | Calibration: 1032006 | Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | 32.83 | 1.25 | 2.50 | 5.00 | Y |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 52.77 | 1.25 | 2.50 | 5.00 | |
| 206-44-0 | Fluoranthene | 49.98 | 1.25 | 2.50 | 5.00 | |
| 86-73-7 | Fluorene | 38.06 | 1.25 | 2.50 | 5.00 | |
| 118-74-1 | Hexachlorobenzene | 51.39 | 1.25 | 2.50 | 5.00 | |
| 87-68-3 | Hexachlorobutadiene | 8.036 | 1.25 | 2.50 | 5.00 | |
| 77-47-4 | Hexachlorocyclopentadiene | 4.238 | 1.25 | 2.50 | 5.00 | J |
| 67-72-1 | Hexachloroethane | 7.263 | 1.25 | 2.50 | 5.00 | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 61.80 | 1.25 | 2.50 | 5.00 | X |
| 78-59-1 | Isophorone | 30.46 | 1.25 | 2.50 | 5.00 | |
| 90-12-0 | 1-Methylnaphthalene | 26.75 | 1.25 | 2.50 | 5.00 | |
| 91-57-6 | 2-Methylnaphthalene | 26.59 | 1.25 | 2.50 | 5.00 | |
| 95-48-7 | 2-Methylphenol | 30.78 | 1.25 | 2.50 | 5.00 | |
| 65794-96-9 | 3+4-Methylphenol | 24.61 | 1.25 | 2.50 | 5.00 | |
| 100-01-6 | 4-Nitroaniline | 62.31 | 5.00 | 10.0 | 20.0 | X |
| 99-09-2 | 3-Nitroaniline | 39.52 | 5.00 | 10.0 | 20.0 | |
| 88-74-4 | 2-Nitroaniline | 41.31 | 5.00 | 10.0 | 20.0 | |
| 98-95-3 | Nitrobenzene | 35.46 | 1.25 | 2.50 | 5.00 | |
| 100-02-7 | 4-Nitrophenol | 14.64 | 5.00 | 10.0 | 20.0 | J |
| 88-75-5 | 2-Nitrophenol | 37.45 | 1.25 | 2.50 | 5.00 | |
| 86-30-6 | N-Nitrosodiphenylamine | 29.69 | 1.25 | 2.50 | 5.00 | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 32.03 | 1.25 | 2.50 | 5.00 | |
| 87-86-5 | Pentachlorophenol | 63.30 | 5.00 | 10.0 | 20.0 | |
| 85-01-8 | Phenanthrene | 49.82 | 1.25 | 2.50 | 5.00 | |
| 108-95-2 | Phenol | 13.82 | 1.25 | 2.50 | 5.00 | |
| 129-00-0 | Pyrene | 51.02 | 1.25 | 2.50 | 5.00 | |
| 88-06-2 | 2,4,6-Trichlorophenol | 44.47 | 1.25 | 2.50 | 5.00 | |
| 95-95-4 | 2,4,5-Trichlorophenol | 45.67 | 1.25 | 2.50 | 5.00 | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 50.00 | 32.24 | 64.5 | 50 - 110 | |
| 2-Fluorophenol | 100.0 | 39.30 | 39.3 | 20 - 110 | |
| Nitrobenzene-d5 | 50.00 | 35.09 | 70.2 | 40 - 110 | |
| Phenol-d6 | 100.0 | 21.65 | 21.7 | 10 - 110 | |
| Terphenyl-d14 | 50.00 | 47.40 | 94.8 | 50 - 135 | |
| 2,4,6-Tribromophenol | 100.0 | 95.43 | 95.4 | 40 - 125 | |

# ANALYSIS DATA SHEET

**LCS Dup**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E27018-BSD1 File ID: E27018L2.D

Sampled: Prepared: Analyzed: 05/28/11 21:38

Solids: Preparation: EXT_3510 Dilution:

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 91-94-1 | 3,3'-Dichlorobenzidine | 38.05 | 1.25 | 2.50 | 5.00 | |
| 83-32-9 | Acenaphthene | 28.52 | 1.25 | 2.50 | 5.00 | |
| 208-96-8 | Acenaphthylene | 26.45 | 1.25 | 2.50 | 5.00 | |
| 98-86-2 | Acetophenone | 37.63 | 1.25 | 2.50 | 5.00 | |
| 120-12-7 | Anthracene | 46.69 | 1.25 | 2.50 | 5.00 | |
| 1912-24-9 | Atrazine | 45.19 | 1.25 | 2.50 | 5.00 | |
| 100-52-7 | Benzaldehyde | 35.28 | 1.25 | 2.50 | 5.00 | Y |
| 92-87-5 | Benzidine | | 12.5 | 25.0 | 50.0 | X, U |
| 56-55-3 | Benzo(a)anthracene | 45.73 | 1.25 | 2.50 | 5.00 | |
| 50-32-8 | Benzo(a)pyrene | 51.05 | 1.25 | 2.50 | 5.00 | X |
| 205-99-2 | Benzo(b)fluoranthene | 63.68 | 1.25 | 2.50 | 5.00 | X |
| 191-24-2 | Benzo(g,h,i)perylene | 62.52 | 1.25 | 2.50 | 5.00 | X |
| 65-85-0 | Benzoic acid | 13.71 | 12.5 | 25.0 | 50.0 | J |
| 207-08-9 | Benzo(k)fluoranthene | 59.83 | 1.25 | 2.50 | 5.00 | X |
| 92-52-4 | 1,1-Biphenyl | 35.19 | 1.25 | 2.50 | 5.00 | |
| 101-55-3 | 4-Bromophenyl-phenylether | 36.91 | 1.25 | 2.50 | 5.00 | |
| 85-68-7 | Butylbenzylphthalate | 48.74 | 1.25 | 2.50 | 5.00 | |
| 105-60-2 | Caprolactam | 8.134 | 1.25 | 2.50 | 5.00 | |
| 86-74-8 | Carbazole | 56.00 | 1.25 | 2.50 | 5.00 | |
| 59-50-7 | 4-Chloro-3-methylphenol | 44.47 | 1.25 | 2.50 | 5.00 | |
| 106-47-8 | 4-Chloroaniline | 32.20 | 1.25 | 2.50 | 5.00 | |
| 111-91-1 | Bis(2-chloroethoxy)methane | 42.79 | 1.25 | 2.50 | 5.00 | |
| 111-44-4 | Bis(2-chloroethyl)ether | 35.51 | 1.25 | 2.50 | 5.00 | |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | 23.35 | 1.25 | 2.50 | 5.00 | Y |
| 91-58-7 | 2-Chloronaphthalene | 27.12 | 1.25 | 2.50 | 5.00 | |
| 95-57-8 | 2-Chlorophenol | 28.90 | 1.25 | 2.50 | 5.00 | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | 37.33 | 1.25 | 2.50 | 5.00 | |
| 218-01-9 | Chrysene | 48.78 | 1.25 | 2.50 | 5.00 | |
| 53-70-3 | Dibenz(a,h)anthracene | 64.30 | 1.25 | 2.50 | 5.00 | X |
| 132-64-9 | Dibenzofuran | 36.13 | 1.25 | 2.50 | 5.00 | |
| 84-74-2 | Di-n-butylphthalate | 50.94 | 1.25 | 2.50 | 5.00 | |
| 120-83-2 | 2,4-Dichlorophenol | 42.67 | 1.25 | 2.50 | 5.00 | |
| 84-66-2 | Diethylphthalate | 56.43 | 1.25 | 2.50 | 5.00 | |
| 105-67-9 | 2,4-Dimethylphenol | 44.68 | 5.00 | 10.0 | 20.0 | |
| 131-11-3 | Dimethyl phthalate | 55.31 | 1.25 | 2.50 | 5.00 | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 55.93 | 5.00 | 10.0 | 20.0 | |
| 51-28-5 | 2,4-Dinitrophenol | 58.67 | 12.5 | 25.0 | 50.0 | |
| 121-14-2 | 2,4-Dinitrotoluene | 57.35 | 1.25 | 2.50 | 5.00 | |
| 606-20-2 | 2,6-Dinitrotoluene | 47.02 | 1.25 | 2.50 | 5.00 | |
| 117-84-0 | Di-n-octylphthalate | 61.56 | 1.25 | 2.50 | 5.00 | X |

# ANALYSIS DATA SHEET

**LCS Dup**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1E27018-BSD1 File ID: E27018L2.D

Sampled: Prepared: Analyzed: 05/28/11 21:38

Solids: Preparation: EXT_3510 Dilution:

Batch: 1E27018 Sequence: 1E15110 Calibration: 1032006 Instrument: MS-BNA1

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | 32.53 | 1.25 | 2.50 | 5.00 | Y |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 44.38 | 1.25 | 2.50 | 5.00 | |
| 206-44-0 | Fluoranthene | 45.25 | 1.25 | 2.50 | 5.00 | |
| 86-73-7 | Fluorene | 39.88 | 1.25 | 2.50 | 5.00 | |
| 118-74-1 | Hexachlorobenzene | 45.70 | 1.25 | 2.50 | 5.00 | |
| 87-68-3 | Hexachlorobutadiene | 9.018 | 1.25 | 2.50 | 5.00 | |
| 77-47-4 | Hexachlorocyclopentadiene | 4.313 | 1.25 | 2.50 | 5.00 | J |
| 67-72-1 | Hexachloroethane | 7.310 | 1.25 | 2.50 | 5.00 | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 62.24 | 1.25 | 2.50 | 5.00 | X |
| 78-59-1 | Isophorone | 33.20 | 1.25 | 2.50 | 5.00 | |
| 90-12-0 | 1-Methylnaphthalene | 27.32 | 1.25 | 2.50 | 5.00 | |
| 91-57-6 | 2-Methylnaphthalene | 30.37 | 1.25 | 2.50 | 5.00 | |
| 95-48-7 | 2-Methylphenol | 26.87 | 1.25 | 2.50 | 5.00 | |
| 65794-96-9 | 3+4-Methylphenol | 23.42 | 1.25 | 2.50 | 5.00 | |
| 100-01-6 | 4-Nitroaniline | 58.17 | 5.00 | 10.0 | 20.0 | X |
| 99-09-2 | 3-Nitroaniline | 37.68 | 5.00 | 10.0 | 20.0 | |
| 88-74-4 | 2-Nitroaniline | 39.42 | 5.00 | 10.0 | 20.0 | |
| 98-95-3 | Nitrobenzene | 35.69 | 1.25 | 2.50 | 5.00 | |
| 100-02-7 | 4-Nitrophenol | 13.95 | 5.00 | 10.0 | 20.0 | J |
| 88-75-5 | 2-Nitrophenol | 39.29 | 1.25 | 2.50 | 5.00 | |
| 86-30-6 | N-Nitrosodiphenylamine | 25.58 | 1.25 | 2.50 | 5.00 | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 30.45 | 1.25 | 2.50 | 5.00 | |
| 87-86-5 | Pentachlorophenol | 57.71 | 5.00 | 10.0 | 20.0 | |
| 85-01-8 | Phenanthrene | 45.43 | 1.25 | 2.50 | 5.00 | |
| 108-95-2 | Phenol | 13.35 | 1.25 | 2.50 | 5.00 | |
| 129-00-0 | Pyrene | 46.76 | 1.25 | 2.50 | 5.00 | |
| 88-06-2 | 2,4,6-Trichlorophenol | 40.53 | 1.25 | 2.50 | 5.00 | |
| 95-95-4 | 2,4,5-Trichlorophenol | 44.52 | 1.25 | 2.50 | 5.00 | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 50.00 | 34.69 | 69.4 | 50 - 110 | |
| 2-Fluorophenol | 100.0 | 33.48 | 33.5 | 20 - 110 | |
| Nitrobenzene-d5 | 50.00 | 33.15 | 66.3 | 40 - 110 | |
| Phenol-d6 | 100.0 | 20.42 | 20.4 | 10 - 110 | |
| Terphenyl-d14 | 50.00 | 41.12 | 82.2 | 50 - 135 | |
| 2,4,6-Tribromophenol | 100.0 | 84.93 | 84.9 | 40 - 125 | |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1F01024-BLK1 File ID: F01024B1.D

Sampled: Prepared: Analyzed: 06/02/11 17:59

Solids: Preparation: EXT_3510 Dilution:

Batch: 1F01024 Sequence: 1F15812 Calibration: 1122001 Instrument: MS-BNA3

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | | 1.25 | 2.50 | 5.00 | U |
| 208-96-8 | Acenaphthylene | | 1.25 | 2.50 | 5.00 | U |
| 98-86-2 | Acetophenone | | 1.25 | 2.50 | 5.00 | U |
| 120-12-7 | Anthracene | | 1.25 | 2.50 | 5.00 | U |
| 1912-24-9 | Atrazine | | 1.25 | 2.50 | 5.00 | U |
| 100-52-7 | Benzaldehyde | | 1.25 | 2.50 | 5.00 | U |
| 92-87-5 | Benzidine | | 12.5 | 25.0 | 50.0 | X, U |
| 56-55-3 | Benzo(a)anthracene | | 1.25 | 2.50 | 5.00 | Q, U |
| 50-32-8 | Benzo(a)pyrene | | 1.25 | 2.50 | 5.00 | U |
| 205-99-2 | Benzo(b)fluoranthene | | 1.25 | 2.50 | 5.00 | Q, U |
| 191-24-2 | Benzo(g,h,i)perylene | | 1.25 | 2.50 | 5.00 | U |
| 65-85-0 | Benzoic acid | | 12.5 | 25.0 | 50.0 | U |
| 207-08-9 | Benzo(k)fluoranthene | | 1.25 | 2.50 | 5.00 | U |
| 92-52-4 | 1,1-Biphenyl | | 1.25 | 2.50 | 5.00 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | | 1.25 | 2.50 | 5.00 | Q, U |
| 85-68-7 | Butylbenzylphthalate | | 1.25 | 2.50 | 5.00 | Q, U |
| 105-60-2 | Caprolactam | | 1.25 | 2.50 | 5.00 | Q, U |
| 86-74-8 | Carbazole | | 1.25 | 2.50 | 5.00 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 106-47-8 | 4-Chloroaniline | | 1.25 | 2.50 | 5.00 | U |
| 111-91-1 | Bis(2-chloroethoxy)methane | | 1.25 | 2.50 | 5.00 | Q, U |
| 111-44-4 | Bis(2-chloroethyl)ether | | 1.25 | 2.50 | 5.00 | U |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | | 1.25 | 2.50 | 5.00 | U |
| 91-58-7 | 2-Chloronaphthalene | | 1.25 | 2.50 | 5.00 | Q, U |
| 95-57-8 | 2-Chlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | | 1.25 | 2.50 | 5.00 | Q, U |
| 218-01-9 | Chrysene | | 1.25 | 2.50 | 5.00 | Q, U |
| 53-70-3 | Dibenz(a,h)anthracene | | 1.25 | 2.50 | 5.00 | U |
| 132-64-9 | Dibenzofuran | | 1.25 | 2.50 | 5.00 | Q, U |
| 84-74-2 | Di-n-butylphthalate | | 1.25 | 2.50 | 5.00 | Q, U |
| 91-94-1 | 3,3'-Dichlorobenzidine | | 1.25 | 2.50 | 5.00 | Q, U |
| 120-83-2 | 2,4-Dichlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 84-66-2 | Diethylphthalate | | 1.25 | 2.50 | 5.00 | Q, U |
| 105-67-9 | 2,4-Dimethylphenol | | 5.00 | 10.0 | 20.0 | U |
| 131-11-3 | Dimethyl phthalate | | 1.25 | 2.50 | 5.00 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | | 5.00 | 10.0 | 20.0 | U |
| 51-28-5 | 2,4-Dinitrophenol | | 12.5 | 25.0 | 50.0 | X, U |
| 121-14-2 | 2,4-Dinitrotoluene | | 1.25 | 2.50 | 5.00 | Q, U |
| 606-20-2 | 2,6-Dinitrotoluene | | 1.25 | 2.50 | 5.00 | Q, U |
| 117-84-0 | Di-n-octylphthalate | | 1.25 | 2.50 | 5.00 | U |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1F01024-BLK1 File ID: F01024B1.D

Sampled: Prepared: Analyzed: 06/02/11 17:59

Solids: Preparation: EXT_3510 Dilution:

Batch: 1F01024 Sequence: 1F15812 Calibration: 1122001 Instrument: MS-BNA3

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | | 1.25 | 2.50 | 5.00 | U |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | | 1.25 | 2.50 | 5.00 | Q, U |
| 206-44-0 | Fluoranthene | | 1.25 | 2.50 | 5.00 | U |
| 86-73-7 | Fluorene | | 1.25 | 2.50 | 5.00 | U |
| 118-74-1 | Hexachlorobenzene | | 1.25 | 2.50 | 5.00 | Q, U |
| 87-68-3 | Hexachlorobutadiene | | 1.25 | 2.50 | 5.00 | U |
| 77-47-4 | Hexachlorocyclopentadiene | | 1.25 | 2.50 | 5.00 | U |
| 67-72-1 | Hexachloroethane | | 1.25 | 2.50 | 5.00 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | | 1.25 | 2.50 | 5.00 | U |
| 78-59-1 | Isophorone | | 1.25 | 2.50 | 5.00 | U |
| 90-12-0 | 1-Methylnaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 91-57-6 | 2-Methylnaphthalene | | 1.25 | 2.50 | 5.00 | U |
| 95-48-7 | 2-Methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 65794-96-9 | 3+4-Methylphenol | | 1.25 | 2.50 | 5.00 | U |
| 100-01-6 | 4-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 99-09-2 | 3-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 88-74-4 | 2-Nitroaniline | | 5.00 | 10.0 | 20.0 | U |
| 98-95-3 | Nitrobenzene | | 1.25 | 2.50 | 5.00 | U |
| 100-02-7 | 4-Nitrophenol | | 5.00 | 10.0 | 20.0 | U |
| 88-75-5 | 2-Nitrophenol | | 1.25 | 2.50 | 5.00 | U |
| 86-30-6 | N-Nitrosodiphenylamine | | 1.25 | 2.50 | 5.00 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | | 1.25 | 2.50 | 5.00 | U |
| 87-86-5 | Pentachlorophenol | | 5.00 | 10.0 | 20.0 | U |
| 85-01-8 | Phenanthrene | | 1.25 | 2.50 | 5.00 | Q, U |
| 108-95-2 | Phenol | | 1.25 | 2.50 | 5.00 | U |
| 129-00-0 | Pyrene | | 1.25 | 2.50 | 5.00 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 1.25 | 2.50 | 5.00 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 1.25 | 2.50 | 5.00 | U |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 50.00 | 33.96 | 67.9 | 50 - 110 | |
| 2-Fluorophenol | 100.0 | 37.47 | 37.5 | 20 - 110 | |
| Nitrobenzene-d5 | 50.00 | 38.46 | 76.9 | 40 - 110 | |
| Phenol-d6 | 100.0 | 21.18 | 21.2 | 10 - 110 | |
| Terphenyl-d14 | 50.00 | 54.61 | 109 | 50 - 135 | |
| 2,4,6-Tribromophenol | 100.0 | 85.62 | 85.6 | 40 - 125 | |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC | SDG: Kirtland_014

Client: Shaw E & I (I700) | Project: Kirtland AFB 2011

Matrix: | Laboratory ID: 1F01024-BS1 | File ID: F01024L1.D

Sampled: | Prepared: | Analyzed: 06/02/11 19:09

Solids: | Preparation: EXT_3510 | Dilution:

Batch: 1F01024 | Sequence: 1F15812 | Calibration: 1122001 | Instrument: MS-BNA3

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 54.59 | 1.25 | 2.50 | 5.00 | |
| 208-96-8 | Acenaphthylene | 47.42 | 1.25 | 2.50 | 5.00 | |
| 98-86-2 | Acetophenone | 44.65 | 1.25 | 2.50 | 5.00 | |
| 120-12-7 | Anthracene | 54.86 | 1.25 | 2.50 | 5.00 | |
| 1912-24-9 | Atrazine | 44.44 | 1.25 | 2.50 | 5.00 | |
| 100-52-7 | Benzaldehyde | 44.84 | 1.25 | 2.50 | 5.00 | |
| 92-87-5 | Benzidine | | 12.5 | 25.0 | 50.0 | X, U |
| 56-55-3 | Benzo(a)anthracene | 58.85 | 1.25 | 2.50 | 5.00 | |
| 50-32-8 | Benzo(a)pyrene | 52.97 | 1.25 | 2.50 | 5.00 | |
| 205-99-2 | Benzo(b)fluoranthene | 62.31 | 1.25 | 2.50 | 5.00 | |
| 191-24-2 | Benzo(g,h,i)perylene | 59.97 | 1.25 | 2.50 | 5.00 | |
| 65-85-0 | Benzoic acid | | 12.5 | 25.0 | 50.0 | U |
| 207-08-9 | Benzo(k)fluoranthene | 62.60 | 1.25 | 2.50 | 5.00 | |
| 92-52-4 | 1,1-Biphenyl | 47.01 | 1.25 | 2.50 | 5.00 | |
| 101-55-3 | 4-Bromophenyl-phenylether | 59.04 | 1.25 | 2.50 | 5.00 | |
| 85-68-7 | Butylbenzylphthalate | 67.14 | 1.25 | 2.50 | 5.00 | |
| 105-60-2 | Caprolactam | 5.464 | 1.25 | 2.50 | 5.00 | |
| 86-74-8 | Carbazole | 54.16 | 1.25 | 2.50 | 5.00 | |
| 59-50-7 | 4-Chloro-3-methylphenol | 43.03 | 1.25 | 2.50 | 5.00 | |
| 106-47-8 | 4-Chloroaniline | 42.38 | 1.25 | 2.50 | 5.00 | |
| 111-91-1 | Bis(2-chloroethoxy)methane | 58.68 | 1.25 | 2.50 | 5.00 | |
| 111-44-4 | Bis(2-chloroethyl)ether | 54.57 | 1.25 | 2.50 | 5.00 | |
| 108-60-1 | 2,2'-Oxybis-1-chloropropane | 50.89 | 1.25 | 2.50 | 5.00 | |
| 91-58-7 | 2-Chloronaphthalene | 53.37 | 1.25 | 2.50 | 5.00 | |
| 95-57-8 | 2-Chlorophenol | 37.87 | 1.25 | 2.50 | 5.00 | |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | 60.83 | 1.25 | 2.50 | 5.00 | |
| 218-01-9 | Chrysene | 60.56 | 1.25 | 2.50 | 5.00 | |
| 53-70-3 | Dibenz(a,h)anthracene | 56.23 | 1.25 | 2.50 | 5.00 | |
| 132-64-9 | Dibenzofuran | 57.88 | 1.25 | 2.50 | 5.00 | |
| 84-74-2 | Di-n-butylphthalate | 62.30 | 1.25 | 2.50 | 5.00 | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 60.21 | 1.25 | 2.50 | 5.00 | |
| 120-83-2 | 2,4-Dichlorophenol | 45.98 | 1.25 | 2.50 | 5.00 | |
| 84-66-2 | Diethylphthalate | 66.20 | 1.25 | 2.50 | 5.00 | |
| 105-67-9 | 2,4-Dimethylphenol | 43.40 | 5.00 | 10.0 | 20.0 | |
| 131-11-3 | Dimethyl phthalate | 61.79 | 1.25 | 2.50 | 5.00 | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 55.65 | 5.00 | 10.0 | 20.0 | |
| 51-28-5 | 2,4-Dinitrophenol | 50.52 | 12.5 | 25.0 | 50.0 | X |
| 121-14-2 | 2,4-Dinitrotoluene | 61.22 | 1.25 | 2.50 | 5.00 | |
| 606-20-2 | 2,6-Dinitrotoluene | 58.32 | 1.25 | 2.50 | 5.00 | |
| 117-84-0 | Di-n-octylphthalate | 66.52 | 1.25 | 2.50 | 5.00 | |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Matrix: Laboratory ID: 1F01024-BS1 File ID: F01024L1.D

Sampled: Prepared: Analyzed: 06/02/11 19:09

Solids: Preparation: EXT_3510 Dilution:

Batch: 1F01024 Sequence: 1F15812 Calibration: 1122001 Instrument: MS-BNA3

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 122-66-7 | 1,2-Diphenylhydrazine | 50.64 | 1.25 | 2.50 | 5.00 | |
| 117-81-7 | Bis(2-ethylhexyl)phthalate | 65.52 | 1.25 | 2.50 | 5.00 | |
| 206-44-0 | Fluoranthene | 56.33 | 1.25 | 2.50 | 5.00 | |
| 86-73-7 | Fluorene | 55.21 | 1.25 | 2.50 | 5.00 | |
| 118-74-1 | Hexachlorobenzene | 56.82 | 1.25 | 2.50 | 5.00 | |
| 87-68-3 | Hexachlorobutadiene | 31.96 | 1.25 | 2.50 | 5.00 | |
| 77-47-4 | Hexachlorocyclopentadiene | 13.84 | 1.25 | 2.50 | 5.00 | |
| 67-72-1 | Hexachloroethane | 25.10 | 1.25 | 2.50 | 5.00 | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 54.74 | 1.25 | 2.50 | 5.00 | |
| 78-59-1 | Isophorone | 40.47 | 1.25 | 2.50 | 5.00 | |
| 90-12-0 | 1-Methylnaphthalene | 44.79 | 1.25 | 2.50 | 5.00 | |
| 91-57-6 | 2-Methylnaphthalene | 45.91 | 1.25 | 2.50 | 5.00 | |
| 95-48-7 | 2-Methylphenol | 30.74 | 1.25 | 2.50 | 5.00 | |
| 65794-96-9 | 3+4-Methylphenol | 26.14 | 1.25 | 2.50 | 5.00 | |
| 100-01-6 | 4-Nitroaniline | 49.67 | 5.00 | 10.0 | 20.0 | |
| 99-09-2 | 3-Nitroaniline | 46.23 | 5.00 | 10.0 | 20.0 | |
| 88-74-4 | 2-Nitroaniline | 56.62 | 5.00 | 10.0 | 20.0 | |
| 98-95-3 | Nitrobenzene | 49.68 | 1.25 | 2.50 | 5.00 | |
| 100-02-7 | 4-Nitrophenol | 9.952 | 5.00 | 10.0 | 20.0 | J |
| 88-75-5 | 2-Nitrophenol | 48.48 | 1.25 | 2.50 | 5.00 | |
| 86-30-6 | N-Nitrosodiphenylamine | 28.88 | 1.25 | 2.50 | 5.00 | |
| 621-64-7 | N-Nitroso-di-n-propylamine | 49.93 | 1.25 | 2.50 | 5.00 | |
| 87-86-5 | Pentachlorophenol | 51.37 | 5.00 | 10.0 | 20.0 | |
| 85-01-8 | Phenanthrene | 57.92 | 1.25 | 2.50 | 5.00 | |
| 108-95-2 | Phenol | 10.71 | 1.25 | 2.50 | 5.00 | |
| 129-00-0 | Pyrene | 60.82 | 1.25 | 2.50 | 5.00 | |
| 88-06-2 | 2,4,6-Trichlorophenol | 54.56 | 1.25 | 2.50 | 5.00 | |
| 95-95-4 | 2,4,5-Trichlorophenol | 54.85 | 1.25 | 2.50 | 5.00 | |

| SYSTEM MONITORING COMPOUND | ADDED (ug/L) | CONC (ug/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| 2-Fluorobiphenyl | 50.00 | 48.36 | 96.7 | 50 - 110 | |
| 2-Fluorophenol | 100.0 | 35.50 | 35.5 | 20 - 110 | |
| Nitrobenzene-d5 | 50.00 | 46.17 | 92.3 | 40 - 110 | |
| Phenol-d6 | 100.0 | 19.60 | 19.6 | 10 - 110 | |
| Terphenyl-d14 | 50.00 | 60.78 | 122 | 50 - 135 | |
| 2,4,6-Tribromophenol | 100.0 | 104.4 | 104 | 40 - 125 | |

# HOLDING TIME SUMMARY

## SW8270C

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| GW0102 | 05/23/11 14:43 | 05/24/11 09:00 | 05/25/11 09:58 | 1.76 | 7.00 | 05/27/11 02:46 | 1.70 | 40.00 | |
| GW8012-RB | 05/23/11 08:47 | 05/24/11 09:00 | 05/25/11 09:58 | 2.01 | 7.00 | 05/27/11 22:41 | 2.53 | 40.00 | |
| GW0064 | 05/24/11 13:58 | 05/25/11 09:00 | 05/27/11 17:15 | 3.10 | 7.00 | 05/29/11 00:03 | 1.28 | 40.00 | |
| GW0064 | 05/24/11 13:58 | 05/25/11 09:00 | 06/02/11 10:28 | 8.81 | 7.00 | 06/05/11 04:57 | 2.77 | 40.00 | * |
| GW0065 | 05/25/11 10:42 | 05/26/11 09:00 | 05/27/11 17:15 | 2.23 | 7.00 | 05/29/11 00:32 | 1.30 | 40.00 | |
| GW0065 | 05/25/11 10:42 | 05/26/11 09:00 | 06/02/11 10:28 | 7.95 | 7.00 | 06/05/11 05:26 | 2.79 | 40.00 | |
| GW0066 | 05/25/11 13:56 | 05/26/11 09:00 | 05/27/11 17:15 | 2.10 | 7.00 | 05/29/11 01:01 | 1.32 | 40.00 | |
| GW0066 | 05/25/11 13:56 | 05/26/11 09:00 | 06/02/11 10:28 | 7.81 | 7.00 | 06/05/11 05:55 | 2.81 | 40.00 | |

# SW8015B (GRO)
# Forms

# ANALYSIS SEQUENCE SUMMARY

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E12909 | Instrument: | GL-GCVOA2 |
| Calibration: | 1129002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1E12909-CAL1 | 003F0301.D | 05/06/11 13:31 |
| Cal Standard | 1E12909-CAL2 | 004F0401.D | 05/06/11 14:07 |
| Cal Standard | 1E12909-CAL3 | 005F0501.D | 05/06/11 14:43 |
| Cal Standard | 1E12909-CAL4 | 006F0601.D | 05/06/11 15:19 |
| Cal Standard | 1E12909-CAL5 | 007F0701.D | 05/06/11 15:55 |
| Cal Standard | 1E12909-CAL6 | 008F0801.D | 05/06/11 16:31 |
| Initial Cal Check | 1E12909-ICV1 | 009F0901.D | 05/06/11 17:07 |

# ANALYSIS SEQUENCE SUMMARY

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E14609 | Instrument: | GL-GCVOA2 |
| Calibration: | 1129002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1E14609-CCV1 | 003F0301.D | 05/25/11 12:31 |
| Blank | 1E20010-BLK1 | 004F0401.D | 05/25/11 13:06 |
| LCS | 1E20010-BS1 | 005F0501.D | 05/25/11 13:42 |
| LCS Dup | 1E20010-BSD1 | 006F0601.D | 05/25/11 14:18 |
| GW0102 | 1105208-01 | 012F1201.D | 05/25/11 17:54 |
| GW8012-RB | 1105208-03 | 013F1301.D | 05/25/11 18:31 |
| Calibration Check | 1E14609-CCV2 | 014F1401.D | 05/25/11 19:07 |

# ANALYSIS SEQUENCE SUMMARY

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F16007 | Instrument: | GL-GCVOA2 |
| Calibration: | 1129002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1F16007-CCV1 | 003F0301.D | 06/07/11 19:06 |
| Blank | 1F07029-BLK1 | 004F0401.D | 06/07/11 19:45 |
| LCS | 1F07029-BS1 | 005F0501.D | 06/07/11 20:22 |
| LCS Dup | 1F07029-BSD1 | 006F0601.D | 06/07/11 20:59 |
| GW0064 | 1105217-01 | 007F0701.D | 06/07/11 21:36 |
| GW0065 | 1105225-01 | 009F0901.D | 06/07/11 22:52 |
| GW0066 | 1105225-03 | 010F1001.D | 06/07/11 23:31 |
| Calibration Check | 1F16007-CCV2 | 011F1101.D | 06/08/11 00:11 |

# ANALYSIS DATA SHEET

**GW0102**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-01 | File ID: | 012F1201.D |
| Sampled: | 05/23/11 14:43 | Prepared: | 05/25/11 09:38 | Analyzed: | 05/25/11 17:54 |
| Solids: | | Preparation: | 8015GRO | Dilution: | 1 |

Batch: 1E20010 Sequence: 1E14609 Calibration: 1129002 Instrument: GL-GCVOA2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | | 0.0500 | 0.100 | 0.150 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.04650 | 93.0 | 50 - 150 | |

# ANALYSIS DATA SHEET

**GW8012-RB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-03 | File ID: | 013F1301.D |
| Sampled: | 05/23/11 08:47 | Prepared: | 05/25/11 09:38 | Analyzed: | 05/25/11 18:31 |
| Solids: | | Preparation: | 8015GRO | Dilution: | 1 |

Batch: 1E20010 Sequence: 1E14609 Calibration: 1129002 Instrument: GL-GCVOA2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | 0.122 | 0.0500 | 0.100 | 0.150 | J |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.04388 | 87.8 | 50 - 150 | |

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01 | File ID: | 007F0701.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 06/07/11 17:25 | Analyzed: | 06/07/11 21:36 |
| Solids: | | Preparation: | 8015GRO | Dilution: | 1 |

Batch: 1F07029 Sequence: 1F16007 Calibration: 1129002 Instrument: GL-GCVOA2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | 0.148 | 0.0500 | 0.100 | 0.150 | J |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.05080 | 102 | 50 - 150 | |

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01 | File ID: | 009F0901.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 06/07/11 17:25 | Analyzed: | 06/07/11 22:52 |
| Solids: | | Preparation: | 8015GRO | Dilution: | 1 |

Batch: 1F07029 Sequence: 1F16007 Calibration: 1129002 Instrument: GL-GCVOA2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | 0.214 | 0.0500 | 0.100 | 0.150 | |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.05391 | 108 | 50 - 150 | |

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03 | File ID: | 010F1001.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 06/07/11 17:25 | Analyzed: | 06/07/11 23:31 |
| Solids: | | Preparation: | 8015GRO | Dilution: | 1 |

Batch: 1F07029 Sequence: 1F16007 Calibration: 1129002 Instrument: GL-GCVOA2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | 0.268 | 0.0500 | 0.100 | 0.150 | |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.04646 | 92.9 | 50 - 150 | |

# LCS / LCS DUPLICATE RECOVERY

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E20010 | Laboratory ID: | 1E20010-BS1 |
| Preparation: | 8015GRO | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Gasoline Range Organics (C6-C10) | 0.5000 | 0.5820 | 116 | 50 - 150 |

| ANALYTE | SPIKE ADDED (mg/L) | LCSD CONCENTRATION (mg/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Gasoline Range Organics (C6-C10) | 0.5000 | 0.5640 | 113 | 3.15 | 50 | 50 - 150 |

# LCS / LCS DUPLICATE RECOVERY

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F07029 | Laboratory ID: | 1F07029-BS1 |
| Preparation: | 8015GRO | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Gasoline Range Organics (C6-C10) | 0.5000 | 0.6122 | 122 | 50 - 150 |

| ANALYTE | SPIKE ADDED (mg/L) | LCSD CONCENTRATION (mg/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Gasoline Range Organics (C6-C10) | 0.5000 | 0.6172 | 123 | 0.815 | 50 | 50 - 150 |

# PREPARATION BATCH SUMMARY

## SW8015B GRO

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E20010 Batch Matrix: Water Preparation: 8015GRO

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 05/25/11 09:38 | 5.00 | 5.00 |
| GW8012-RB | 1105208-03 | 05/25/11 09:38 | 5.00 | 5.00 |
| Blank | 1E20010-BLK1 | 05/25/11 09:38 | 5.00 | 5.00 |
| LCS | 1E20010-BS1 | 05/25/11 09:38 | 5.00 | 5.00 |
| LCS Dup | 1E20010-BSD1 | 05/25/11 09:38 | 5.00 | 5.00 |

# PREPARATION BATCH SUMMARY

## SW8015B GRO

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F07029 Batch Matrix: Water Preparation: 8015GRO

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0064 | 1105217-01 | 06/07/11 17:25 | 5.00 | 5.00 |
| GW0065 | 1105225-01 | 06/07/11 17:25 | 5.00 | 5.00 |
| GW0066 | 1105225-03 | 06/07/11 17:25 | 5.00 | 5.00 |
| Blank | 1F07029-BLK1 | 06/07/11 17:25 | 5.00 | 5.00 |
| LCS | 1F07029-BS1 | 06/07/11 17:25 | 5.00 | 5.00 |
| LCS Dup | 1F07029-BSD1 | 06/07/11 17:25 | 5.00 | 5.00 |

# INITIAL CALIBRATION STANDARDS

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E12909 | Instrument: | GL-GCVOA2 |
| Calibration: | 1129002 | | |

| Standard ID | Description | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|---|
| 11E0203 | GRO Cal 0.1ppm | 1E12909-CAL1 | 003F0301.D | 05/06/11 13:31 |
| 11E0204 | GRO Cal 0.2ppm | 1E12909-CAL2 | 004F0401.D | 05/06/11 14:07 |
| 11E0205 | GRO Cal 0.5ppm | 1E12909-CAL3 | 005F0501.D | 05/06/11 14:43 |
| 11E0206 | GRO Cal 1.0ppm | 1E12909-CAL4 | 006F0601.D | 05/06/11 15:19 |
| 11E0207 | GRO Cal 2.0ppm | 1E12909-CAL5 | 007F0701.D | 05/06/11 15:55 |
| 11E0208 | GRO Cal 5.0ppm | 1E12909-CAL6 | 008F0801.D | 05/06/11 16:31 |

# INITIAL CALIBRATION DATA

## SW8015B GRO

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1129002 | Instrument: | GL-GCVOA2 | |
| Matrix: | Water | Calibration Dates: | 5/6/11_13:31 | 5/6/11_16:31 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF | ug/mL | RF |
| Gasoline Range Organics (C6-C10 | 5 | 1934846 | 2 | 2010328 | 1 | 2211392 | 0.5 | 2202664 | 0.2 | 3018605 | 0.1 | 3836990 |
| Bromofluorobenzene | 0.5 | 1133264 | 0.2 | 1271385 | 0.1 | 1371040 | 0.05 | 1400780 | 0.02 | 1524700 | 0.01 | 1731400 |

# INITIAL CALIBRATION DATA (Continued)

## SW8015B GRO

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1129002 | Instrument: | GL-GCVOA2 | |
| Matrix: | Water | Calibration Dates: | 5/6/11 13:31 | 5/6/11 16:31 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics (C6-C10) | 2535804 | 29.40336 | 7.233 | 2.067693E-02 | 0.9997615 | | 0.995 | |
| Bromofluorobenzene | 1405428 | 14.71084 | 19.5535 | 4.036379E-02 | | | 20 | |

# INITIAL CALIBRATION CHECK

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCVOA2 | Calibration: | 1129002 |
| Lab File ID: | 009F0901.D | Calibration Date: | 05/06/11 13:01 |
| Sequence: | 1E12909 | Injection Date: | 05/06/11 |
| Lab Sample ID: | 1E12909-ICV1 | Injection Time: | 17:07 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Gasoline Range Organics (C6-C10) | L | 0.5000 | 0.5538 | 2535804 | 2539888 | | 10.8 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCVOA2 | Calibration: | 1129002 |
| Lab File ID: | 003F0301.D | Calibration Date: | 05/06/11 13:01 |
| Sequence: | 1E14609 | Injection Date: | 05/25/11 |
| Lab Sample ID: | 1E14609-CCV1 | Injection Time: | 12:31 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Gasoline Range Organics (C6-C10) | L | 0.5000 | 0.5584 | 2535804 | 2557350 | | 11.7 | 20 |
| Bromofluorobenzene | A | 0.05000 | 0.04861 | 1405428 | 1366340 | | -2.8 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCVOA2 | Calibration: | 1129002 |
| Lab File ID: | 014F1401.D | Calibration Date: | 05/06/11 13:01 |
| Sequence: | 1E14609 | Injection Date: | 05/25/11 |
| Lab Sample ID: | 1E14609-CCV2 | Injection Time: | 19:07 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Gasoline Range Organics (C6-C10) | L | 0.5000 | 0.5362 | 2535804 | 2472966 | | 7.2 | 20 |
| Bromofluorobenzene | A | 0.05000 | 0.05075 | 1405428 | 1426420 | | 1.5 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCVOA2 | Calibration: | 1129002 |
| Lab File ID: | 003F0301.D | Calibration Date: | 05/06/11 13:01 |
| Sequence: | 1F16007 | Injection Date: | 06/07/11 |
| Lab Sample ID: | 1F16007-CCV1 | Injection Time: | 19:06 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Gasoline Range Organics (C6-C10) | L | 0.5000 | 0.5871 | 2535804 | 2665966 | | 17.4 | 20 |
| Bromofluorobenzene | A | 0.05000 | 0.05058 | 1405428 | 1421640 | | 1.2 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCVOA2 | Calibration: | 1129002 |
| Lab File ID: | 011F1101.D | Calibration Date: | 05/06/11 13:01 |
| Sequence: | 1F16007 | Injection Date: | 06/08/11 |
| Lab Sample ID: | 1F16007-CCV2 | Injection Time: | 00:11 |

| | | CONC. (ug/mL) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Gasoline Range Organics (C6-C10) | L | 0.5000 | 0.5805 | 2535804 | 2640984 | | 16.1 | 20 |
| Bromofluorobenzene | A | 0.05000 | 0.05095 | 1405428 | 1432160 | | 1.9 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E14609 | Instrument: | GL-GCVOA2 |
| | | Calibration: | 1129002 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E14609-CCV1 ) ug/mL** | | | | Lab File ID: 003F0301.D | | Analyzed: 05/25/11 12:31 | | |
| Bromofluorobenzene | 0.05000 | 97.2 | 80 - 120 | 19.556 | 19.556 | 0.0000 | +/-0.210 | |
| **Blank (1E20010-BLK1 ) mg/L** | | | | Lab File ID: 004F0401.D | | Analyzed: 05/25/11 13:06 | | |
| Bromofluorobenzene | 0.05000 | 92.4 | 50 - 150 | 19.556 | 19.556 | 0.0000 | +/-0.210 | |
| **LCS (1E20010-BS1 ) mg/L** | | | | Lab File ID: 005F0501.D | | Analyzed: 05/25/11 13:42 | | |
| Bromofluorobenzene | 0.05000 | 96.2 | 50 - 150 | 19.553 | 19.556 | -0.0030 | +/-0.210 | |
| **LCS Dup (1E20010-BSD1 ) mg/L** | | | | Lab File ID: 006F0601.D | | Analyzed: 05/25/11 14:18 | | |
| Bromofluorobenzene | 0.05000 | 95.0 | 50 - 150 | 19.556 | 19.556 | 0.0000 | +/-0.210 | |
| **GW0102 (1105208-01 ) mg/L** | | | | Lab File ID: 012F1201.D | | Analyzed: 05/25/11 17:54 | | |
| Bromofluorobenzene | 0.05000 | 93.0 | 50 - 150 | 19.556 | 19.556 | 0.0000 | +/-0.210 | |
| **GW8012-RB (1105208-03 ) mg/L** | | | | Lab File ID: 013F1301.D | | Analyzed: 05/25/11 18:31 | | |
| Bromofluorobenzene | 0.05000 | 87.8 | 50 - 150 | 19.56 | 19.556 | 0.0040 | +/-0.210 | |
| **Calibration Check (1E14609-CCV2 ) ug/mL** | | | | Lab File ID: 014F1401.D | | Analyzed: 05/25/11 19:07 | | |
| Bromofluorobenzene | 0.05000 | 102 | 80 - 120 | 19.56 | 19.556 | 0.0040 | +/-0.210 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8015B GRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F16007 | Instrument: | GL-GCVOA2 |
| | | Calibration: | 1129002 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F16007-CCV1 ) ug/mL** | | | | Lab File ID: 003F0301.D | | Analyzed: 06/07/11 19:06 | | |
| Bromofluorobenzene | 0.05000 | 101 | 80 - 120 | 19.53 | 19.53 | 0.0000 | +/-0.210 | |
| **Blank (1F07029-BLK1 ) mg/L** | | | | Lab File ID: 004F0401.D | | Analyzed: 06/07/11 19:45 | | |
| Bromofluorobenzene | 0.05000 | 96.6 | 50 - 150 | 19.533 | 19.53 | 0.0030 | +/-0.210 | |
| **LCS (1F07029-BS1 ) mg/L** | | | | Lab File ID: 005F0501.D | | Analyzed: 06/07/11 20:22 | | |
| Bromofluorobenzene | 0.05000 | 105 | 50 - 150 | 19.533 | 19.53 | 0.0030 | +/-0.210 | |
| **LCS Dup (1F07029-BSD1 ) mg/L** | | | | Lab File ID: 006F0601.D | | Analyzed: 06/07/11 20:59 | | |
| Bromofluorobenzene | 0.05000 | 104 | 50 - 150 | 19.536 | 19.53 | 0.0060 | +/-0.210 | |
| **GW0064 (1105217-01 ) mg/L** | | | | Lab File ID: 007F0701.D | | Analyzed: 06/07/11 21:36 | | |
| Bromofluorobenzene | 0.05000 | 102 | 50 - 150 | 19.536 | 19.53 | 0.0060 | +/-0.210 | |
| **GW0065 (1105225-01 ) mg/L** | | | | Lab File ID: 009F0901.D | | Analyzed: 06/07/11 22:52 | | |
| Bromofluorobenzene | 0.05000 | 108 | 50 - 150 | 19.533 | 19.53 | 0.0030 | +/-0.210 | |
| **GW0066 (1105225-03 ) mg/L** | | | | Lab File ID: 010F1001.D | | Analyzed: 06/07/11 23:31 | | |
| Bromofluorobenzene | 0.05000 | 92.9 | 50 - 150 | 19.53 | 19.53 | 0.0000 | +/-0.210 | |
| **Calibration Check (1F16007-CCV2 ) ug/mL** | | | | Lab File ID: 011F1101.D | | Analyzed: 06/08/11 00:11 | | |
| Bromofluorobenzene | 0.05000 | 102 | 80 - 120 | 19.526 | 19.53 | -0.0040 | +/-0.210 | |

# HOLDING TIME SUMMARY

## SW8015B GRO

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| GW0102 | 05/23/11 14:43 | 05/24/11 09:00 | 05/25/11 09:38 | N/A | 14.00 | 05/25/11 17:54 | 2.09 | 14.00 | |
| GW8012-RB | 05/23/11 08:47 | 05/24/11 09:00 | 05/25/11 09:38 | N/A | 14.00 | 05/25/11 18:31 | 2.36 | 14.00 | |
| GW0064 | 05/24/11 13:58 | 05/25/11 09:00 | 06/07/11 17:25 | N/A | 14.00 | 06/07/11 21:36 | 14.28 | 14.00 | |
| GW0065 | 05/25/11 10:42 | 05/26/11 09:00 | 06/07/11 17:25 | N/A | 14.00 | 06/07/11 22:52 | 13.47 | 14.00 | |
| GW0066 | 05/25/11 13:56 | 05/26/11 09:00 | 06/07/11 17:25 | N/A | 14.00 | 06/07/11 23:31 | 13.36 | 14.00 | |

# ANALYSIS DATA SHEET

**Blank**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | | Laboratory ID: | 1E20010-BLK1 | File ID: | 004F0401.D |
| Sampled: | | Prepared: | | Analyzed: | 05/25/11 13:06 |
| Solids: | | Preparation: | 8015GRO | Dilution: | |

Batch: 1E20010 Sequence: 1E14609 Calibration: 1129002 Instrument: GL-GCVOA2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | | 0.0500 | 0.100 | 0.150 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.04619 | 92.4 | 50 - 150 | |

# ANALYSIS DATA SHEET

**LCS**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |

| | | | | | |
|---|---|---|---|---|---|
| Matrix: | | Laboratory ID: | 1E20010-BS1 | File ID: | 005F0501.D |
| Sampled: | | Prepared: | | Analyzed: | 05/25/11 13:42 |
| Solids: | | Preparation: | 8015GRO | Dilution: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Batch: | 1E20010 | Sequence: | 1E14609 | Calibration: | 1129002 | Instrument: | GL-GCVOA2 |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | 0.5820 | 0.0500 | 0.100 | 0.150 | |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.04808 | 96.2 | 50 - 150 | |

# ANALYSIS DATA SHEET

**LCS Dup**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |

| | | | | | |
|---|---|---|---|---|---|
| Matrix: | | Laboratory ID: | 1E20010-BSD1 | File ID: | 006F0601.D |
| Sampled: | | Prepared: | | Analyzed: | 05/25/11 14:18 |
| Solids: | | Preparation: | 8015GRO | Dilution: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Batch: | 1E20010 | Sequence: | 1E14609 | Calibration: | 1129002 | Instrument: | GL-GCVOA2 |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | 0.5640 | 0.0500 | 0.100 | 0.150 | |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.04751 | 95.0 | 50 - 150 | |

# ANALYSIS DATA SHEET

**Blank**

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Matrix:
Laboratory ID: 1F07029-BLK1
File ID: 004F0401.D
Sampled:
Prepared:
Analyzed: 06/07/11 19:45
Solids:
Preparation: 8015GRO
Dilution:
Batch: 1F07029
Sequence: 1F16007
Calibration: 1129002
Instrument: GL-GCVOA2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | | 0.0500 | 0.100 | 0.150 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.04829 | 96.6 | 50 - 150 | |

# ANALYSIS DATA SHEET

**LCS**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |

| | | | | | |
|---|---|---|---|---|---|
| Matrix: | | Laboratory ID: | 1F07029-BS1 | File ID: | 005F0501.D |
| Sampled: | | Prepared: | | Analyzed: | 06/07/11 20:22 |
| Solids: | | Preparation: | 8015GRO | Dilution: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Batch: | 1F07029 | Sequence: | 1F16007 | Calibration: | 1129002 | Instrument: | GL-GCVOA2 |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | 0.6122 | 0.0500 | 0.100 | 0.150 | |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.05269 | 105 | 50 - 150 | |

# ANALYSIS DATA SHEET

**LCS Dup**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |

| | | | | | |
|---|---|---|---|---|---|
| Matrix: | | Laboratory ID: | 1F07029-BSD1 | File ID: | 006F0601.D |
| Sampled: | | Prepared: | | Analyzed: | 06/07/11 20:59 |
| Solids: | | Preparation: | 8015GRO | Dilution: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Batch: | 1F07029 | Sequence: | 1F16007 | Calibration: | 1129002 | Instrument: | GL-GCVOA2 |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics (C6-C10) | 0.6172 | 0.0500 | 0.100 | 0.150 | |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| Bromofluorobenzene | 0.05000 | 0.05212 | 104 | 50 - 150 | |

# METHOD DETECTION AND REPORTING LIMITS

**Laboratory:** Empirical Laboratories, LLC
**SDG:** Kirtland_014
**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011
**Matrix:** Water
**Instrument:** GL-GCVOA2

| Analyte | MDL | MRL | Units | Method |
|---|---|---|---|---|
| Gasoline Range Organics (C6-C10) | 0.0500 | 0.150 | mg/L | SW8015B GRO |

# SW8015B (DRO)
# Forms

# ANALYSIS SEQUENCE SUMMARY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1B03804 | Instrument: | GL-GCFID |
| Calibration: | 1038002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1B03804-CAL6 | 003B0301.D | 02/04/11 11:28 |
| Cal Standard | 1B03804-CAL5 | 004B0401.D | 02/04/11 12:02 |
| Cal Standard | 1B03804-CAL4 | 005B0501.D | 02/04/11 12:35 |
| Cal Standard | 1B03804-CAL3 | 006B0601.D | 02/04/11 13:09 |
| Cal Standard | 1B03804-CAL2 | 007B0701.D | 02/04/11 13:42 |
| Cal Standard | 1B03804-CAL1 | 008B0801.D | 02/04/11 14:16 |
| Initial Cal Check | 1B03804-ICV1 | 009B0901.D | 02/04/11 14:50 |

# ANALYSIS SEQUENCE SUMMARY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E13009 | Instrument: | GL-GCFID2 |
| Calibration: | 1130003 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1E13009-CAL6 | 003F0301.D | 05/09/11 19:09 |
| Cal Standard | 1E13009-CAL5 | 004F0401.D | 05/09/11 19:42 |
| Cal Standard | 1E13009-CAL4 | 005F0501.D | 05/09/11 20:16 |
| Cal Standard | 1E13009-CAL3 | 006F0601.D | 05/09/11 20:50 |
| Cal Standard | 1E13009-CAL2 | 007F0701.D | 05/09/11 21:24 |
| Cal Standard | 1E13009-CAL1 | 008F0801.D | 05/09/11 21:57 |
| Initial Cal Check | 1E13009-ICV1 | 009F0901.D | 05/09/11 22:31 |

# ANALYSIS SEQUENCE SUMMARY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E14804 | Instrument: | GL-GCFID2 |
| Calibration: | 1130003 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1E14804-CCV1 | 003F0301.D | 05/25/11 10:33 |
| LCS | 1E23013-BS1 | 005F0501.D | 05/25/11 11:45 |
| GW0102 | 1105208-01 | 011F1101.D | 05/25/11 16:12 |
| GW8012-RB | 1105208-03 | 012F1201.D | 05/25/11 16:46 |
| Calibration Check | 1E14804-CCV2 | 013F1301.D | 05/25/11 17:20 |

# ANALYSIS SEQUENCE SUMMARY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15205 | Instrument: | GL-GCFID |
| Calibration: | 1038002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1F15205-CCV1 | 003B0301.D | 05/27/11 15:19 |
| Blank | 1E23013-BLK1 | 004B0101.D | 05/27/11 16:41 |
| Calibration Check | 1F15205-CCV2 | 005B0201.D | 05/27/11 17:14 |

# ANALYSIS SEQUENCE SUMMARY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15315 | Instrument: | GL-GCFID |
| Calibration: | 1038002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1F15315-CCV1 | 021B2101.D | 06/01/11 02:37 |
| Calibration Check | 1F15315-CCV2 | 037B3701.D | 06/01/11 11:42 |
| Blank | 1E31004-BLK1 | 039B3901.D | 06/01/11 12:51 |
| LCS | 1E31004-BS1 | 040B4001.D | 06/01/11 13:26 |
| GW0064 | 1105217-01 | 041B4101.D | 06/01/11 14:01 |
| GW0065 | 1105225-01 | 042B4201.D | 06/01/11 14:35 |
| GW0066 | 1105225-03 | 043B4301.D | 06/01/11 15:10 |
| Calibration Check | 1F15315-CCV3 | 048B4801.D | 06/01/11 18:34 |

# ANALYSIS DATA SHEET

**GW0102**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-01 | File ID: | 011F1101.D |
| Sampled: | 05/23/11 14:43 | Prepared: | 05/23/11 17:13 | Analyzed: | 05/25/11 16:12 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E23013 Sequence: 1E14804 Calibration: 1130003 Instrument: GL-GCFID2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | | 0.0962 | 0.0962 | 0.0962 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.01923 | 0.01187 | 61.7 | 30 - 140 | |

# ANALYSIS DATA SHEET

**GW8012-RB**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-03 | File ID: | 012F1201.D |
| Sampled: | 05/23/11 08:47 | Prepared: | 05/23/11 17:13 | Analyzed: | 05/25/11 16:46 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E23013 Sequence: 1E14804 Calibration: 1130003 Instrument: GL-GCFID2

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | | 0.0962 | 0.0962 | 0.0962 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.01923 | 0.01028 | 53.4 | 30 - 140 | |

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01 | File ID: | 041B4101.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 05/31/11 14:56 | Analyzed: | 06/01/11 14:01 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E31004 Sequence: 1F15315 Calibration: 1038002 Instrument: GL-GCFID

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | | 0.0943 | 0.0943 | 0.0943 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.01887 | 0.01778 | 94.2 | 30 - 140 | |

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01 | File ID: | 042B4201.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 05/31/11 14:56 | Analyzed: | 06/01/11 14:35 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E31004 Sequence: 1F15315 Calibration: 1038002 Instrument: GL-GCFID

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | | 0.0980 | 0.0980 | 0.0980 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.01961 | 0.01724 | 87.9 | 30 - 140 | |

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03 | File ID: | 043B4301.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 05/31/11 14:56 | Analyzed: | 06/01/11 15:10 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | 1 |

Batch: 1E31004 Sequence: 1F15315 Calibration: 1038002 Instrument: GL-GCFID

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | | 0.0943 | 0.0943 | 0.0943 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.01887 | 0.01846 | 97.9 | 30 - 140 | |

# LCS / LCS DUPLICATE RECOVERY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E23013 | Laboratory ID: | 1E23013-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Diesel Range Organics (C10-C28) | 1.000 | 0.6106 | 61.1 | 50 - 150 |

# LCS / LCS DUPLICATE RECOVERY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E31004 | Laboratory ID: | 1E31004-BS1 |
| Preparation: | EXT_3510 | Initial/Final: | 1000 mL / 1 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Diesel Range Organics (C10-C28) | 1.000 | 0.8968 | 89.7 | 50 - 150 |

# PREPARATION BATCH SUMMARY

## SW8015B DRO

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E23013 Batch Matrix: Water Preparation: EXT_3510

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 05/23/11 17:13 | 1,040.00 | 1.00 |
| GW8012-RB | 1105208-03 | 05/23/11 17:13 | 1,040.00 | 1.00 |
| Blank | 1E23013-BLK1 | 05/23/11 17:13 | 1,000.00 | 1.00 |
| LCS | 1E23013-BS1 | 05/23/11 17:13 | 1,000.00 | 1.00 |

# PREPARATION BATCH SUMMARY

## SW8015B DRO

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E31004 Batch Matrix: Water Preparation: EXT_3510

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0064 | 1105217-01 | 05/31/11 14:56 | 1,060.00 | 1.00 |
| GW0065 | 1105225-01 | 05/31/11 14:56 | 1,020.00 | 1.00 |
| GW0066 | 1105225-03 | 05/31/11 14:56 | 1,060.00 | 1.00 |
| Blank | 1E31004-BLK1 | 05/31/11 14:56 | 1,000.00 | 1.00 |
| LCS | 1E31004-BS1 | 05/31/11 14:56 | 1,000.00 | 1.00 |

# INITIAL CALIBRATION STANDARDS

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1B03804 | Instrument: | GL-GCFID |
| Calibration: | 1038002 | | |

| Standard ID | Description | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|---|
| 10K0188 | DRO ICAL6@100ppm | 1B03804-CAL6 | 003B0301.D | 02/04/11 11:28 |
| 10K0189 | DRO ICAL5@250ppm | 1B03804-CAL5 | 004B0401.D | 02/04/11 12:02 |
| 10K0190 | DRO ICAL4@500ppm | 1B03804-CAL4 | 005B0501.D | 02/04/11 12:35 |
| 10K0192 | DRO ICAL3@1000ppm | 1B03804-CAL3 | 006B0601.D | 02/04/11 13:09 |
| 10K0193 | DRO ICAL2@2500ppm | 1B03804-CAL2 | 007B0701.D | 02/04/11 13:42 |
| 10K0194 | DRO ICAL1@5000ppm | 1B03804-CAL1 | 008B0801.D | 02/04/11 14:16 |

# INITIAL CALIBRATION STANDARDS

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E13009 | Instrument: | GL-GCFID2 |
| Calibration: | 1130003 | | |

| Standard ID | Description | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|---|
| 11D0042 | DRO ICAL6@100ppm | 1E13009-CAL6 | 003F0301.D | 05/09/11 19:09 |
| 11D0043 | DRO ICAL5@250ppm | 1E13009-CAL5 | 004F0401.D | 05/09/11 19:42 |
| 11D0044 | DRO ICAL4@500ppm | 1E13009-CAL4 | 005F0501.D | 05/09/11 20:16 |
| 11D0045 | DRO ICAL3@1000ppm | 1E13009-CAL3 | 006F0601.D | 05/09/11 20:50 |
| 11D0046 | DRO ICAL2@2500ppm | 1E13009-CAL2 | 007F0701.D | 05/09/11 21:24 |
| 11D0047 | DRO ICAL1@5000ppm | 1E13009-CAL1 | 008F0801.D | 05/09/11 21:57 |

# INITIAL CALIBRATION DATA

## SW8015B DRO

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1038002 | Instrument: | GL-GCFID | |
| Matrix: | Water | Calibration Dates: | 2/4/11_11:28 | 2/4/11_14:16 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | RF | mg/L | RF | mg/L | RF | mg/L | RF | mg/L | RF | mg/L | RF |
| Diesel Range Organics (C10-C28) | 100 | 1351.87 | 250 | 1499.38 | 500 | 1574.304 | 1000 | 1676.537 | 2500 | 1883.202 | 5000 | 1703.416 |
| o-Terphenyl | 5 | 1984.4 | 12.5 | 1928.48 | 25 | 1883.4 | 50 | 1943.72 | 125 | 1932.104 | 250 | 1921.648 |

# INITIAL CALIBRATION DATA (Continued)

## SW8015B DRO

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1038002 | Instrument: | GL-GCFID | |
| Matrix: | Water | Calibration Dates: | 2/4/11 11:28 | 2/4/11 14:16 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (C10-C28) | 1614.785 | 11.34472 | 6.25 | 0 | | | 20 | |
| o-Terphenyl | 1932.292 | 1.695087 | 11.31367 | 0.0744468 | | | 20 | |

# INITIAL CALIBRATION DATA

## SW8015B DRO

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1130003 | Instrument: | GL-GCFID2 | |
| Matrix: | Water | Calibration Dates: | 5/9/11_19:09 | 5/9/11_21:57 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | RF | mg/L | RF | mg/L | RF | mg/L | RF | mg/L | RF | mg/L | RF |
| Diesel Range Organics (C10-C28) | 100 | 1983.15 | 250 | 2371.384 | 500 | 2470.962 | 1000 | 2809.255 | 2500 | 2564.569 | 5000 | 2592.746 |
| Diesel Range Organics (C8-C40) | 100 | | 250 | | 500 | | 1000 | | 2500 | | 5000 | |
| o-Terphenyl | 5 | 2079.4 | 12.5 | 2790.96 | 25 | 2786.36 | 50 | 2966.5 | 125 | 3005.696 | 250 | 2946.7 |

# INITIAL CALIBRATION DATA (Continued)

## SW8015B DRO

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1130003 | Instrument: | GL-GCFID2 | |
| Matrix: | Water | Calibration Dates: | 5/9/11 19:09 | 5/9/11 21:57 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics (C10-C28) | 2465.344 | 11.26614 | 4.32 | 1.350901E-02 | | | 20 | |
| Diesel Range Organics (C8-C40) | | | | | | | 20 | |
| o-Terphenyl | 2762.603 | 12.56739 | 8.0125 | 0.1625157 | | | 20 | |

# INITIAL CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID | Calibration: | 1038002 |
| Lab File ID: | 009B0901.D | Calibration Date: | 02/04/11 11:28 |
| Sequence: | 1B03804 | Injection Date: | 02/04/11 |
| Lab Sample ID: | 1B03804-ICV1 | Injection Time: | 14:50 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1178 | 1614.785 | 1901.657 | | 17.8 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# INITIAL CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID2 | Calibration: | 1130003 |
| Lab File ID: | 009F0901.D | Calibration Date: | 05/09/11 00:00 |
| Sequence: | 1E13009 | Injection Date: | 05/09/11 |
| Lab Sample ID: | 1E13009-ICV1 | Injection Time: | 22:31 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1012 | 2465.344 | 2494.116 | | 1.2 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID2 | Calibration: | 1130003 |
| Lab File ID: | 003F0301.D | Calibration Date: | 05/09/11 00:00 |
| Sequence: | 1E14804 | Injection Date: | 05/25/11 |
| Lab Sample ID: | 1E14804-CCV1 | Injection Time: | 10:33 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1030 | 2465.344 | 2540.169 | | 3.0 | 20 |
| o-Terphenyl | A | 50.00 | 49.51 | 2762.603 | 2735.68 | | -1.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID2 | Calibration: | 1130003 |
| Lab File ID: | 013F1301.D | Calibration Date: | 05/09/11 00:00 |
| Sequence: | 1E14804 | Injection Date: | 05/25/11 |
| Lab Sample ID: | 1E14804-CCV2 | Injection Time: | 17:20 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1094 | 2465.344 | 2698.556 | | 9.5 | 20 |
| o-Terphenyl | A | 50.00 | 48.32 | 2762.603 | 2669.88 | | -3.4 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID | Calibration: | 1038002 |
| Lab File ID: | 003B0301.D | Calibration Date: | 02/04/11 11:28 |
| Sequence: | 1F15205 | Injection Date: | 05/27/11 |
| Lab Sample ID: | 1F15205-CCV1 | Injection Time: | 15:19 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1058 | 1614.785 | 1708.902 | | 5.8 | 20 |
| o-Terphenyl | A | 50.00 | 49.69 | 1932.292 | 1920.2 | | -0.6 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID | Calibration: | 1038002 |
| Lab File ID: | 005B0201.D | Calibration Date: | 02/04/11 11:28 |
| Sequence: | 1F15205 | Injection Date: | 05/27/11 |
| Lab Sample ID: | 1F15205-CCV2 | Injection Time: | 17:14 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1058 | 1614.785 | 1707.665 | | 5.8 | 20 |
| o-Terphenyl | A | 50.00 | 49.20 | 1932.292 | 1901.22 | | -1.6 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID | Calibration: | 1038002 |
| Lab File ID: | 021B2101.D | Calibration Date: | 02/04/11 11:28 |
| Sequence: | 1F15315 | Injection Date: | 06/01/11 |
| Lab Sample ID: | 1F15315-CCV1 | Injection Time: | 02:37 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1100 | 1614.785 | 1775.737 | | 10.0 | 20 |
| o-Terphenyl | A | 50.00 | 51.01 | 1932.292 | 1971.5 | | 2.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID | Calibration: | 1038002 |
| Lab File ID: | 037B3701.D | Calibration Date: | 02/04/11 11:28 |
| Sequence: | 1F15315 | Injection Date: | 06/01/11 |
| Lab Sample ID: | 1F15315-CCV2 | Injection Time: | 11:42 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1058 | 1614.785 | 1709.22 | | 5.8 | 20 |
| o-Terphenyl | A | 50.00 | 49.57 | 1932.292 | 1915.58 | | -0.9 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-GCFID | Calibration: | 1038002 |
| Lab File ID: | 048B4801.D | Calibration Date: | 02/04/11 11:28 |
| Sequence: | 1F15315 | Injection Date: | 06/01/11 |
| Lab Sample ID: | 1F15315-CCV3 | Injection Time: | 18:34 |

| | | CONC. (mg/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| Diesel Range Organics (C10-C28) | A | 1000 | 1088 | 1614.785 | 1756.14 | | 8.8 | 20 |
| o-Terphenyl | A | 50.00 | 50.79 | 1932.292 | 1962.72 | | 1.6 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E14804 | Instrument: | GL-GCFID2 |
| | | Calibration: | 1130003 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1E14804-CCV1 ) mg/L** | | | | Lab File ID: 003F0301.D | | Analyzed: 05/25/11 10:33 | | |
| o-Terphenyl | 50.00 | 99.0 | 80 - 120 | 8.006 | 8.006 | 0.0000 | +/-0.050 | |
| **LCS (1E23013-BS1 ) mg/L** | | | | Lab File ID: 005F0501.D | | Analyzed: 05/25/11 11:45 | | |
| o-Terphenyl | 0.02000 | 68.9 | 30 - 140 | 8.02 | 8.006 | 0.0140 | +/-0.050 | |
| **GW0102 (1105208-01 ) mg/L** | | | | Lab File ID: 011F1101.D | | Analyzed: 05/25/11 16:12 | | |
| o-Terphenyl | 0.01923 | 61.7 | 30 - 140 | 8.043 | 8.006 | 0.0370 | +/-0.050 | |
| **GW8012-RB (1105208-03 ) mg/L** | | | | Lab File ID: 012F1201.D | | Analyzed: 05/25/11 16:46 | | |
| o-Terphenyl | 0.01923 | 53.4 | 30 - 140 | 8.06 | 8.006 | 0.0540 | +/-0.050 | * |
| **Calibration Check (1E14804-CCV2 ) mg/L** | | | | Lab File ID: 013F1301.D | | Analyzed: 05/25/11 17:20 | | |
| o-Terphenyl | 50.00 | 96.6 | 80 - 120 | 7.993 | 8.006 | -0.0130 | +/-0.050 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15205 | Instrument: | GL-GCFID |
| | | Calibration: | 1038002 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F15205-CCV1 ) mg/L** | | | | Lab File ID: 003B0301.D | | Analyzed: 05/27/11 15:19 | | |
| o-Terphenyl | 50.00 | 99.4 | 80 - 120 | 11.003 | 11.003 | 0.0000 | +/-0.050 | |
| **Blank (1E23013-BLK1 ) mg/L** | | | | Lab File ID: 004B0101.D | | Analyzed: 05/27/11 16:41 | | |
| o-Terphenyl | 0.02000 | 81.8 | 30 - 140 | 11.06 | 11.003 | 0.0570 | +/-0.050 | * |
| **Calibration Check (1F15205-CCV2 ) mg/L** | | | | Lab File ID: 005B0201.D | | Analyzed: 05/27/11 17:14 | | |
| o-Terphenyl | 50.00 | 98.4 | 80 - 120 | 11.006 | 11.003 | 0.0030 | +/-0.050 | |

# SURROGATE STANDARD RECOVERY AND RT SUMMARY

## SW8015B DRO

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15315 | Instrument: | GL-GCFID |
| | | Calibration: | 1038002 |

| Surrogate Compound | Spike Level | % Recovery | Recovery Limits | RT | CCV RT | RT Diff | RT Diff Limit | Q |
|---|---|---|---|---|---|---|---|---|
| **Calibration Check (1F15315-CCV1 ) mg/L** | | | | Lab File ID: 021B2101.D | | Analyzed: 06/01/11 02:37 | | |
| o-Terphenyl | 50.00 | 102 | 80 - 120 | 10.983 | 10.983 | 0.0000 | +/-0.050 | |
| **Calibration Check (1F15315-CCV2 ) mg/L** | | | | Lab File ID: 037B3701.D | | Analyzed: 06/01/11 11:42 | | |
| o-Terphenyl | 50.00 | 99.1 | 80 - 120 | 11.016 | 10.983 | 0.0330 | +/-0.050 | |
| **Blank (1E31004-BLK1 ) mg/L** | | | | Lab File ID: 039B3901.D | | Analyzed: 06/01/11 12:51 | | |
| o-Terphenyl | 0.02000 | 88.8 | 30 - 140 | 11.043 | 10.983 | 0.0600 | +/-0.050 | * |
| **LCS (1E31004-BS1 ) mg/L** | | | | Lab File ID: 040B4001.D | | Analyzed: 06/01/11 13:26 | | |
| o-Terphenyl | 0.02000 | 97.0 | 30 - 140 | 11.036 | 10.983 | 0.0530 | +/-0.050 | * |
| **GW0064 (1105217-01 ) mg/L** | | | | Lab File ID: 041B4101.D | | Analyzed: 06/01/11 14:01 | | |
| o-Terphenyl | 0.01887 | 94.2 | 30 - 140 | 11.046 | 10.983 | 0.0630 | +/-0.050 | * |
| **GW0065 (1105225-01 ) mg/L** | | | | Lab File ID: 042B4201.D | | Analyzed: 06/01/11 14:35 | | |
| o-Terphenyl | 0.01961 | 87.9 | 30 - 140 | 11.05 | 10.983 | 0.0670 | +/-0.050 | * |
| **GW0066 (1105225-03 ) mg/L** | | | | Lab File ID: 043B4301.D | | Analyzed: 06/01/11 15:10 | | |
| o-Terphenyl | 0.01887 | 97.9 | 30 - 140 | 11.106 | 10.983 | 0.1230 | +/-0.050 | * |
| **Calibration Check (1F15315-CCV3 ) mg/L** | | | | Lab File ID: 048B4801.D | | Analyzed: 06/01/11 18:34 | | |
| o-Terphenyl | 50.00 | 102 | 80 - 120 | 11.06 | 10.983 | 0.0770 | +/-0.050 | * |

# HOLDING TIME SUMMARY

## SW8015B DRO

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| GW0102 | 05/23/11 14:43 | 05/24/11 09:00 | 05/23/11 17:13 | 0.06 | 7.00 | 05/25/11 16:12 | 1.96 | 40.00 | |
| GW8012-RB | 05/23/11 08:47 | 05/24/11 09:00 | 05/23/11 17:13 | 0.31 | 7.00 | 05/25/11 16:46 | 1.98 | 40.00 | |
| GW0064 | 05/24/11 13:58 | 05/25/11 09:00 | 05/31/11 14:56 | 7.00 | 7.00 | 06/01/11 14:01 | 0.96 | 40.00 | |
| GW0065 | 05/25/11 10:42 | 05/26/11 09:00 | 05/31/11 14:56 | 6.13 | 7.00 | 06/01/11 14:35 | 0.99 | 40.00 | |
| GW0066 | 05/25/11 13:56 | 05/26/11 09:00 | 05/31/11 14:56 | 6.00 | 7.00 | 06/01/11 15:10 | 1.01 | 40.00 | |

# ANALYSIS DATA SHEET

**Blank**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | | Laboratory ID: | 1E23013-BLK1 | File ID: | 004B0101.D |
| Sampled: | | Prepared: | | Analyzed: | 05/27/11 16:41 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | |

Batch: 1E23013 Sequence: 1F15205 Calibration: 1038002 Instrument: GL-GCFID

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | | 0.100 | 0.100 | 0.100 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.02000 | 0.01636 | 81.8 | 30 - 140 | |

# ANALYSIS DATA SHEET

**LCS**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |

| | | | | | |
|---|---|---|---|---|---|
| Matrix: | | Laboratory ID: | 1E23013-BS1 | File ID: | 005F0501.D |
| Sampled: | | Prepared: | | Analyzed: | 05/25/11 11:45 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Batch: | 1E23013 | Sequence: | 1E14804 | Calibration: | 1130003 | Instrument: | GL-GCFID2 |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | 0.6106 | 0.100 | 0.100 | 0.100 | |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.02000 | 0.01379 | 68.9 | 30 - 140 | |

# ANALYSIS DATA SHEET

**Blank**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | | Laboratory ID: | 1E31004-BLK1 | File ID: | 039B3901.D |
| Sampled: | | Prepared: | | Analyzed: | 06/01/11 12:51 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | |

Batch: 1E31004 Sequence: 1F15315 Calibration: 1038002 Instrument: GL-GCFID

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | | 0.100 | 0.100 | 0.100 | U |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.02000 | 0.01776 | 88.8 | 30 - 140 | |

# ANALYSIS DATA SHEET

**LCS**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |

| | | | | | |
|---|---|---|---|---|---|
| Matrix: | | Laboratory ID: | 1E31004-BS1 | File ID: | 040B4001.D |
| Sampled: | | Prepared: | | Analyzed: | 06/01/11 13:26 |
| Solids: | | Preparation: | EXT_3510 | Dilution: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Batch: | 1E31004 | Sequence: | 1F15315 | Calibration: | 1038002 | Instrument: | GL-GCFID |

| CAS NO. | COMPOUND | CONC. (mg/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 11-84-7 | Diesel Range Organics (C10-C28) | 0.8968 | 0.100 | 0.100 | 0.100 | |

| SYSTEM MONITORING COMPOUND | ADDED (mg/L) | CONC (mg/L) | % REC | QC LIMITS | Q |
|---|---|---|---|---|---|
| o-Terphenyl | 0.02000 | 0.01939 | 97.0 | 30 - 140 | |

# METHOD DETECTION AND REPORTING LIMITS

**Laboratory:** Empirical Laboratories, LLC
**SDG:** Kirtland_014
**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011
**Matrix:** Water
**Instrument:** GL-GCFID

| Analyte | MDL | MRL | Units | Method |
|---|---|---|---|---|
| Diesel Range Organics (C10-C28) | 0.100 | 0.100 | mg/L | SW8015B DRO |

# METHOD DETECTION AND REPORTING LIMITS

**Laboratory:** Empirical Laboratories, LLC
**SDG:** Kirtland_014
**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011
**Matrix:** Water
**Instrument:** GL-GCFID2

| Analyte | MDL | MRL | Units | Method |
|---|---|---|---|---|
| Diesel Range Organics (C10-C28) | 0.100 | 0.100 | mg/L | SW8015B DRO |

# Data for SW8011 Forms

# ANALYSIS SEQUENCE SUMMARY

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1D11806 | Instrument: | GL-ECD2 |
| Calibration: | 1118002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1D11806-CAL1 | 003R0101.D | 04/26/11 12:07 |
| Cal Standard | 1D11806-CAL1 | 003F0101.D | 04/26/11 12:07 |
| Cal Standard | 1D11806-CAL2 | 004R0101.D | 04/26/11 12:23 |
| Cal Standard | 1D11806-CAL2 | 004F0101.D | 04/26/11 12:23 |
| Cal Standard | 1D11806-CAL3 | 005R0101.D | 04/26/11 12:44 |
| Cal Standard | 1D11806-CAL3 | 005F0101.D | 04/26/11 12:44 |
| Cal Standard | 1D11806-CAL4 | 006R0101.D | 04/26/11 13:05 |
| Cal Standard | 1D11806-CAL4 | 006F0101.D | 04/26/11 13:05 |
| Cal Standard | 1D11806-CAL5 | 007R0101.D | 04/26/11 13:27 |
| Cal Standard | 1D11806-CAL5 | 007F0101.D | 04/26/11 13:27 |
| Cal Standard | 1D11806-CAL6 | 008R0101.D | 04/26/11 13:48 |
| Cal Standard | 1D11806-CAL6 | 008F0101.D | 04/26/11 13:48 |
| Initial Cal Check | 1D11806-ICV1 | 009R0101.D | 04/26/11 14:10 |
| Initial Cal Check | 1D11806-ICV1 | 009F0101.D | 04/26/11 14:10 |

# ANALYSIS SEQUENCE SUMMARY

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15413 | Instrument: | GL-ECD2 |
| Calibration: | 1118002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1F15413-CCV1 | 002R0101.D | 06/01/11 14:37 |
| Calibration Check | 1F15413-CCV1 | 002F0101.D | 06/01/11 14:37 |
| Blank | 1E31001-BLK1 | 004R0101.D | 06/01/11 15:28 |
| LCS | 1E31001-BS1 | 005R0101.D | 06/01/11 15:44 |
| LCS | 1E31001-BS1 | 005F0101.D | 06/01/11 15:44 |
| LCS Dup | 1E31001-BSD1 | 006R0101.D | 06/01/11 16:06 |
| LCS Dup | 1E31001-BSD1 | 006F0101.D | 06/01/11 16:06 |
| GW0102 | 1105208-01 | 010R0101.D | 06/01/11 17:32 |
| GW0065 | 1105225-01 | 012R0101.D | 06/01/11 18:15 |
| GW0066 | 1105225-03 | 013R0101.D | 06/01/11 18:37 |
| GW0066 | 1105225-03 | 013F0101.D | 06/01/11 18:37 |
| Calibration Check | 1F15413-CCV2 | 016R0101.D | 06/01/11 19:41 |
| Calibration Check | 1F15413-CCV2 | 016F0101.D | 06/01/11 19:41 |

# ANALYSIS SEQUENCE SUMMARY

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15908 | Instrument: | GL-ECD2 |
| Calibration: | 1118002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1F15908-CCV1 | 002R0101.D | 06/06/11 14:23 |
| Calibration Check | 1F15908-CCV1 | 002F0101.D | 06/06/11 14:23 |
| GW0064 | 1105217-01RE1 | 013R0101.D | 06/06/11 18:25 |
| GW0064 | 1105217-01RE1 | 013F0101.D | 06/06/11 18:25 |
| Calibration Check | 1F15908-CCV2 | 016R0101.D | 06/06/11 19:30 |
| Calibration Check | 1F15908-CCV2 | 016F0101.D | 06/06/11 19:30 |

# ANALYSIS DATA SHEET

**GW0102**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-01 | File ID: | 010R0101.D |
| Sampled: | 05/23/11 14:43 | Prepared: | 05/31/11 08:47 | Analyzed: | 06/01/11 17:32 |
| Solids: | | Preparation: | EDB | Dilution: | 1 |

Batch: 1E31001 Sequence: 1F15413 Calibration: 1118002 Instrument: GL-ECD2

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | | 0.00944 | 0.0189 | 0.0283 | U |

* Values outside of QC limits

# ANALYSIS DATA SHEET

**GW0064**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01RE1 | File ID: | 013F0101.D |
| Sampled: | 05/24/11 13:58 | Prepared: | 05/31/11 08:47 | Analyzed: | 06/06/11 18:25 |
| Solids: | | Preparation: | EDB | Dilution: | 2 |

Batch: 1E31001 Sequence: 1F15908 Calibration: 1118002 Instrument: GL-ECD2

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | 1.12 | 0.0188 | 0.0377 | 0.0565 | D |

* Values outside of QC limits

# ANALYSIS DATA SHEET

**GW0065**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01 | File ID: | 012R0101.D |
| Sampled: | 05/25/11 10:42 | Prepared: | 05/31/11 08:47 | Analyzed: | 06/01/11 18:15 |
| Solids: | | Preparation: | EDB | Dilution: | 1 |

Batch: 1E31001 Sequence: 1F15413 Calibration: 1118002 Instrument: GL-ECD2

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | | 0.00940 | 0.0188 | 0.0282 | U |

* Values outside of QC limits

# ANALYSIS DATA SHEET

**GW0066**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-03 | File ID: | 013F0101.D |
| Sampled: | 05/25/11 13:56 | Prepared: | 05/31/11 08:47 | Analyzed: | 06/01/11 18:37 |
| Solids: | | Preparation: | EDB | Dilution: | 1 |

Batch: 1E31001 Sequence: 1F15413 Calibration: 1118002 Instrument: GL-ECD2

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | | 0.00937 | 0.0187 | 0.0281 | U |

* Values outside of QC limits

# LCS / LCS DUPLICATE RECOVERY

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E31001 | Laboratory ID: | 1E31001-BS1 |
| Preparation: | EDB | Initial/Final: | 35 mL / 35 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| 1,2-Dibromoethane | 0.5000 | 0.5035 | 101 | 70 - 130 |
| 1,2-Dibromoethane [2C] | 0.5000 | 0.4955 | 99.1 | 70 - 130 |

| ANALYTE | SPIKE ADDED (ug/L) | LCSD CONCENTRATION (ug/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | 0.5000 | 0.5544 | 111 | 9.62 | 20 | 70 - 130 |
| 1,2-Dibromoethane [2C] | 0.5000 | 0.5255 | 105 | 5.87 | 20 | 70 - 130 |

# PREPARATION BATCH SUMMARY

## SW8011

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E31001 Batch Matrix: Water Preparation: EDB

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 05/31/11 08:47 | 37.07 | 35.00 |
| GW0064 | 1105217-01RE1 | 05/31/11 08:47 | 37.15 | 35.00 |
| GW0065 | 1105225-01 | 05/31/11 08:47 | 37.25 | 35.00 |
| GW0066 | 1105225-03 | 05/31/11 08:47 | 37.37 | 35.00 |
| Blank | 1E31001-BLK1 | 05/31/11 08:47 | 35.00 | 35.00 |
| LCS | 1E31001-BS1 | 05/31/11 08:47 | 35.00 | 35.00 |
| LCS Dup | 1E31001-BSD1 | 05/31/11 08:47 | 35.00 | 35.00 |

# ANALYSIS DATA SHEET

**Blank**

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | | | Project: | Kirtland AFB 2011 |
| Matrix: | | Laboratory ID: | 1E31001-BLK1 | File ID: | 004R0101.D |
| Sampled: | | Prepared: | 05/31/11 08:47 | Analyzed: | 06/01/11 15:28 |
| Solids: | | Preparation: | EDB | Dilution: | |

Batch: 1E31001 Sequence: 1F15413 Calibration: 1118002 Instrument: GL-ECD2

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | | 0.0100 | 0.0200 | 0.0300 | U |

* Values outside of QC limits

# INITIAL CALIBRATION STANDARDS

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1D11806 | Instrument: | GL-ECD2 |
| Calibration: | 1118002 | | |

| Standard ID | Description | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|---|
| 11D0621 | EDB ICAL 1 (0.03ppb) | 1D11806-CAL1 | 003R0101.D | 04/26/11 12:07 |
| 11D0621 | EDB ICAL 1 (0.03ppb) | 1D11806-CAL1 | 003F0101.D | 04/26/11 12:07 |
| 11D0622 | EDB ICAL 2 (0.05ppb) | 1D11806-CAL2 | 004R0101.D | 04/26/11 12:23 |
| 11D0622 | EDB ICAL 2 (0.05ppb) | 1D11806-CAL2 | 004F0101.D | 04/26/11 12:23 |
| 11D0623 | EDB ICAL 3 (0.10ppb) | 1D11806-CAL3 | 005R0101.D | 04/26/11 12:44 |
| 11D0623 | EDB ICAL 3 (0.10ppb) | 1D11806-CAL3 | 005F0101.D | 04/26/11 12:44 |
| 11D0624 | EDB ICAL 4 (0.20ppb) | 1D11806-CAL4 | 006R0101.D | 04/26/11 13:05 |
| 11D0624 | EDB ICAL 4 (0.20ppb) | 1D11806-CAL4 | 006F0101.D | 04/26/11 13:05 |
| 11D0625 | EDB ICAL 5 (0.50ppb)/CCV | 1D11806-CAL5 | 007R0101.D | 04/26/11 13:27 |
| 11D0625 | EDB ICAL 5 (0.50ppb)/CCV | 1D11806-CAL5 | 007F0101.D | 04/26/11 13:27 |
| 11D0626 | EDB ICAL 6 (1.00ppb) | 1D11806-CAL6 | 008R0101.D | 04/26/11 13:48 |
| 11D0626 | EDB ICAL 6 (1.00ppb) | 1D11806-CAL6 | 008F0101.D | 04/26/11 13:48 |

# INITIAL CALIBRATION DATA

## SW8011

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1118002 | Instrument: | GL-ECD2 | |
| Matrix: | Water | Calibration Dates: | 4/26/11_12:07 | 4/26/11_13:48 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| 1,2-Dibromoethane | 0.03 | 11666.67 | 0.05 | 13000 | 0.1 | 14970 | 0.2 | 13020 | 0.5 | 11516 | 1 | 11342 |
| 1,2-Dibromoethane [2C] | 0.03 | 30200 | 0.05 | 36160 | 0.1 | 37010 | 0.2 | 34535 | 0.5 | 31338 | 1 | 30084 |
| 1,2-Dibromo-3-chloropropane | 0.03 | 16800 | 0.05 | 21540 | 0.1 | 20560 | 0.2 | 21680 | 0.5 | 19172 | 1 | 18131 |
| 1,2-Dibromo-3-chloropropane [2C] | 0.03 | 73000 | 0.05 | 70700 | 0.1 | 68990 | 0.2 | 68840 | 0.5 | 70438 | 1 | 70415 |

# INITIAL CALIBRATION DATA (Continued)

## SW8011

| | | | | |
|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 | |
| Calibration: | 1118002 | Instrument: | GL-ECD2 | |
| Matrix: | Water | Calibration Dates: | 4/26/11 12:07 | 4/26/11 13:48 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | 12585.78 | 10.99857 | 1.744167 | 0.3001279 | 0.99878 | | CCC () | * |
| 1,2-Dibromoethane [2C] | 33221.17 | 9.251799 | 0.6746667 | 0.5104924 | | | CCC () | * |
| 1,2-Dibromo-3-chloropropane | 19647.17 | 9.968561 | 7.306833 | 8.658577E-02 | | | CCC () | * |
| 1,2-Dibromo-3-chloropropane [2C] | 70397.17 | 2.132975 | 4.458 | 0.2389413 | | | CCC () | * |

# INITIAL CALIBRATION CHECK

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-ECD2 | Calibration: | 1118002 |
| Lab File ID: | 009F0101.D | Calibration Date: | 04/26/11 00:00 |
| Sequence: | 1D11806 | Injection Date: | 04/26/11 |
| Lab Sample ID: | 1D11806-ICV1 | Injection Time: | 14:10 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | ICV | ICAL | ICV | MIN (#) | ICV | LIMIT (#) |
| 1,2-Dibromoethane | L | 0.5000 | 0.5687 | 12585.78 | 13112 | | 13.7 | 20 |
| 1,2-Dibromoethane [2C] | A | 0.5000 | 0.5058 | 33221.17 | 33608 | | 1.2 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-ECD2 | Calibration: | 1118002 |
| Lab File ID: | 002F0101.D | Calibration Date: | 04/26/11 00:00 |
| Sequence: | 1F15413 | Injection Date: | 06/01/11 |
| Lab Sample ID: | 1F15413-CCV1 | Injection Time: | 14:37 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 1,2-Dibromoethane | L | 0.5000 | 0.4795 | 12585.78 | 11116 | | -4.1 | 20 |
| 1,2-Dibromoethane [2C] | A | 0.5000 | 0.5221 | 33221.17 | 34688 | | 4.4 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-ECD2 | Calibration: | 1118002 |
| Lab File ID: | 016F0101.D | Calibration Date: | 04/26/11 00:00 |
| Sequence: | 1F15413 | Injection Date: | 06/01/11 |
| Lab Sample ID: | 1F15413-CCV2 | Injection Time: | 19:41 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 1,2-Dibromoethane | L | 0.5000 | 0.5727 | 12585.78 | 13202 | | 14.5 | 20 |
| 1,2-Dibromoethane [2C] | A | 0.5000 | 0.5468 | 33221.17 | 36332 | | 9.4 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-ECD2 | Calibration: | 1118002 |
| Lab File ID: | 002F0101.D | Calibration Date: | 04/26/11 00:00 |
| Sequence: | 1F15908 | Injection Date: | 06/06/11 |
| Lab Sample ID: | 1F15908-CCV1 | Injection Time: | 14:23 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 1,2-Dibromoethane | L | 0.5000 | 0.5268 | 12585.78 | 12174 | | 5.4 | 20 |
| 1,2-Dibromoethane [2C] | A | 0.5000 | 0.5652 | 33221.17 | 37552 | | 13.0 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# CONTINUING CALIBRATION CHECK

## SW8011

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Instrument ID: | GL-ECD2 | Calibration: | 1118002 |
| Lab File ID: | 016F0101.D | Calibration Date: | 04/26/11 00:00 |
| Sequence: | 1F15908 | Injection Date: | 06/06/11 |
| Lab Sample ID: | 1F15908-CCV2 | Injection Time: | 19:30 |

| | | CONC. (ug/L) | | RESPONSE FACTOR | | | % DIFF / DRIFT | |
|---|---|---|---|---|---|---|---|---|
| COMPOUND | TYPE | STD | CCV | ICAL | CCV | MIN (#) | CCV | LIMIT (#) |
| 1,2-Dibromoethane | L | 0.5000 | 0.5684 | 12585.78 | 13106 | | 13.7 | 20 |
| 1,2-Dibromoethane [2C] | A | 0.5000 | 0.5728 | 33221.17 | 38056 | | 14.6 | 20 |

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

# HOLDING TIME SUMMARY

## SW8011

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

| Sample Name | Date Collected | Date Received | Date Prepared | Days to Prep | Max Days to Prep | Date Analyzed | Days to Analysis | Max Days to Analysis | Q |
|---|---|---|---|---|---|---|---|---|---|
| GW0102 | 05/23/11 14:43 | 05/24/11 09:00 | 05/31/11 08:47 | N/A | 14.00 | 06/01/11 17:32 | 9.08 | 14.00 | |
| GW0064 | 05/24/11 13:58 | 05/25/11 09:00 | 05/31/11 08:47 | N/A | 14.00 | 06/01/11 17:54 | 8.12 | 14.00 | |
| GW0064 | 05/24/11 13:58 | 05/25/11 09:00 | 05/31/11 08:47 | N/A | 14.00 | 06/06/11 18:25 | 13.14 | 14.00 | |
| GW0065 | 05/25/11 10:42 | 05/26/11 09:00 | 05/31/11 08:47 | N/A | 14.00 | 06/01/11 18:15 | 7.27 | 14.00 | |
| GW0066 | 05/25/11 13:56 | 05/26/11 09:00 | 05/31/11 08:47 | N/A | 14.00 | 06/01/11 18:37 | 7.15 | 14.00 | |

# ANALYSIS DATA SHEET

**LCS**

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Matrix:
Laboratory ID: 1E31001-BS1
File ID: 005F0101.D
Sampled:
Prepared:
Analyzed: 06/01/11 15:44
Solids:
Preparation: EDB
Dilution:
Batch: 1E31001
Sequence: 1F15413
Calibration: 1118002
Instrument: GL-ECD2

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | 0.5035 | 0.0100 | 0.0200 | 0.0300 | |

# ANALYSIS DATA SHEET

**LCS**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |

| | | | | | |
|---|---|---|---|---|---|
| Matrix: | | Laboratory ID: | 1E31001-BS1 | File ID: | 005R0101.D |
| Sampled: | | Prepared: | | Analyzed: | 06/01/11 15:44 |
| Solids: | | Preparation: | EDB | Dilution: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Batch: | 1E31001 | Sequence: | 1F15413 | Calibration: | 1118002 | Instrument: | GL-ECD2 |

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane [2C] | 0.4955 | 0.0100 | 0.0200 | 0.0300 | |

# ANALYSIS DATA SHEET

**LCS Dup**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |

| | | | | | |
|---|---|---|---|---|---|
| Matrix: | | Laboratory ID: | 1E31001-BSD1 | File ID: | 006F0101.D |
| Sampled: | | Prepared: | | Analyzed: | 06/01/11 16:06 |
| Solids: | | Preparation: | EDB | Dilution: | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Batch: | 1E31001 | Sequence: | 1F15413 | Calibration: | 1118002 | Instrument: | GL-ECD2 |

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane | 0.5544 | 0.0100 | 0.0200 | 0.0300 | |

# ANALYSIS DATA SHEET

**LCS Dup**

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Matrix:
Laboratory ID: 1E31001-BSD1
File ID: 006R0101.D
Sampled:
Prepared:
Analyzed: 06/01/11 16:06
Solids:
Preparation: EDB
Dilution:
Batch: 1E31001
Sequence: 1F15413
Calibration: 1118002
Instrument: GL-ECD2

| CAS NO. | COMPOUND | CONC. (ug/L) | DL | LOD | LOQ | Q |
|---|---|---|---|---|---|---|
| 106-93-4 | 1,2-Dibromoethane [2C] | 0.5255 | 0.0100 | 0.0200 | 0.0300 | |

FORM X
IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

GW0064

Lab Name: Empirical Laboratories, LLC

Lab Sample ID: 1105217-01RE1 Date(s) Analyzed: 06/06/2011 06/06/2011

Instrument ID (1): GL-ECD2 Instrument ID (2): GL-ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

| ANALYTE | COL | RT | RT WINDOW | | CONCENTRATION | %D |
|---|---|---|---|---|---|---|
| | | | FROM | TO | | |
| 1,2-Dibromoethane | 1 | 1.76 | 1.71 | 1.77 | 1.12 | |
| | 2 | 0.68 | 0.64 | 0.70 | 1.02 | 9 |

FORM X
IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

LCS

Lab Name: Empirical Laboratories, LLC

Lab Sample ID: 1E31001-BS1 Date(s) Analyzed: 06/01/2011 06/01/2011

Instrument ID (1): GL-ECD2 Instrument ID (2): GL-ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

| ANALYTE | COL | RT | RT WINDOW | | CONCENTRATION | %D |
|---|---|---|---|---|---|---|
| | | | FROM | TO | | |
| 1,2-Dibromoethane | 1 | 1.75 | 1.71 | 1.77 | 0.5035 | |
| | 2 | 0.67 | 0.64 | 0.70 | 0.4955 | 2 |

FORM X
IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Name: Empirical Laboratories, LLC

Lab Sample ID: 1E31001-BSD1 Date(s) Analyzed: 06/01/2011 06/01/2011

Instrument ID (1): GL-ECD2 Instrument ID (2): GL-ECD2

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

| ANALYTE | COL | RT | RT WINDOW | | CONCENTRATION | %D |
|---|---|---|---|---|---|---|
| | | | FROM | TO | | |
| 1,2-Dibromoethane | 1 | 1.75 | 1.71 | 1.77 | 0.5544 | |
| | 2 | 0.67 | 0.64 | 0.70 | 0.5255 | 5 |

# METHOD DETECTION AND REPORTING LIMITS

**Laboratory:** Empirical Laboratories, LLC
**SDG:** Kirtland_014
**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011
**Matrix:** Water
**Instrument:** GL-ECD2

| Analyte | MDL | MRL | Units | Method |
|---|---|---|---|---|
| 1,2-Dibromoethane | 0.0100 | 0.0300 | ug/L | SW8011 |

# Data for SW6010B Forms

# ANALYSIS DATA SHEET

**GW0102**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-01 |
| Sampled: | 05/23/11 14:43 | Received: | 05/24/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7440-70-2 | Calcium | 33800 | 1000 | 2000 | 5000 | 1 | | SW6010B | 1F02011 | 06/03/11 21:50 |
| 7439-92-1 | Lead | | 1.50 | 3.00 | 3.00 | 1 | U | SW6010B | 1F02011 | 06/03/11 21:50 |
| 7439-95-4 | Magnesium | 4170 | 1000 | 3000 | 5000 | 1 | J | SW6010B | 1F02011 | 06/03/11 21:50 |
| 7440-09-7 | Potassium | 2180 | 1000 | 3000 | 5000 | 1 | J | SW6010B | 1F02011 | 06/03/11 21:50 |
| 7440-23-5 | Sodium | 23100 | 1000 | 3000 | 5000 | 1 | | SW6010B | 1F02011 | 06/03/11 21:50 |

# ANALYSIS DATA SHEET

**GW0102**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-02 |
| Sampled: | 05/23/11 14:43 | Received: | 05/24/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron (dissolved) | | 30.0 | 60.0 | 100 | 1 | U | SW6010B | 1F08003 | 06/08/11 11:06 |
| 7439-96-5 | Manganese (dissolved) | 8.73 | 3.00 | 6.00 | 15.0 | 1 | J | SW6010B | 1F08003 | 06/08/11 11:06 |

# ANALYSIS DATA SHEET

**GW8012-RB**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-03 |
| Sampled: | 05/23/11 08:47 | Received: | 05/24/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7440-70-2 | Calcium | | 1000 | 2000 | 5000 | 1 | U | SW6010B | 1F02011 | 06/03/11 21:54 |
| 7439-92-1 | Lead | | 1.50 | 3.00 | 3.00 | 1 | U | SW6010B | 1F02011 | 06/03/11 21:54 |
| 7439-95-4 | Magnesium | | 1000 | 3000 | 5000 | 1 | U | SW6010B | 1F02011 | 06/03/11 21:54 |
| 7440-09-7 | Potassium | | 1000 | 3000 | 5000 | 1 | U | SW6010B | 1F02011 | 06/03/11 21:54 |
| 7440-23-5 | Sodium | | 1000 | 3000 | 5000 | 1 | U | SW6010B | 1F02011 | 06/03/11 21:54 |

# ANALYSIS DATA SHEET

**GW8012-RB**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105208-04 |
| Sampled: | 05/23/11 08:47 | Received: | 05/24/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron (dissolved) | | 30.0 | 60.0 | 100 | 1 | U | SW6010B | 1F08003 | 06/08/11 11:10 |
| 7439-96-5 | Manganese (dissolved) | | 3.00 | 6.00 | 15.0 | 1 | U | SW6010B | 1F08003 | 06/08/11 11:10 |

# ANALYSIS DATA SHEET

**GW0064**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01 |
| Sampled: | 05/24/11 13:58 | Received: | 05/25/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7440-70-2 | Calcium | 43600 | 1000 | 2000 | 5000 | 1 | | SW6010B | 1F02011 | 06/03/11 21:59 |
| 7439-92-1 | Lead | | 1.50 | 3.00 | 3.00 | 1 | U | SW6010B | 1F02011 | 06/03/11 21:59 |
| 7439-95-4 | Magnesium | 5410 | 1000 | 3000 | 5000 | 1 | | SW6010B | 1F02011 | 06/03/11 21:59 |
| 7440-09-7 | Potassium | 2370 | 1000 | 3000 | 5000 | 1 | J | SW6010B | 1F02011 | 06/03/11 21:59 |
| 7440-23-5 | Sodium | 25200 | 1000 | 3000 | 5000 | 1 | | SW6010B | 1F02011 | 06/03/11 21:59 |

# ANALYSIS DATA SHEET

**GW0064**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-02 |
| Sampled: | 05/24/11 13:58 | Received: | 05/25/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron (dissolved) | | 30.0 | 60.0 | 100 | 1 | U | SW6010B | 1F08003 | 06/08/11 11:15 |
| 7439-96-5 | Manganese (dissolved) | 154 | 3.00 | 6.00 | 15.0 | 1 | | SW6010B | 1F08003 | 06/08/11 11:15 |

# ANALYSIS DATA SHEET

**GW0065**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-01 |
| Sampled: | 05/25/11 10:42 | Received: | 05/26/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7440-70-2 | Calcium | 34400 | 1000 | 2000 | 5000 | 1 | | SW6010B | 1F10002 | 06/13/11 15:31 |
| 7439-92-1 | Lead | | 1.50 | 3.00 | 3.00 | 1 | U | SW6010B | 1F10002 | 06/13/11 15:31 |
| 7439-95-4 | Magnesium | 4120 | 1000 | 3000 | 5000 | 1 | J | SW6010B | 1F10002 | 06/13/11 15:31 |
| 7440-09-7 | Potassium | 2050 | 1000 | 3000 | 5000 | 1 | J | SW6010B | 1F10002 | 06/13/11 15:31 |
| 7440-23-5 | Sodium | 26500 | 1000 | 3000 | 5000 | 1 | | SW6010B | 1F10002 | 06/13/11 15:31 |

# ANALYSIS DATA SHEET

**GW0065**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-02 |
| Sampled: | 05/25/11 10:42 | Received: | 05/26/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron (dissolved) | | 30.0 | 60.0 | 100 | 1 | U | SW6010B | 1F08003 | 06/08/11 11:19 |
| 7439-96-5 | Manganese (dissolved) | 34.7 | 3.00 | 6.00 | 15.0 | 1 | | SW6010B | 1F08003 | 06/08/11 11:19 |

# ANALYSIS DATA SHEET

**GW0066**

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
Sampled: 05/25/11 13:56
% Solids: 0.00

SDG: Kirtland_014
Project: Kirtland AFB 2011
Laboratory ID: 1105225-03
Received: 05/26/11 09:00

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7440-70-2 | Calcium | 67000 | 1000 | 2000 | 5000 | 1 | | SW6010B | 1F10002 | 06/13/11 15:36 |
| 7439-92-1 | Lead | | 1.50 | 3.00 | 3.00 | 1 | U | SW6010B | 1F10002 | 06/13/11 15:36 |
| 7439-95-4 | Magnesium | 16600 | 1000 | 3000 | 5000 | 1 | | SW6010B | 1F10002 | 06/13/11 15:36 |
| 7440-09-7 | Potassium | 3460 | 1000 | 3000 | 5000 | 1 | J | SW6010B | 1F10002 | 06/13/11 15:36 |
| 7440-23-5 | Sodium | 38700 | 1000 | 3000 | 5000 | 1 | | SW6010B | 1F10002 | 06/13/11 15:36 |

# ANALYSIS DATA SHEET

**GW0066**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105225-04 |
| Sampled: | 05/25/11 13:56 | Received: | 05/26/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (ug/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7439-89-6 | Iron (dissolved) | | 30.0 | 60.0 | 100 | 1 | U | SW6010B | 1F08003 | 06/08/11 11:24 |
| 7439-96-5 | Manganese (dissolved) | 245 | 3.00 | 6.00 | 15.0 | 1 | | SW6010B | 1F08003 | 06/08/11 11:24 |

# INITIAL AND CONTINUING CALIBRATION CHECK

## SW6010B

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: ME-ICP

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1158003
Sequence: 1F15807

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1F15807-ICV1 | Calcium | 50000 | 51680 | 103 | ug/L | +/- 10.00% |
| | Lead | 1000 | 993.4 | 99.3 | ug/L | +/- 10.00% |
| | Magnesium | 50000 | 47890 | 95.8 | ug/L | +/- 10.00% |
| | Potassium | 10000 | 9306 | 93.1 | ug/L | +/- 10.00% |
| | Sodium | 50000 | 50910 | 102 | ug/L | +/- 10.00% |
| 1F15807-CCV1 | Calcium | 50000 | 51880 | 104 | ug/L | +/- 10.00% |
| | Lead | 1000 | 1003 | 100 | ug/L | +/- 10.00% |
| | Magnesium | 50000 | 48510 | 97.0 | ug/L | +/- 10.00% |
| | Potassium | 10000 | 9920 | 99.2 | ug/L | +/- 10.00% |
| | Sodium | 50000 | 51460 | 103 | ug/L | +/- 10.00% |
| 1F15807-CCV7 | Calcium | 50000 | 50880 | 102 | ug/L | +/- 10.00% |
| | Lead | 1000 | 994.6 | 99.5 | ug/L | +/- 10.00% |
| | Magnesium | 50000 | 47570 | 95.1 | ug/L | +/- 10.00% |
| | Potassium | 10000 | 10030 | 100 | ug/L | +/- 10.00% |
| | Sodium | 50000 | 50660 | 101 | ug/L | +/- 10.00% |
| 1F15807-CCV8 | Calcium | 50000 | 49220 | 98.4 | ug/L | +/- 10.00% |
| | Lead | 1000 | 1014 | 101 | ug/L | +/- 10.00% |
| | Magnesium | 50000 | 47020 | 94.0 | ug/L | +/- 10.00% |
| | Potassium | 10000 | 9786 | 97.9 | ug/L | +/- 10.00% |
| | Sodium | 50000 | 50720 | 101 | ug/L | +/- 10.00% |
| 1F15807-CCV9 | Calcium | 50000 | 49450 | 98.9 | ug/L | +/- 10.00% |
| | Lead | 1000 | 1010 | 101 | ug/L | +/- 10.00% |
| | Magnesium | 50000 | 47050 | 94.1 | ug/L | +/- 10.00% |
| | Potassium | 10000 | 9774 | 97.7 | ug/L | +/- 10.00% |
| | Sodium | 50000 | 50600 | 101 | ug/L | +/- 10.00% |

# INITIAL AND CONTINUING CALIBRATION CHECK

## SW6010B

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: ME-ICP

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1160001
Sequence: 1F16015

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1F16015-ICV1 | Iron (dissolved) | 10000 | 10490 | 105 | ug/L | +/- 10.00% |
| | Manganese (dissolved) | 1000 | 1068 | 107 | ug/L | +/- 10.00% |
| 1F16015-CCV1 | Iron (dissolved) | 10000 | 10250 | 103 | ug/L | +/- 10.00% |
| | Manganese (dissolved) | 1000 | 1077 | 108 | ug/L | +/- 10.00% |
| 1F16015-CCV5 | Iron (dissolved) | 10000 | 9991 | 99.9 | ug/L | +/- 10.00% |
| | **Manganese (dissolved)** | **1000** | **1128** | **113** | **ug/L** | +/- 10.00% |
| 1F16015-CCV6 | Iron (dissolved) | 10000 | 9978 | 99.8 | ug/L | +/- 10.00% |
| | **Manganese (dissolved)** | **1000** | **1131** | **113** | **ug/L** | +/- 10.00% |
| 1F16015-CCV9 | Iron (dissolved) | 10000 | 10180 | 102 | ug/L | +/- 10.00% |
| | Manganese (dissolved) | 1000 | 1057 | 106 | ug/L | +/- 10.00% |
| 1F16015-CCVA | Iron (dissolved) | 10000 | 10340 | 103 | ug/L | +/- 10.00% |
| | Manganese (dissolved) | 1000 | 1085 | 109 | ug/L | +/- 10.00% |

# INITIAL AND CONTINUING CALIBRATION CHECK

## SW6010B

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: ME-ICP

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1165001
Sequence: 1F16506

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1F16506-ICV1 | Calcium | 50000 | 51070 | 102 | ug/L | +/- 10.00% |
| | Lead | 1000 | 995.9 | 99.6 | ug/L | +/- 10.00% |
| | Magnesium | 50000 | 47880 | 95.8 | ug/L | +/- 10.00% |
| | Potassium | 10000 | 9698 | 97.0 | ug/L | +/- 10.00% |
| | Sodium | 50000 | 50230 | 100 | ug/L | +/- 10.00% |
| 1F16506-CCV1 | Calcium | 50000 | 50450 | 101 | ug/L | +/- 10.00% |
| | Lead | 1000 | 1019 | 102 | ug/L | +/- 10.00% |
| | Magnesium | 50000 | 47660 | 95.3 | ug/L | +/- 10.00% |
| | Potassium | 10000 | 9938 | 99.4 | ug/L | +/- 10.00% |
| | Sodium | 50000 | 51580 | 103 | ug/L | +/- 10.00% |
| 1F16506-CCV2 | Calcium | 50000 | 51730 | 103 | ug/L | +/- 10.00% |
| | Lead | 1000 | 1023 | 102 | ug/L | +/- 10.00% |
| | Magnesium | 50000 | 48850 | 97.7 | ug/L | +/- 10.00% |
| | Potassium | 10000 | 9966 | 99.7 | ug/L | +/- 10.00% |
| | Sodium | 50000 | 52280 | 105 | ug/L | +/- 10.00% |

# CRDL STANDARD

## SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: ME-ICP

Calibration: 1158003

Sequence: 1F15807

| Lab Sample ID | Analyte | True | Found | %R | Units | QC Limts |
|---|---|---|---|---|---|---|
| 1F15807-CRL1 | Calcium | 2000 | 2061 | 103 | ug/L | 80 - 120 |
| | Magnesium | 3000 | 2722 | 90.7 | ug/L | 80 - 120 |
| | Potassium | 3000 | 2909 | 97.0 | ug/L | 80 - 120 |
| | Sodium | 3000 | 2985 | 99.5 | ug/L | 80 - 120 |
| 1F15807-CRL2 | Lead | 3.000 | 3.069 | 102 | ug/L | 80 - 120 |

# CRDL STANDARD

## SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: ME-ICP

Calibration: 1160001

Sequence: 1F16015

| Lab Sample ID | Analyte | True | Found | %R | Units | QC Limts |
|---|---|---|---|---|---|---|
| 1F16015-CRL1 | Iron (dissolved) | 60.00 | 62.09 | 103 | ug/L | 80 - 120 |
| | Manganese (dissolved) | 6.000 | 6.579 | 110 | ug/L | 80 - 120 |
| 1F16015-CRL3 | Iron (dissolved) | 60.00 | 63.34 | 106 | ug/L | 80 - 120 |
| | Manganese (dissolved) | 6.000 | 7.063 | 118 | ug/L | 80 - 120 |

# CRDL STANDARD

## SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: ME-ICP

Calibration: 1165001

Sequence: 1F16506

| Lab Sample ID | Analyte | True | Found | %R | Units | QC Limts |
|---|---|---|---|---|---|---|
| 1F16506-CRL1 | Calcium | 2000 | 2052 | 103 | ug/L | 80 - 120 |
| | Lead | 3.000 | 2.920 | 97.3 | ug/L | 80 - 120 |
| | Magnesium | 3000 | 2732 | 91.1 | ug/L | 80 - 120 |
| | Potassium | 3000 | 2895 | 96.5 | ug/L | 80 - 120 |
| | Sodium | 3000 | 2988 | 99.6 | ug/L | 80 - 120 |

# BLANKS
## SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Instrument ID: ME-ICP
Project: Kirtland AFB 2011
Sequence: 1F15807
Calibration: 1158003

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F15807-ICB1 | Calcium | 3.020 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | -0.3493 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 8.770 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 19.20 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 12.27 | 1000 | 5000 | ug/L | U | SW6010B |
| 1F15807-CCB1 | Calcium | 7.85 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | -0.261 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 9.17 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 12.4 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 22.6 | 1000 | 5000 | ug/L | U | SW6010B |
| 1F15807-CCB7 | Calcium | 6.90 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | 0.420 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | -1.26 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 48.1 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 224 | 1000 | 5000 | ug/L | U | SW6010B |
| 1F02011-BLK1 | Calcium | 8.13 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | -0.0257 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 7.72 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 40.4 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 203 | 1000 | 5000 | ug/L | U | SW6010B |
| 1F15807-CCB8 | Calcium | 0.880 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | 0.610 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 4.30 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 20.2 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 44.6 | 1000 | 5000 | ug/L | U | SW6010B |
| 1F15807-CCB9 | Calcium | 0.760 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | -0.281 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 3.71 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 15.7 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 35.6 | 1000 | 5000 | ug/L | U | SW6010B |

# BLANKS
## SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Instrument ID: ME-ICP
Project: Kirtland AFB 2011
Sequence: 1F16015
Calibration: 1160001

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F16015-ICB1 | Iron (dissolved) | 2.234 | 30.0 | 100 | ug/L | U | SW6010B |
| | Manganese (dissolved) | 0.01839 | 3.00 | 15.0 | ug/L | U | SW6010B |
| 1F16015-CCB1 | Iron (dissolved) | -0.362 | 30.0 | 100 | ug/L | U | SW6010B |
| | Manganese (dissolved) | 0.0368 | 3.00 | 15.0 | ug/L | U | SW6010B |
| 1F16015-CCB5 | Iron (dissolved) | 2.00 | 30.0 | 100 | ug/L | U | SW6010B |
| | Manganese (dissolved) | 0.163 | 3.00 | 15.0 | ug/L | U | SW6010B |
| 1F16015-CCB6 | Iron (dissolved) | -0.0903 | 30.0 | 100 | ug/L | U | SW6010B |
| | Manganese (dissolved) | 0.166 | 3.00 | 15.0 | ug/L | U | SW6010B |
| 1F16015-CCB9 | Iron (dissolved) | -1.47 | 30.0 | 100 | ug/L | U | SW6010B |
| | Manganese (dissolved) | 0.241 | 3.00 | 15.0 | ug/L | U | SW6010B |
| 1F08003-BLK1 | Iron (dissolved) | -0.856 | 30.0 | 100 | ug/L | U | SW6010B |
| | Manganese (dissolved) | 0.137 | 3.00 | 15.0 | ug/L | U | SW6010B |
| 1F16015-CCBA | Iron (dissolved) | 0.275 | 30.0 | 100 | ug/L | U | SW6010B |
| | Manganese (dissolved) | 0.155 | 3.00 | 15.0 | ug/L | U | SW6010B |

# BLANKS
## SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Instrument ID: ME-ICP
Project: Kirtland AFB 2011
Sequence: 1F16506
Calibration: 1165001

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F16506-ICB1 | Calcium | 3.450 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | 0.2593 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 8.030 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 10.92 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 5.560 | 1000 | 5000 | ug/L | U | SW6010B |
| 1F16506-CCB1 | Calcium | 1.67 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | 0.136 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 2.42 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 1.53 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 10.8 | 1000 | 5000 | ug/L | U | SW6010B |
| 1F10002-BLK1 | Calcium | 8.69 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | 0.159 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 3.84 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 15.9 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 7.14 | 1000 | 5000 | ug/L | U | SW6010B |
| 1F16506-CCB2 | Calcium | 13.5 | 1000 | 5000 | ug/L | U | SW6010B |
| | Lead | 0.223 | 1.50 | 3.00 | ug/L | U | SW6010B |
| | Magnesium | 8.44 | 1000 | 5000 | ug/L | U | SW6010B |
| | Potassium | 6.29 | 1000 | 5000 | ug/L | U | SW6010B |
| | Sodium | 6.78 | 1000 | 5000 | ug/L | U | SW6010B |

# ICP INTERFERENCE CHECK SAMPLE

## SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Instrument ID: ME-ICP
Calibration: 1158003
Sequence: 1F15807

| Lab Sample ID | Analyte | True | Found | %R | Units |
|---|---|---|---|---|---|
| 1F15807-IFA1 | Calcium | 500000 | 486,480.00 | 97.3 | ug/L |
| | Lead | | 10.48 | | ug/L |
| | Magnesium | 500000 | 488,230.00 | 97.6 | ug/L |
| | Potassium | | -70.94 | | ug/L |
| | Sodium | | 68.81 | | ug/L |
| 1F15807-IFB1 | Calcium | 500000 | 463,740.00 | 92.7 | ug/L |
| | Lead | 50.00 | 53.21 | 106 | ug/L |
| | Magnesium | 500000 | 464,910.00 | 93.0 | ug/L |
| | Potassium | | -30.91 | | ug/L |
| | Sodium | | 105.00 | | ug/L |

# ICP INTERFERENCE CHECK SAMPLE

## SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: ME-ICP

Calibration: 1160001

Sequence: 1F16015

| Lab Sample ID | Analyte | True | Found | %R | Units |
|---|---|---|---|---|---|
| 1F16015-IFA1 | Iron (dissolved) | 200000 | 195,190.00 | 97.6 | ug/L |
| | Manganese (dissolved) | | 3.01 | | ug/L |
| 1F16015-IFB1 | Iron (dissolved) | 200000 | 194,860.00 | 97.4 | ug/L |
| | Manganese (dissolved) | 500.0 | 503.11 | 101 | ug/L |

# ICP INTERFERENCE CHECK SAMPLE

## SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Instrument ID: ME-ICP
Calibration: 1165001
Sequence: 1F16506

| Lab Sample ID | Analyte | True | Found | %R | Units |
|---|---|---|---|---|---|
| 1F16506-IFA1 | Calcium | 500000 | 492,140.00 | 98.4 | ug/L |
| | Lead | | 5.48 | | ug/L |
| | Magnesium | 500000 | 505,610.00 | 101 | ug/L |
| | Potassium | | -85.60 | | ug/L |
| | Sodium | | 49.63 | | ug/L |
| 1F16506-IFB1 | Calcium | 500000 | 490,760.00 | 98.2 | ug/L |
| | Lead | 50.00 | 54.05 | 108 | ug/L |
| | Magnesium | 500000 | 494,370.00 | 98.9 | ug/L |
| | Potassium | | -73.65 | | ug/L |
| | Sodium | | 112.20 | | ug/L |

# LCS / LCS DUPLICATE RECOVERY

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F02011 | Laboratory ID: | 1F02011-BS1 |
| Preparation: | MET_3005A | Initial/Final: | 50 mL / 50 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Calcium | 5000 | 5133 | 103 | 80 - 120 |
| Lead | 250.0 | 254.3 | 102 | 80 - 120 |
| Magnesium | 5000 | 4558 | 91.2 | 80 - 120 |
| Potassium | 5000 | 4953 | 99.1 | 80 - 120 |
| Sodium | 5000 | 5266 | 105 | 80 - 120 |

# LCS / LCS DUPLICATE RECOVERY

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F08003 | Laboratory ID: | 1F08003-BS1 |
| Preparation: | MET_3005A | Initial/Final: | 50 mL / 50 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Iron (dissolved) | 1000 | 1057 | 106 | 80 - 120 |
| Manganese (dissolved) | 500.0 | 538.7 | 108 | 80 - 120 |

# LCS / LCS DUPLICATE RECOVERY

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F10002 | Laboratory ID: | 1F10002-BS1 |
| Preparation: | MET_3005A | Initial/Final: | 50 mL / 50 mL |

| ANALYTE | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Calcium | 5000 | 4844 | 96.9 | 80 - 120 |
| Lead | 250.0 | 247.5 | 99.0 | 80 - 120 |
| Magnesium | 5000 | 4287 | 85.7 | 80 - 120 |
| Potassium | 5000 | 4744 | 94.9 | 80 - 120 |
| Sodium | 5000 | 4944 | 98.9 | 80 - 120 |

# METHOD DETECTION AND REPORTING LIMITS

**Laboratory:** Empirical Laboratories, LLC **SDG:** Kirtland_014

**Client:** Shaw E & I (I700) **Project:** Kirtland AFB 2011

**Matrix:** Water **Instrument:** ME-ICP

| Analyte | MDL | MRL | Units | Method |
|---|---|---|---|---|
| Calcium | 1000 | 5000 | ug/L | SW6010B |
| Iron (dissolved) | 30.0 | 100 | ug/L | SW6010B |
| Lead | 1.50 | 3.00 | ug/L | SW6010B |
| Magnesium | 1000 | 5000 | ug/L | SW6010B |
| Manganese (dissolved) | 3.00 | 15.0 | ug/L | SW6010B |
| Potassium | 1000 | 5000 | ug/L | SW6010B |
| Sodium | 1000 | 5000 | ug/L | SW6010B |

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10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories, LLC Contract: Shaw E & I (I700)

SDG No.: Kirtland_014

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 9/11/2009

| Analyte | Wave-length (nm) | Interelement Correction Factors for: | | | | |
|---|---|---|---|---|---|---|
| | | Al | Ca | Fe | Mg | Ag |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | 0.0002980 | 0.0000000 | 0.0000080 | 0.0003250 | 0.0000000 |
| Lead | 220.3 | 0.0002980 | 0.0000000 | 0.0000080 | 0.0003250 | 0.0000000 |
| Lead | 220.3 | 0.0002980 | 0.0000000 | 0.0000080 | 0.0003250 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000140 | 0.0287450 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000140 | 0.0287450 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000140 | 0.0287450 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |

Comments:

FORM XA-IN

USEPA - CLP

10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories, LLC Contract: Shaw E & I (I700)

SDG No.: Kirtland_014

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 9/11/2009

| Analyte | Wave-length (nm) | Interelement Correction Factors for: As | B | Ba | Be | Cd |
|---|---|---|---|---|---|---|
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |

Comments:

FORM XA-IN

USEPA - CLP

10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories, LLC Contract: Shaw E & I (I700)

SDG No.: Kirtland_014

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 9/11/2009

| Analyte | Wave-length (nm) | Interelement Correction Factors for: | | | | |
|---|---|---|---|---|---|---|
| | | Co | Cr | Cu | K | Mn |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0022600 | 0.0000000 | 0.0000990 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0022600 | 0.0000000 | 0.0000990 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0022600 | 0.0000000 | 0.0000990 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |

Comments:

FORM XA-IN

USEPA - CLP

10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories, LLC Contract: Shaw E & I (I700)

SDG No.: Kirtland_014

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 9/11/2009

| Analyte | Wave-length (nm) | Interelement Correction Factors for: | | | | |
|---|---|---|---|---|---|---|
| | | Mo | Na | Ni | Pb | Sb |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | -0.0026440 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | -0.0026440 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | -0.0026440 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |

Comments:

FORM XA-IN

USEPA - CLP

10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories, LLC Contract: Shaw E & I (I700)

SDG No.: Kirtland_014

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 9/11/2009

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Se | Sn | Ti | Tl | V |
|---|---|---|---|---|---|---|
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Calcium | 317.9 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Iron | 261.1 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000360 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000360 |
| Lead | 220.3 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000360 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Magnesium | 279.0 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000300 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000300 |
| Manganese | 257.6 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | -0.0000300 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Potassium | 766.4 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |
| Sodium | 330.2 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 | 0.0000000 |

Comments:

FORM XA-IN

USEPA - CLP

10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Empirical Laboratories, LLC Contract: Shaw E & I (I700)

SDG No.: Kirtland_014

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 9/11/2009

| Analyte | Wave-length (nm) | Interelement Correction Factors for: Zn | | | | |
|---|---|---|---|---|---|---|
| Calcium | 317.9 | 0.0000000 | | | | |
| Calcium | 317.9 | 0.0000000 | | | | |
| Calcium | 317.9 | 0.0000000 | | | | |
| Iron | 261.1 | 0.0000000 | | | | |
| Iron | 261.1 | 0.0000000 | | | | |
| Iron | 261.1 | 0.0000000 | | | | |
| Lead | 220.3 | 0.0000000 | | | | |
| Lead | 220.3 | 0.0000000 | | | | |
| Lead | 220.3 | 0.0000000 | | | | |
| Magnesium | 279.0 | 0.0000000 | | | | |
| Magnesium | 279.0 | 0.0000000 | | | | |
| Magnesium | 279.0 | 0.0000000 | | | | |
| Manganese | 257.6 | 0.0000000 | | | | |
| Manganese | 257.6 | 0.0000000 | | | | |
| Manganese | 257.6 | 0.0000000 | | | | |
| Potassium | 766.4 | 0.0000000 | | | | |
| Potassium | 766.4 | 0.0000000 | | | | |
| Potassium | 766.4 | 0.0000000 | | | | |
| Sodium | 330.2 | 0.0000000 | | | | |
| Sodium | 330.2 | 0.0000000 | | | | |
| Sodium | 330.2 | 0.0000000 | | | | |

Comments:

FORM XA-IN

# ICP-AES AND ICP-MS LINEAR RANGES (QUARTERLY)

Lab Name: Empirical Laboratories, LLC

Client: Shaw E & I (I700) SDG: Kirtland_014

Project: Kirtland AFB 2011

ICP Instrument ID: ME-ICP Date: 09/11/2009

| Analyte | Integ. Time (Sec.) | Concentration ug/L | M |
|---|---|---|---|
| Calcium | 15 | 500000 | P |
| Calcium | 15 | 500000 | P |
| Calcium | 15 | 500000 | P |
| Iron | 15 | 500000 | P |
| Iron | 15 | 500000 | P |
| Iron | 15 | 500000 | P |
| Lead | 15 | 10000 | P |
| Lead | 15 | 10000 | P |
| Lead | 15 | 10000 | P |
| Magnesium | 15 | 500000 | P |
| Magnesium | 15 | 500000 | P |
| Magnesium | 15 | 500000 | P |
| Manganese | 15 | 10000 | P |
| Manganese | 15 | 10000 | P |
| Manganese | 15 | 10000 | P |
| Potassium | 15 | 100000 | P |
| Potassium | 15 | 100000 | P |
| Potassium | 15 | 100000 | P |
| Sodium | 15 | 500000 | P |
| Sodium | 15 | 500000 | P |
| Sodium | 15 | 500000 | P |

# PREPARATION BATCH SUMMARY

## SW6010B

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F02011 Batch Matrix: Water Preparation: MET_3005A

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 06/02/11 10:42 | 50.00 | 50.00 |
| GW8012-RB | 1105208-03 | 06/02/11 10:42 | 50.00 | 50.00 |
| GW0064 | 1105217-01 | 06/02/11 10:42 | 50.00 | 50.00 |
| Blank | 1F02011-BLK1 | 06/02/11 10:42 | 50.00 | 50.00 |
| LCS | 1F02011-BS1 | 06/02/11 10:42 | 50.00 | 50.00 |

# PREPARATION BATCH SUMMARY

## SW6010B

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F08003 Batch Matrix: Water Preparation: MET_3005A

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-02 | 06/08/11 08:49 | 50.00 | 50.00 |
| GW8012-RB | 1105208-04 | 06/08/11 08:49 | 50.00 | 50.00 |
| GW0064 | 1105217-02 | 06/08/11 08:49 | 50.00 | 50.00 |
| GW0065 | 1105225-02 | 06/08/11 08:49 | 50.00 | 50.00 |
| GW0066 | 1105225-04 | 06/08/11 08:49 | 50.00 | 50.00 |
| Blank | 1F08003-BLK1 | 06/08/11 08:49 | 50.00 | 50.00 |
| LCS | 1F08003-BS1 | 06/08/11 08:49 | 50.00 | 50.00 |

# PREPARATION BATCH SUMMARY

## SW6010B

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F10002 Batch Matrix: Water Preparation: MET_3005A

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0065 | 1105225-01 | 06/10/11 08:46 | 50.00 | 50.00 |
| GW0066 | 1105225-03 | 06/10/11 08:46 | 50.00 | 50.00 |
| Blank | 1F10002-BLK1 | 06/10/11 08:46 | 50.00 | 50.00 |
| LCS | 1F10002-BS1 | 06/10/11 08:46 | 50.00 | 50.00 |

# ANALYSIS SEQUENCE SUMMARY

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15807 | Instrument: | ME-ICP |
| Calibration: | 1158003 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1F15807-CAL1 | 060311A-001 | 06/03/11 09:45 |
| Cal Standard | 1F15807-CAL2 | 060311A-002 | 06/03/11 09:49 |
| Cal Standard | 1F15807-CAL3 | 060311A-003 | 06/03/11 09:53 |
| Cal Standard | 1F15807-CAL5 | 060311A-005 | 06/03/11 10:02 |
| Cal Standard | 1F15807-CAL6 | 060311A-006 | 06/03/11 10:07 |
| Cal Standard | 1F15807-CAL7 | 060311A-007 | 06/03/11 10:12 |
| Cal Standard | 1F15807-CAL8 | 060311A-008 | 06/03/11 10:17 |
| Initial Cal Check | 1F15807-ICV1 | 060311B-001 | 06/03/11 10:47 |
| Initial Cal Blank | 1F15807-ICB1 | 060311B-002 | 06/03/11 10:54 |
| Instrument RL Check | 1F15807-CRL1 | 060311B-003 | 06/03/11 10:59 |
| Instrument RL Check | 1F15807-CRL2 | 060311B-004 | 06/03/11 11:03 |
| Interference Check A | 1F15807-IFA1 | 060311B-005 | 06/03/11 11:08 |
| Interference Check B | 1F15807-IFB1 | 060311B-007 | 06/03/11 11:23 |
| Calibration Check | 1F15807-CCV1 | 060311B-009 | 06/03/11 11:34 |
| Calibration Blank | 1F15807-CCB1 | 060311B-010 | 06/03/11 11:42 |
| Calibration Check | 1F15807-CCV7 | 060311B-097 | 06/03/11 18:59 |
| Calibration Blank | 1F15807-CCB7 | 060311B-098 | 06/03/11 19:06 |
| Blank | 1F02011-BLK1 | 060311B-099 | 06/03/11 19:11 |
| LCS | 1F02011-BS1 | 060311B-100 | 06/03/11 19:16 |
| Calibration Check | 1F15807-CCV8 | 060311B-123 | 06/03/11 21:06 |
| Calibration Blank | 1F15807-CCB8 | 060311B-124 | 06/03/11 21:13 |
| GW0102 | 1105208-01 | 060311B-132 | 06/03/11 21:50 |
| GW8012-RB | 1105208-03 | 060311B-133 | 06/03/11 21:54 |
| GW0064 | 1105217-01 | 060311B-134 | 06/03/11 21:59 |
| Calibration Check | 1F15807-CCV9 | 060311B-135 | 06/03/11 22:05 |
| Calibration Blank | 1F15807-CCB9 | 060311B-136 | 06/03/11 22:12 |

# ANALYSIS SEQUENCE SUMMARY

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F16015 | Instrument: | ME-ICP |
| Calibration: | 1160001 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1F16015-CAL1 | 060711A-001 | 06/07/11 10:06 |
| Cal Standard | 1F16015-CAL2 | 060711A-002 | 06/07/11 10:11 |
| Cal Standard | 1F16015-CAL3 | 060711A-003 | 06/07/11 10:15 |
| Cal Standard | 1F16015-CAL4 | 060711A-004 | 06/07/11 10:19 |
| Cal Standard | 1F16015-CAL5 | 060711A-005 | 06/07/11 10:24 |
| Cal Standard | 1F16015-CAL6 | 060711A-006 | 06/07/11 10:28 |
| Initial Cal Check | 1F16015-ICV1 | 060711B-001 | 06/07/11 11:06 |
| Initial Cal Blank | 1F16015-ICB1 | 060711B-002 | 06/07/11 11:14 |
| Instrument RL Check | 1F16015-CRL1 | 060711B-003 | 06/07/11 11:18 |
| Interference Check A | 1F16015-IFA1 | 060711B-005 | 06/07/11 11:28 |
| Interference Check B | 1F16015-IFB1 | 060711B-006 | 06/07/11 11:33 |
| Calibration Check | 1F16015-CCV1 | 060711B-008 | 06/07/11 11:45 |
| Calibration Blank | 1F16015-CCB1 | 060711B-009 | 06/07/11 11:52 |
| Calibration Check | 1F16015-CCV5 | 060711B-060 | 06/07/11 16:08 |
| Calibration Blank | 1F16015-CCB5 | 060711B-061 | 06/07/11 16:15 |
| Instrument RL Check | 1F16015-CRL3 | 060711B-063 | 06/07/11 16:24 |
| Calibration Check | 1F16015-CCV6 | 060711B-066 | 06/07/11 16:39 |
| Calibration Blank | 1F16015-CCB6 | 060711B-067 | 06/07/11 16:46 |
| Calibration Check | 1F16015-CCV9 | 060711D-001 | 06/08/11 10:15 |
| Calibration Blank | 1F16015-CCB9 | 060711D-002 | 06/08/11 10:23 |
| Blank | 1F08003-BLK1 | 060711D-003 | 06/08/11 10:27 |
| LCS | 1F08003-BS1 | 060711D-005 | 06/08/11 10:36 |
| GW0102 | 1105208-02 | 060711D-011 | 06/08/11 11:06 |
| GW8012-RB | 1105208-04 | 060711D-012 | 06/08/11 11:10 |
| GW0064 | 1105217-02 | 060711D-013 | 06/08/11 11:15 |
| GW0065 | 1105225-02 | 060711D-014 | 06/08/11 11:19 |
| GW0066 | 1105225-04 | 060711D-015 | 06/08/11 11:24 |
| Calibration Check | 1F16015-CCVA | 060711D-016 | 06/08/11 11:30 |
| Calibration Blank | 1F16015-CCBA | 060711D-017 | 06/08/11 11:37 |

# ANALYSIS SEQUENCE SUMMARY

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F16506 | Instrument: | ME-ICP |
| Calibration: | 1165001 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1F16506-CAL1 | 061311A-001 | 06/13/11 13:16 |
| Cal Standard | 1F16506-CAL2 | 061311A-002 | 06/13/11 13:21 |
| Cal Standard | 1F16506-CAL3 | 061311A-003 | 06/13/11 13:24 |
| Cal Standard | 1F16506-CAL5 | 061311A-005 | 06/13/11 13:33 |
| Cal Standard | 1F16506-CAL6 | 061311A-006 | 06/13/11 13:38 |
| Cal Standard | 1F16506-CAL7 | 061311A-007 | 06/13/11 13:43 |
| Cal Standard | 1F16506-CAL8 | 061311A-008 | 06/13/11 13:47 |
| Initial Cal Check | 1F16506-ICV1 | 061311B-001 | 06/13/11 14:24 |
| Initial Cal Blank | 1F16506-ICB1 | 061311B-002 | 06/13/11 14:31 |
| Instrument RL Check | 1F16506-CRL1 | 061311B-003 | 06/13/11 14:36 |
| Interference Check A | 1F16506-IFA1 | 061311B-006 | 06/13/11 14:51 |
| Interference Check B | 1F16506-IFB1 | 061311B-007 | 06/13/11 14:57 |
| Calibration Check | 1F16506-CCV1 | 061311B-009 | 06/13/11 15:08 |
| Calibration Blank | 1F16506-CCB1 | 061311B-010 | 06/13/11 15:15 |
| Blank | 1F10002-BLK1 | 061311B-011 | 06/13/11 15:20 |
| LCS | 1F10002-BS1 | 061311B-012 | 06/13/11 15:25 |
| GW0065 | 1105225-01 | 061311B-013 | 06/13/11 15:31 |
| GW0066 | 1105225-03 | 061311B-014 | 06/13/11 15:36 |
| Calibration Check | 1F16506-CCV2 | 061311B-024 | 06/13/11 16:23 |
| Calibration Blank | 1F16506-CCB2 | 061311B-025 | 06/13/11 16:30 |

# INITIAL CALIBRATION DATA

## SW6010B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1158003 | | Instrument: | ME-ICP | |
| Matrix: | Water | | Calibration Dates: | 6/3/11 9:45 | 6/3/11 10:17 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Aluminum | 0 | 0 | 5000 | 1.8858E-05 | 10000 | 1.9263E-05 | | | 500000 | 1.94816E-05 | | |
| Antimony | 0 | 0 | 100 | 0.000759 | 1000 | 7.8378E-04 | | | | | 10000 | 8.0048E-04 |
| Arsenic | 0 | 0 | 100 | 0.0003958 | 1000 | 4.1336E-04 | | | | | 10000 | 4.0715E-04 |
| Barium | 0 | 0 | 50 | 0.0127392 | 1000 | 0.01268 | 5000 | 0.0130796 | | | | |
| Beryllium | 0 | 0 | 100 | 0.0028242 | 1000 | 0.0027732 | | | | | 10000 | 0.0026414 |
| Boron | 0 | 0 | 50 | 0.0000146 | 1000 | 0.0000157 | | | | | 5000 | 1.517E-05 |
| Cadmium | 0 | 0 | 100 | 0.016496 | 1000 | 0.016257 | | | | | 10000 | 0.015445 |
| Calcium | 0 | 0 | 1100 | 4.659091E-05 | 50000 | 4.5772E-05 | | | | | 10000 | |
| Chromium | 0 | 0 | 100 | 0.0000392 | 1000 | 3.852E-05 | | | | | 10000 | 3.9205E-05 |
| Cobalt | 0 | 0 | 100 | 0.0062393 | 1000 | 0.0061294 | | | | | 10000 | 0.0064011 |
| Copper | 0 | 0 | 100 | 0.0000818 | 1000 | 0.0000791 | | | | | 10000 | 7.8525E-05 |
| Iron | 0 | 0 | 5100 | 1.47549E-05 | 10000 | 1.3857E-05 | | | 500000 | 1.3856E-05 | 10000 | |
| Lead | 0 | 0 | 100 | 0.0014216 | 1000 | 0.0013902 | | | | | 10000 | 0.0014361 |
| Magnesium | 0 | 0 | 5100 | | 50000 | 1.7132E-06 | | | 500000 | 1.83986E-06 | 10000 | |
| Manganese | 0 | 0 | 100 | 0.0002624 | 1000 | 2.6007E-04 | 10000 | 2.4944E-04 | | | 10000 | |
| Molybdenum | 0 | 0 | 100 | 0.0045201 | 1000 | 0.0045635 | | | | | 10000 | 0.0045554 |
| Nickel | 0 | 0 | 100 | 0.0038751 | 1000 | 0.0037364 | | | | | 10000 | 0.0037685 |
| Potassium | 0 | 0 | 1000 | 8.95E-06 | 10000 | 9.84E-06 | | | | | | |
| Selenium | 0 | 0 | 100 | 0.0005057 | 1000 | 5.0103E-04 | | | | | 10000 | 4.9477E-04 |
| Silver | 0 | 0 | 20 | 0.0000565 | 500 | 5.554E-05 | 2000 | 0.0000557 | | | | |
| Sodium | 0 | 0 | 1000 | | 50000 | 4.0662E-05 | | | | | | |
| Strontium | 0 | 0 | 100 | 0.001693 | 1000 | 0.001657 | | | | | 10000 | 0.001631 |
| Thallium | 0 | 0 | 100 | 0.0007584 | 1000 | 7.6564E-04 | | | | | 10000 | 7.9188E-04 |
| Tin | 0 | 0 | 50 | 0.0013864 | 1000 | 0.0014056 | | | | | 5000 | 1.41056E-03 |
| Titanium | 0 | 0 | 100 | 0.0002249 | 1000 | 2.1661E-04 | | | | | 10000 | 2.1913E-04 |
| Vanadium | 0 | 0 | 100 | 0.000048 | 1000 | 0.0000474 | | | | | 10000 | 4.7123E-05 |
| Zinc | 0 | 0 | 100 | 0.0064006 | 1000 | 0.0063322 | | | | | 10000 | 0.0062917 |

# INITIAL CALIBRATION DATA (Continued)

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1158003 | Instrument: | ME-ICP |
| Matrix: | Water | Calibration Dates: | 6/3/11 9:45 6/3/11 10:17 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Aluminum | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | | | |
| Barium | | | | | | | | | | | | |
| Beryllium | | | | | | | | | | | | |
| Boron | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | |
| Calcium | 100000 | | 500000 | 4.2892E-05 | | | | | | | | |
| Chromium | | | | | | | | | | | | |
| Cobalt | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | |
| Magnesium | | | 100000 | 1.7279E-06 | | | | | | | | |
| Manganese | | | | | | | | | | | | |
| Molybdenum | | | | | | | | | | | | |
| Nickel | | | | | | | | | | | | |
| Potassium | 100000 | 1.0107E-05 | | | | | | | | | | |
| Selenium | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | |
| Sodium | 100000 | 4.1103E-05 | 500000 | 4.1332E-05 | | | | | | | | |
| Strontium | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | |
| Tin | | | | | | | | | | | | |
| Titanium | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW6010B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1158003 | | Instrument: | ME-ICP | |
| Matrix: | Water | | Calibration Dates: | 6/3/11 9:45 | 6/3/11 10:17 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 1.440065E-05 | 66.6908 | 3.976315 | 108.9714 | 0.9999999 | | 0.998 | |
| Antimony | 5.85815E-04 | 66.7301 | 13.62281 | 190.2969 | 0.9999968 | | 0.998 | |
| Arsenic | 3.040775E-04 | 66.70953 | 8.854835 | 181.7677 | 0.9999968 | | 0.998 | |
| Barium | 0.0096247 | 66.69177 | 3.465183 | 172.8808 | 0.9999602 | | 0.998 | |
| Beryllium | 0.0020597 | 66.77146 | 7.082935 | 151.8565 | 0.9999776 | | 0.998 | |
| Boron | 1.13675E-05 | 66.78367 | 4.002572 | 166.6493 | 0.9999464 | | 0.998 | |
| Cadmium | 0.0120495 | 66.77111 | 7.343025 | 188.8815 | 0.9999751 | | 0.998 | |
| Calcium | 3.381373E-05 | 66.83152 | 2.738242 | 91.98459 | 0.999956 | | 0.998 | |
| Chromium | 2.923125E-05 | 66.67575 | 10.19053 | 185.5386 | 0.999997 | | 0.998 | |
| Cobalt | 4.69245E-03 | 66.70907 | 4.413425 | 170.8154 | 0.9999825 | | 0.998 | |
| Copper | 5.985625E-05 | 66.70932 | 0.955065 | 54.8601 | 0.9999999 | | 0.998 | |
| Iron | 1.061698E-05 | 66.78587 | 21.5105 | 182.739 | 0.9999996 | | 0.998 | |
| Lead | 1.061975E-03 | 66.69107 | 27.0546 | 195.766 | 0.9999899 | | 0.998 | |
| Magnesium | 1.32024E-06 | 66.80419 | 14.8741 | 193.0311 | 0.9998582 | | 0.998 | |
| Manganese | 1.929775E-04 | 66.73072 | 3.503185 | 151.64 | 0.9999835 | | 0.998 | |
| Molybdenum | 3.40975E-03 | 66.66896 | 12.20503 | 193.1444 | 1 | | 0.998 | |
| Nickel | 0.002845 | 66.69923 | 1.01618 | 117.4919 | 0.9999988 | | 0.998 | |
| Potassium | 7.22425E-06 | 67.01735 | 3.02944 | 125.6931 | 0.999998 | | 0.998 | |
| Selenium | 3.75375E-04 | 66.67734 | 4.357195 | 181.9503 | 0.9999989 | | 0.998 | |
| Silver | 4.1935E-05 | 66.67419 | 4.82769 | 164.897 | 0.999999 | | 0.998 | |
| Sodium | 3.077425E-05 | 66.67279 | 1.238527 | 61.12319 | 0.9999972 | | 0.998 | |
| Strontium | 1.24525E-03 | 66.69791 | 5.393475 | 137.5615 | 0.9999978 | | 0.998 | |
| Thallium | 5.7898E-04 | 66.71293 | 11.27796 | 184.1311 | 0.9999906 | | 0.998 | |
| Tin | 1.05064E-03 | 66.67404 | 31.64494 | 196.7986 | 0.9999996 | | 0.998 | |
| Titanium | 1.6516E-04 | 66.69976 | 3.588397 | 131.1192 | 0.9999982 | | 0.998 | |
| Vanadium | 3.563075E-05 | 66.67458 | 1.521723 | 109.4981 | 0.9999998 | | 0.998 | |
| Zinc | 4.756125E-03 | 66.67336 | 10.02173 | 192.5113 | 0.9999997 | | 0.998 | |

# INITIAL CALIBRATION DATA

## SW6010B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1160001 | | Instrument: | ME-ICP | |
| Matrix: | Water | | Calibration Dates: | 6/7/11_10:06 | 6/7/11_10:38 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Aluminum | 0 | 0 | 5000 | 1.7714E-05 | 10000 | 1.8151E-05 | | | 500000 | 1.80666E-05 | | |
| Antimony | 0 | 0 | 100 | 0.0007546 | 1000 | 7.8674E-04 | | | | | 10000 | 7.7332E-04 |
| Arsenic | 0 | 0 | 100 | 0.0003663 | 1000 | 3.8864E-04 | | | | | 10000 | 0.0003822 |
| Barium | 0 | 0 | 50 | 0.0125144 | 1000 | 0.012503 | 5000 | 0.0127548 | | | | |
| Beryllium | 0 | 0 | 100 | 0.0026763 | 1000 | 0.0026584 | | | | | 10000 | 0.0025449 |
| Boron | 0 | 0 | 50 | 0.0000134 | 1000 | 1.404E-05 | | | | | 5000 | 1.3744E-05 |
| Cadmium | 0 | 0 | 100 | 0.015674 | 1000 | 0.015521 | | | | | 10000 | 0.014744 |
| Calcium | 0 | 0 | 1100 | 4.201818E-05 | 50000 | 4.1482E-05 | | | | | 10000 | |
| Chromium | 0 | 0 | 100 | 0.0000371 | 1000 | 3.585E-05 | | | | | 10000 | 3.6546E-05 |
| Cobalt | 0 | 0 | 100 | 0.0062404 | 1000 | 0.0061663 | | | | | 10000 | 0.0062119 |
| Copper | 0 | 0 | 100 | 0.0000796 | 1000 | 7.585E-05 | | | | | 10000 | 7.4328E-05 |
| Iron | 0 | 0 | 5100 | 1.402745E-05 | 10000 | 1.3375E-05 | | | 500000 | 1.3317E-05 | 10000 | |
| Lead | 0 | 0 | 100 | 0.0013853 | 1000 | 0.0013731 | | | | | 10000 | 0.0013851 |
| Magnesium | 0 | 0 | 5100 | | 50000 | 1.6082E-06 | | | 500000 | 1.71808E-06 | 10000 | |
| Manganese | 0 | 0 | 100 | 0.0002472 | 1000 | 2.4003E-04 | 10000 | 2.2999E-04 | | | 10000 | |
| Molybdenum | 0 | 0 | 100 | 0.0043524 | 1000 | 0.0044099 | | | | | 10000 | 0.0043795 |
| Nickel | 0 | 0 | 100 | 0.0037065 | 1000 | 0.0035686 | | | | | 10000 | 0.0035858 |
| Potassium | 0 | 0 | 1000 | 8.42E-06 | 10000 | 9.185E-06 | | | | | | |
| Selenium | 0 | 0 | 100 | 0.0004801 | 1000 | 0.0004772 | | | | | 10000 | 4.6651E-04 |
| Silver | 0 | 0 | 20 | 0.0000535 | 500 | 0.0000516 | 2000 | 5.159E-05 | | | | |
| Sodium | 0 | 0 | 1000 | | 50000 | 3.9104E-05 | | | | | | |
| Strontium | 0 | 0 | 100 | 0.001573 | 1000 | 0.001552 | | | | | 10000 | 0.001536 |
| Thallium | 0 | 0 | 100 | 0.0007735 | 1000 | 7.8803E-04 | | | | | 10000 | 7.8223E-04 |
| Tin | 0 | 0 | 50 | 0.0013318 | 1000 | 0.0013614 | | | | | 5000 | 1.35356E-03 |
| Titanium | 0 | 0 | 100 | 0.0002114 | 1000 | 2.0468E-04 | | | | | 10000 | 2.0816E-04 |
| Vanadium | 0 | 0 | 100 | 0.0000452 | 1000 | 4.366E-05 | | | | | 10000 | 4.3798E-05 |
| Zinc | 0 | 0 | 100 | 0.0061507 | 1000 | 0.0061174 | | | | | 10000 | 0.0060335 |

# INITIAL CALIBRATION DATA (Continued)

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1160001 | Instrument: | ME-ICP |
| Matrix: | Water | Calibration Dates: | 6/7/11 10:06 6/7/11 10:38 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Aluminum | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | | | |
| Barium | | | | | | | | | | | | |
| Beryllium | | | | | | | | | | | | |
| Boron | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | |
| Calcium | 100000 | | 500000 | 4.0586E-05 | | | | | | | | |
| Chromium | | | | | | | | | | | | |
| Cobalt | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | |
| Magnesium | | | 100000 | 1.6301E-06 | | | | | | | | |
| Manganese | | | | | | | | | | | | |
| Molybdenum | | | | | | | | | | | | |
| Nickel | | | | | | | | | | | | |
| Potassium | 100000 | 9.3412E-06 | | | | | | | | | | |
| Selenium | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | |
| Sodium | 100000 | 3.7587E-05 | 500000 | 3.8312E-05 | | | | | | | | |
| Strontium | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | |
| Tin | | | | | | | | | | | | |
| Titanium | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1160001 | Instrument: | ME-ICP |
| Matrix: | Water | Calibration Dates: | 6/7/11 10:06 6/7/11 10:38 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 1.34829E-05 | 66.68145 | 1.48205 | 178.2519 | 0.9999999 | | 0.998 | |
| Antimony | 5.78665E-04 | 66.70557 | 7.019465 | 189.526 | 0.9999961 | | 0.998 | |
| Arsenic | 2.84285E-04 | 66.74842 | 3.756715 | 166.1186 | 0.9999958 | | 0.998 | |
| Barium | 9.44305E-03 | 66.678 | 2.44191 | 176.6557 | 0.9999833 | | 0.998 | |
| Beryllium | 0.0019699 | 66.73207 | 6.079222 | 187.0055 | 0.9999818 | | 0.998 | |
| Boron | 1.0296E-05 | 66.71503 | 6.326572 | 194.034 | 0.9999797 | | 0.998 | |
| Cadmium | 1.148475E-02 | 66.76087 | 6.50458 | 191.0849 | 0.9999747 | | 0.998 | |
| Calcium | 3.102155E-05 | 66.69385 | 2.359732 | 169.4148 | 0.9999953 | | 0.998 | |
| Chromium | 2.7374E-05 | 66.69284 | 7.663805 | 191.9621 | 0.9999961 | | 0.998 | |
| Cobalt | 4.65465E-03 | 66.66989 | 2.875712 | 175.3875 | 0.9999994 | | 0.998 | |
| Copper | 5.74445E-05 | 66.77813 | 0.7949225 | 91.946 | 0.9999978 | | 0.998 | |
| Iron | 1.017986E-05 | 66.74174 | 3.946107 | 182.2807 | 0.9999998 | | 0.998 | |
| Lead | 1.035875E-03 | 66.66895 | 23.30187 | 195.8592 | 0.9999992 | | 0.998 | |
| Magnesium | 1.239095E-06 | 66.77672 | 84.29095 | 199.1746 | 0.9998976 | | 0.998 | |
| Manganese | 1.79305E-04 | 66.78279 | 7.718715 | 190.538 | 0.9999833 | | 0.998 | |
| Molybdenum | 3.28545E-03 | 66.6705 | 9.493885 | 194.552 | 0.9999995 | | 0.998 | |
| Nickel | 2.715225E-03 | 66.70495 | 1.15802 | 154.1108 | 0.9999994 | | 0.998 | |
| Potassium | 6.73655E-06 | 66.93391 | 1.466213 | 118.4179 | 0.9999993 | | 0.998 | |
| Selenium | 3.559525E-04 | 66.68688 | 9.41732 | 185.8657 | 0.999996 | | 0.998 | |
| Silver | 3.91725E-05 | 66.70607 | 5.629612 | 167.0053 | 0.9999999 | | 0.998 | |
| Sodium | 2.875075E-05 | 66.70148 | 1.136082 | 96.40266 | 0.9999713 | | 0.998 | |
| Strontium | 1.16525E-03 | 66.67935 | 2.84865 | 176.4325 | 0.9999991 | | 0.998 | |
| Thallium | 5.8594E-04 | 66.67445 | 5.555942 | 178.1319 | 0.9999993 | | 0.998 | |
| Tin | 1.01169E-03 | 66.67816 | 75.41809 | 198.3805 | 0.9999983 | | 0.998 | |
| Titanium | 1.5606E-04 | 66.68985 | 7.457818 | 192.7797 | 0.9999968 | | 0.998 | |
| Vanadium | 3.31645E-05 | 66.69967 | 4.199277 | 181.929 | 0.9999997 | | 0.998 | |
| Zinc | 0.0045754 | 66.67538 | 98.08331 | 199.5356 | 0.9999983 | | 0.998 | |

# INITIAL CALIBRATION DATA

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1165001 | Instrument: | ME-ICP |
| Matrix: | Water | Calibration Dates: | 6/13/11_13:16 6/13/11_13:47 |

| Compound | Level 01 | | Level 02 | | Level 03 | | Level 04 | | Level 05 | | Level 06 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Aluminum | 0 | 0 | 5000 | 1.8262E-05 | 10000 | 1.8757E-05 | | | 500000 | 1.87848E-05 | | |
| Antimony | 0 | 0 | 100 | 0.000744 | 1000 | 7.7814E-04 | | | | | 10000 | 7.3229E-04 |
| Arsenic | 0 | 0 | 100 | 0.0003708 | 1000 | 3.9594E-04 | | | | | 10000 | 3.8861E-04 |
| Barium | 0 | 0 | 50 | 0.0123978 | 1000 | 0.012729 | 5000 | 0.0129594 | | | | |
| Beryllium | 0 | 0 | 100 | 0.0026714 | 1000 | 0.0027608 | | | | | 10000 | 0.0025257 |
| Boron | 0 | 0 | 50 | 0.0000142 | 1000 | 0.000015 | | | | | 5000 | 1.4612E-05 |
| Cadmium | 0 | 0 | 100 | 0.015979 | 1000 | 0.016031 | | | | | 10000 | 0.015042 |
| Calcium | 0 | 0 | 1100 | 4.484546E-05 | 50000 | 4.4812E-05 | | | | | 10000 | |
| Chromium | 0 | 0 | 100 | 0.0000379 | 1000 | 3.872E-05 | | | | | 10000 | 3.7602E-05 |
| Cobalt | 0 | 0 | 100 | 0.006033 | 1000 | 0.0061101 | | | | | 10000 | 0.005968 |
| Copper | 0 | 0 | 100 | 0.0000787 | 1000 | 7.633999E-05 | | | | | 10000 | 7.2962E-05 |
| Iron | 0 | 0 | 5100 | 1.362157E-05 | 10000 | 1.3497E-05 | | | 500000 | 1.33486E-05 | 10000 | |
| Lead | 0 | 0 | 100 | 0.0013751 | 1000 | 0.0013798 | | | | | 10000 | 0.0013605 |
| Magnesium | 0 | 0 | 5100 | | 50000 | 1.684E-06 | | | 500000 | 1.79568E-06 | 10000 | |
| Manganese | 0 | 0 | 100 | 0.0002566 | 1000 | 2.5604E-04 | 10000 | 0.0002459 | | | 10000 | |
| Molybdenum | 0 | 0 | 100 | 0.0043849 | 1000 | 0.004474 | | | | | 10000 | 0.0044147 |
| Nickel | 0 | 0 | 100 | 0.003739 | 1000 | 0.0036711 | | | | | 10000 | 0.0036394 |
| Potassium | 0 | 0 | 1000 | 8.550001E-06 | 10000 | 9.603E-06 | | | | | | |
| Selenium | 0 | 0 | 100 | 0.0004753 | 1000 | 4.8303E-04 | | | | | 10000 | 4.6063E-04 |
| Silver | 0 | 0 | 20 | 0.000055 | 500 | 5.258E-05 | 2000 | 5.2995E-05 | | | | |
| Sodium | 0 | 0 | 1000 | | 50000 | 4.0476E-05 | | | | | | |
| Strontium | 0 | 0 | 100 | 0.00162 | 1000 | 0.001652 | | | | | 10000 | 0.001585 |
| Thallium | 0 | 0 | 100 | 7.788001E-04 | 1000 | 7.9392E-04 | | | | | 10000 | 7.9152E-04 |
| Tin | 0 | 0 | 50 | 0.0013392 | 1000 | 0.0013995 | | | | | 5000 | 1.34466E-03 |
| Titanium | 0 | 0 | 100 | 0.0002145 | 1000 | 0.0002138 | | | | | 10000 | 0.0002114 |
| Vanadium | 0 | 0 | 100 | 0.0000466 | 1000 | 0.0000473 | | | | | 10000 | 4.6239E-05 |
| Zinc | 0 | 0 | 100 | 0.0061648 | 1000 | 0.0062235 | | | | | 10000 | 0.006042 |

# INITIAL CALIBRATION DATA (Continued)

## SW6010B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Calibration: | 1165001 | Instrument: | ME-ICP |
| Matrix: | Water | Calibration Dates: | 6/13/11 13:16 6/13/11 13:47 |

| Compound | Level 07 | | Level 08 | | Level 09 | | Level 10 | | Level 11 | | Level 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF | ug/L | RF |
| Aluminum | | | | | | | | | | | | |
| Antimony | | | | | | | | | | | | |
| Arsenic | | | | | | | | | | | | |
| Barium | | | | | | | | | | | | |
| Beryllium | | | | | | | | | | | | |
| Boron | | | | | | | | | | | | |
| Cadmium | | | | | | | | | | | | |
| Calcium | 100000 | | 500000 | 4.3098E-05 | | | | | | | | |
| Chromium | | | | | | | | | | | | |
| Cobalt | | | | | | | | | | | | |
| Copper | | | | | | | | | | | | |
| Iron | | | | | | | | | | | | |
| Lead | | | | | | | | | | | | |
| Magnesium | | | 100000 | 1.6976E-06 | | | | | | | | |
| Manganese | | | | | | | | | | | | |
| Molybdenum | | | | | | | | | | | | |
| Nickel | | | | | | | | | | | | |
| Potassium | 100000 | 9.9043E-06 | | | | | | | | | | |
| Selenium | | | | | | | | | | | | |
| Silver | | | | | | | | | | | | |
| Sodium | 100000 | 3.8855E-05 | 500000 | 3.9398E-05 | | | | | | | | |
| Strontium | | | | | | | | | | | | |
| Thallium | | | | | | | | | | | | |
| Tin | | | | | | | | | | | | |
| Titanium | | | | | | | | | | | | |
| Vanadium | | | | | | | | | | | | |
| Zinc | | | | | | | | | | | | |

# INITIAL CALIBRATION DATA (Continued)

## SW6010B

| | | | | | |
|---|---|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | | SDG: | Kirtland_014 | |
| Client: | Shaw E & I (I700) | | Project: | Kirtland AFB 2011 | |
| Calibration: | 1165001 | | Instrument: | ME-ICP | |
| Matrix: | Water | | Calibration Dates: | 6/13/11 13:16 | 6/13/11 13:47 |

| Compound | Mean RF | RF RSD | Mean RT | RT RSD | Linear r | Quad COD | LIMIT | Q |
|---|---|---|---|---|---|---|---|---|
| Aluminum | 1.395095E-05 | 66.68889 | 4.109628 | 174.4364 | 0.9999999 | | 0.998 | |
| Antimony | 5.636075E-04 | 66.75593 | 18.94354 | 195.1549 | 0.9999617 | | 0.998 | |
| Arsenic | 2.888375E-04 | 66.76677 | 7.757738 | 184.3361 | 0.999995 | | 0.998 | |
| Barium | 9.52155E-03 | 66.71061 | 4.757143 | 177.0808 | 0.9999871 | | 0.998 | |
| Beryllium | 1.989475E-03 | 66.84432 | 12.79769 | 196.6104 | 0.9999172 | | 0.998 | |
| Boron | 1.0953E-05 | 66.73334 | 4.230673 | 171.2638 | 0.999969 | | 0.998 | |
| Cadmium | 0.011763 | 66.77852 | 5.627293 | 195.8398 | 0.9999599 | | 0.998 | |
| Calcium | 3.318886E-05 | 66.712 | 1.937717 | 165.5069 | 0.9999846 | | 0.998 | |
| Chromium | 2.85555E-05 | 66.68722 | 1.9738 | 158.3319 | 0.9999912 | | 0.998 | |
| Cobalt | 4.527775E-03 | 66.679 | 1.492413 | 140.9071 | 0.9999947 | | 0.998 | |
| Copper | 5.70005E-05 | 66.79454 | 1.041695 | 128.7034 | 0.999984 | | 0.998 | |
| Iron | 1.011679E-05 | 66.67581 | 71.7077 | 198.6237 | 1 | | 0.998 | |
| Lead | 1.02885E-03 | 66.67145 | 28.35809 | 196.8714 | 0.9999982 | | 0.998 | |
| Magnesium | 1.29432E-06 | 66.77739 | 80.33438 | 198.5423 | 0.9998855 | | 0.998 | |
| Manganese | 1.89635E-04 | 66.71708 | 8.948958 | 192.8842 | 0.9999844 | | 0.998 | |
| Molybdenum | 0.0033184 | 66.67601 | 6.321252 | 190.002 | 0.9999982 | | 0.998 | |
| Nickel | 2.762375E-03 | 66.68363 | 1.391087 | 165.4248 | 0.9999996 | | 0.998 | |
| Potassium | 7.014325E-06 | 67.17853 | 2.225953 | 135.1397 | 0.9999975 | | 0.998 | |
| Selenium | 3.5474E-04 | 66.71808 | 12.82605 | 193.066 | 0.9999788 | | 0.998 | |
| Silver | 4.014375E-05 | 66.71861 | 4.40061 | 181.2403 | 0.9999944 | | 0.998 | |
| Sodium | 2.968225E-05 | 66.70529 | 1.60162 | 100.0963 | 0.9999762 | | 0.998 | |
| Strontium | 1.21425E-03 | 66.70474 | 8.67155 | 188.8761 | 0.9999827 | | 0.998 | |
| Thallium | 5.9106E-04 | 66.67612 | 8.74486 | 190.018 | 0.9999998 | | 0.998 | |
| Tin | 1.02084E-03 | 66.72001 | 52.02353 | 197.3329 | 0.9999268 | | 0.998 | |
| Titanium | 1.59925E-04 | 66.67184 | 3.15921 | 182.2838 | 0.9999989 | | 0.998 | |
| Vanadium | 3.503475E-05 | 66.67852 | 3.01401 | 168.525 | 0.9999951 | | 0.998 | |
| Zinc | 4.607575E-03 | 66.68686 | 63.01523 | 199.4913 | 0.9999914 | | 0.998 | |

# Data for Wet Chemistry Forms

# ANALYSIS DATA SHEET

**GW0102**

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
Sampled: 05/23/11 14:43
% Solids: 0.00

SDG: Kirtland_014
Project: Kirtland AFB 2011
Laboratory ID: 1105208-01
Received: 05/24/11 09:00

| CAS NO. | Analyte | Conc. (mg/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7664-41-7 | Ammonia as N | | 0.110 | 0.150 | 0.300 | 1 | U | SM4500NH3BG | 1F09001 | 06/09/11 15:34 |
| 18496-25-8 | Sulfide | | 0.690 | 1.72 | 3.45 | 0.69 | U | SM4500S2CF | 1E27011 | 05/27/11 13:30 |
| 10-09-3 | Alkalinity, Bicarbonate (as CACO3) | 98.8 | 1.00 | 1.00 | 1.00 | 1 | | SM2320B | 1F06012 | 06/06/11 12:10 |
| 16887-00-6 | Chloride | 7.12 | 0.170 | 0.330 | 1.00 | 1 | M | E300.0 | 1E24008 | 05/24/11 22:56 |
| 13-01-4 | Alkalinity, Carbonate (as CACO3) | | 1.00 | 1.00 | 1.00 | 1 | U | SM2320B | 1F06012 | 06/06/11 12:10 |
| 14797-55-8 | Nitrate as N | 0.0700 | 0.0330 | 0.100 | 0.200 | 1 | J | E300.0 | 1E24008 | 05/24/11 22:56 |
| 14808-79-8 | Sulfate as SO4 | 27.0 | 0.330 | 1.00 | 2.50 | 1 | M | E300.0 | 1E24008 | 05/24/11 22:56 |

# ANALYSIS DATA SHEET

**GW0064**

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | Laboratory ID: | 1105217-01 |
| Sampled: | 05/24/11 13:58 | Received: | 05/25/11 09:00 |
| % Solids: | 0.00 | | |

| CAS NO. | Analyte | Conc. (mg/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7664-41-7 | Ammonia as N | | 0.110 | 0.150 | 0.300 | 1 | U | SM4500NH3BG | 1F09001 | 06/09/11 15:36 |
| 18496-25-8 | Sulfide | | 0.678 | 1.69 | 3.39 | 0.68 | U | SM4500S2CF | 1E27011 | 05/27/11 13:31 |
| 10-09-3 | Alkalinity, Bicarbonate (as CACO3) | 114 | 1.00 | 1.00 | 1.00 | 1 | | SM2320B | 1F06012 | 06/06/11 12:36 |
| 16887-00-6 | Chloride | 12.7 | 0.170 | 0.330 | 2.50 | 1 | M | E300.0 | 1E25011 | 05/25/11 18:58 |
| 13-01-4 | Alkalinity, Carbonate (as CACO3) | | 1.00 | 1.00 | 1.00 | 1 | U | SM2320B | 1F06012 | 06/06/11 12:36 |
| 14797-55-8 | Nitrate as N | | 0.0330 | 0.100 | 0.200 | 1 | U | E300.0 | 1E25011 | 05/25/11 18:58 |
| 14808-79-8 | Sulfate as SO4 | 36.9 | 0.330 | 1.00 | 2.50 | 1 | M | E300.0 | 1E25011 | 05/25/11 18:58 |

# ANALYSIS DATA SHEET

**GW0065**

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
Sampled: 05/25/11 10:42
% Solids: 0.00

SDG: Kirtland_014
Project: Kirtland AFB 2011
Laboratory ID: 1105225-01
Received: 05/26/11 09:00

| CAS NO. | Analyte | Conc. (mg/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7664-41-7 | Ammonia as N | | 0.110 | 0.150 | 0.300 | 1 | U | SM4500NH3BG | 1F13029 | 06/15/11 15:08 |
| 18496-25-8 | Sulfide | | 0.690 | 1.72 | 3.45 | 0.69 | U | SM4500S2CF | 1E27011 | 05/27/11 13:45 |
| 10-09-3 | Alkalinity, Bicarbonate (as CACO3) | 101 | 1.00 | 1.00 | 1.00 | 1 | | SM2320B | 1F08005 | 06/08/11 11:30 |
| 16887-00-6 | Chloride | 9.35 | 0.170 | 0.330 | 1.00 | 1 | M | E300.0 | 1E26024 | 05/26/11 20:02 |
| 13-01-4 | Alkalinity, Carbonate (as CACO3) | | 1.00 | 1.00 | 1.00 | 1 | U | SM2320B | 1F08005 | 06/08/11 11:30 |
| 14797-55-8 | Nitrate as N | 0.151 | 0.0330 | 0.100 | 0.200 | 1 | J | E300.0 | 1E26024 | 05/26/11 20:02 |
| 14808-79-8 | Sulfate as SO4 | 27.5 | 0.330 | 1.00 | 2.50 | 1 | M | E300.0 | 1E26024 | 05/26/11 20:02 |

# ANALYSIS DATA SHEET

**GW0066**

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
Sampled: 05/25/11 13:56
% Solids: 0.00

SDG: Kirtland_014
Project: Kirtland AFB 2011
Laboratory ID: 1105225-03
Received: 05/26/11 09:00

| CAS NO. | Analyte | Conc. (mg/L) | DL | LOD | LOQ | D.F. | Q | Method | Batch | Analyzed |
|---|---|---|---|---|---|---|---|---|---|---|
| 7664-41-7 | Ammonia as N | | 0.110 | 0.150 | 0.300 | 1 | U | SM4500NH3BG | 1F13029 | 06/15/11 15:10 |
| 18496-25-8 | Sulfide | | 0.727 | 1.82 | 3.64 | 0.73 | U | SM4500S2CF | 1E27011 | 05/27/11 13:46 |
| 10-09-3 | Alkalinity, Bicarbonate (as CACO3) | 178 | 1.00 | 1.00 | 1.00 | 1 | | SM2320B | 1F08005 | 06/08/11 11:41 |
| 16887-00-6 | Chloride | 39.9 | 0.170 | 0.330 | 1.00 | 1 | M | E300.0 | 1E26024 | 05/26/11 20:20 |
| 13-01-4 | Alkalinity, Carbonate (as CACO3) | | 1.00 | 1.00 | 1.00 | 1 | U | SM2320B | 1F08005 | 06/08/11 11:41 |
| 14797-55-8 | Nitrate as N | | 0.0330 | 0.100 | 0.200 | 1 | U | E300.0 | 1E26024 | 05/26/11 20:20 |
| 14808-79-8 | Sulfate as SO4 | 49.7 | 0.330 | 1.00 | 2.50 | 1 | M | E300.0 | 1E26024 | 05/26/11 20:20 |

# INITIAL AND CONTINUING CALIBRATION CHECK

## E300.0

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: WC-IC

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1124002
Sequence: 1E12407

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1E12407-ICV1 | Chloride | 4.800 | 4.757 | 99.1 | mg/L | +/- 10.00% |
| | Nitrate as N | 3.616 | 3.589 | 99.3 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 24.00 | 23.63 | 98.5 | mg/L | +/- 10.00% |

# INITIAL AND CONTINUING CALIBRATION CHECK

## E300.0

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: WC-IC

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1124002
Sequence: 1E14412

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1E14412-CCV1 | Chloride | 25.00 | 23.50 | 94.0 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.372 | 94.9 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 22.91 | 91.7 | mg/L | +/- 10.00% |
| 1E14412-CCV2 | Chloride | 25.00 | 24.46 | 97.8 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.403 | 96.1 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 24.60 | 98.4 | mg/L | +/- 10.00% |
| 1E14412-CCV4 | Chloride | 25.00 | 24.46 | 97.8 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.475 | 99.0 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 24.30 | 97.2 | mg/L | +/- 10.00% |
| 1E14412-CCV5 | Chloride | 25.00 | 24.46 | 97.8 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.465 | 98.6 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 24.34 | 97.4 | mg/L | +/- 10.00% |

# INITIAL AND CONTINUING CALIBRATION CHECK

## E300.0

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: WC-IC

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1124002
Sequence: 1F15423

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1F15423-CCV1 | Chloride | 25.00 | 23.37 | 93.5 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.357 | 94.3 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 23.36 | 93.5 | mg/L | +/- 10.00% |
| 1F15423-CCV2 | Chloride | 25.00 | 24.16 | 96.6 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.444 | 97.8 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 24.16 | 96.6 | mg/L | +/- 10.00% |
| 1F15423-CCV3 | Chloride | 25.00 | 23.99 | 96.0 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.434 | 97.4 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 23.86 | 95.4 | mg/L | +/- 10.00% |

# INITIAL AND CONTINUING CALIBRATION CHECK

## E300.0

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: WC-IC

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1124002
Sequence: 1F15709

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1F15709-CCV1 | Chloride | 25.00 | 24.00 | 96.0 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.441 | 97.6 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 23.74 | 95.0 | mg/L | +/- 10.00% |
| 1F15709-CCV2 | Chloride | 25.00 | 24.51 | 98.1 | mg/L | +/- 10.00% |
| | Nitrate as N | 2.500 | 2.478 | 99.1 | mg/L | +/- 10.00% |
| | Sulfate as SO4 | 25.00 | 24.18 | 96.7 | mg/L | +/- 10.00% |

# INITIAL AND CONTINUING CALIBRATION CHECK

## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: WC-Lachat

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1161003
Sequence: 1F16013

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1F16013-ICV1 | Ammonia as N | 2.000 | 2.116 | 106 | mg/L | +/- 10.00% |
| 1F16013-CCV1 | Ammonia as N | 2.000 | 2.187 | 109 | mg/L | +/- 10.00% |

# INITIAL AND CONTINUING CALIBRATION CHECK

## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: WC-Lachat

SDG: Kirtland_014
Project: Kirtland AFB 2011
Calibration: 1166003
Sequence: 1F16608

| Lab Sample ID | Analyte | True | Found | %R | Units | Control Limit |
|---|---|---|---|---|---|---|
| 1F16608-ICV1 | Ammonia as N | 2.000 | 2.125 | 106 | mg/L | +/- 10.00% |
| 1F16608-CCV1 | Ammonia as N | 2.000 | 2.170 | 108 | mg/L | +/- 10.00% |

# CRDL STANDARD

## E300.0

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: WC-IC

Calibration: 1124002

Sequence: 1E14412

| Lab Sample ID | Analyte | True | Found | %R | Units | QC Limts |
|---|---|---|---|---|---|---|
| 1E14412-CRL1 | Nitrate as N | 0.05000 | 0.05800 | 116 | mg/L | 75 - 125 |
| 1E14412-CRL2 | Chloride | 1.000 | 0.7560 | 75.6 | mg/L | 75 - 125 |
| 1E14412-CRL3 | Sulfate as SO4 | 2.500 | 1.905 | 76.2 | mg/L | 75 - 125 |

# CRDL STANDARD

## E300.0

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: WC-IC

Calibration: 1124002

Sequence: 1F15423

| Lab Sample ID | Analyte | True | Found | %R | Units | QC Limts |
|---|---|---|---|---|---|---|
| 1F15423-CRL1 | Nitrate as N | 0.1000 | 0.1010 | 101 | mg/L | 75 - 125 |
| 1F15423-CRL2 | Chloride | 2.500 | 2.158 | 86.3 | mg/L | 75 - 125 |
| | Sulfate as SO4 | 2.500 | 2.049 | 82.0 | mg/L | 75 - 125 |

# CRDL STANDARD

## E300.0

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: WC-IC

Calibration: 1124002

Sequence: 1F15709

| Lab Sample ID | Analyte | True | Found | %R | Units | QC Limts |
|---|---|---|---|---|---|---|
| 1F15709-CRL1 | Chloride | 1.000 | 0.7850 | 78.5 | mg/L | 75 - 125 |
| | Nitrate as N | 0.1000 | 0.1020 | 102 | mg/L | 75 - 125 |
| 1F15709-CRL2 | Sulfate as SO4 | 2.500 | 2.049 | 82.0 | mg/L | 75 - 125 |

# METHOD BLANKS
## E300.0

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 1E24008

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1E24008-BLK1 | Chloride | -0.0920 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |

# METHOD BLANKS
## E300.0

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 1E25011

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1E25011-BLK1 | Chloride | -0.0610 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |

# METHOD BLANKS
## E300.0

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 1E26024

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1E26024-BLK1 | Chloride | -0.0170 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |

# METHOD BLANKS
## SM4500S2CF

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 1E27011

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1E27011-BLK1 | Sulfide | 0.00 | 0.800 | 4.00 | mg/L | U | SM4500S2CF |

# METHOD BLANKS
## SM2320B

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 1F06012

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F06012-BLK1 | Alkalinity, Total (as CACO3) | 0.00 | 1.00 | 1.00 | mg/L | U | SM2320B |

# METHOD BLANKS
## SM2320B

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 1F08005

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F08005-BLK1 | Alkalinity, Total (as CACO3) | 0.456 | 1.00 | 1.00 | mg/L | U | SM2320B |

# METHOD BLANKS
## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 1F09001

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F09001-BLK1 | Ammonia as N | -0.0224 | 0.110 | 0.300 | mg/L | U | SM4500NH3BG |

# METHOD BLANKS
## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 1F13029

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F13029-BLK1 | Ammonia as N | -0.0558 | 0.110 | 0.300 | mg/L | U | SM4500NH3BG |

# BLANKS
## E300.0

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 1E12407
Calibration: 1124002
Instrument ID: WC-IC

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1E12407-ICB1 | Chloride | -0.1530 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.000 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.000 | 0.330 | 2.00 | mg/L | U | E300.0 |

# BLANKS
## E300.0

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 1E14412
Calibration: 1124002
Instrument ID: WC-IC

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1E14412-CCB1 | Chloride | -0.0920 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |
| 1E14412-CCB2 | Chloride | -0.0790 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |
| 1E14412-CCB4 | Chloride | -0.116 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |
| 1E14412-CCB5 | Chloride | -0.103 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |

# BLANKS
## E300.0

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 1F15423
Calibration: 1124002
Instrument ID: WC-IC

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F15423-CCB1 | Chloride | -0.129 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |
| 1F15423-CCB2 | Chloride | 0.0600 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.0220 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |
| 1F15423-CCB3 | Chloride | -0.110 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.00 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |

# BLANKS
## E300.0

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 1F15709
Calibration: 1124002
Instrument ID: WC-IC

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F15709-CCB1 | Chloride | -0.0240 | 0.170 | 0.500 | mg/L | U | E300.0 |
| | Nitrate as N | 0.0210 | 0.0330 | 0.200 | mg/L | U | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |
| 1F15709-CCB2 | Chloride | 0.170 | 0.170 | 0.500 | mg/L | | E300.0 |
| | Nitrate as N | 0.0360 | 0.0330 | 0.200 | mg/L | J | E300.0 |
| | Sulfate as SO4 | 0.00 | 0.330 | 2.00 | mg/L | U | E300.0 |

# BLANKS
## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 1F16013
Calibration: 1161003
Instrument ID: WC-Lachat

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F16013-ICB1 | Ammonia as N | -0.01347 | 0.110 | 0.300 | mg/L | U | SM4500NH3BG |
| 1F16013-CCB1 | Ammonia as N | -0.0187 | 0.110 | 0.300 | mg/L | U | SM4500NH3BG |

# BLANKS
## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
SDG: Kirtland_014
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 1F16608
Calibration: 1166003
Instrument ID: WC-Lachat

| Lab Sample ID | Analyte | Found | MDL | MRL | Units | C | Method |
|---|---|---|---|---|---|---|---|
| 1F16608-ICB1 | Ammonia as N | -0.01774 | 0.110 | 0.300 | mg/L | U | SM4500NH3BG |
| 1F16608-CCB1 | Ammonia as N | -0.0168 | 0.110 | 0.300 | mg/L | U | SM4500NH3BG |

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

## E300.0

**GW0064**

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Matrix: Water

Batch: 1E25011

% Solids:

Source Sample Name: **1105217-01**

| ANALYTE | SPIKE ADDED (mg/L) | SAMPLE CONCENTRATION (mg/L) | MS CONCENTRATION (mg/L) | MS % REC. | Q | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Chloride | 27.78 | 12.68 | 39.64 | 97.1 | | 80 - 120 |
| Nitrate as N | 2.778 | ND | 2.719 | 97.9 | | 80 - 120 |
| Sulfate as SO4 | 27.78 | 36.92 | 63.70 | 96.4 | | 80 - 120 |

| ANALYTE | SPIKE ADDED (mg/L) | MSD CONCENTRATION (mg/L) | MSD % REC. # | % RPD | Q | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|
| Chloride | 27.78 | 39.98 | 98.3 | 0.857 | | 20 | 80 - 120 |
| Nitrate as N | 2.778 | 2.713 | 97.7 | 0.205 | | 20 | 80 - 120 |
| Sulfate as SO4 | 27.78 | 64.09 | 97.8 | 0.616 | | 20 | 80 - 120 |

# MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

**SM2320B**

**GW0102**

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Matrix: Water

Batch: 1F06012

% Solids:

Source Sample Name: **1105208-01**

| ANALYTE | SPIKE ADDED (mg/L) | SAMPLE CONCENTRATION (mg/L) | MS CONCENTRATION (mg/L) | MS % REC. | Q | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Alkalinity, Total (as CACO3) | 111.1 | 98.80 | 233.9 | 122 | | 75 - 125 |

| ANALYTE | SPIKE ADDED (mg/L) | MSD CONCENTRATION (mg/L) | MSD % REC. # | % RPD | Q | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|---|
| Alkalinity, Total (as CACO3) | 111.1 | 234.8 | 122 | 0.360 | | 20 | 75 - 125 |

GW0064

# DUPLICATES

## E300.0

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
Batch: 1E25011
Preparation: WC_PREP_ANIONS_W
Source Sample Name: GW0064

SDG: Kirtland_014
Project: Kirtland AFB 2011
Laboratory ID: 1E25011-DUP1
Lab Source ID: 1105217-01
Initial/Final: 5 mL / 5 mL
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | DUPLICATE CONCENTRATION (mg/L) | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|
| Chloride | 20 | 12.7 | 12.64 | 0.340 | | E300.0 |
| Nitrate as N | 20 | 0.200 U | 0.200 U | | | E300.0 |
| Sulfate as SO4 | 20 | 36.9 | 36.68 | 0.663 | | E300.0 |

GW0102

# DUPLICATES

## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
Batch: 1F09001
Preparation: pNone
Source Sample Name: GW0102

SDG: Kirtland_014
Project: Kirtland AFB 2011
Laboratory ID: 1F09001-DUP1
Lab Source ID: 1105208-01
Initial/Final: 100 mL / 100 mL
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | DUPLICATE CONCENTRATION (mg/L) | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|
| Ammonia as N | | 0.300 U | 0.300 U | | | SM4500NH3BG |

GW0065

# DUPLICATES

## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
Batch: 1F13029
Preparation: pNone
Source Sample Name: GW0065

SDG: Kirtland_014
Project: Kirtland AFB 2011
Laboratory ID: 1F13029-DUP1
Lab Source ID: 1105225-01
Initial/Final: 100 mL / 100 mL
% Solids:

| ANALYTE | CONTROL LIMIT | SAMPLE CONCENTRATION (mg/L) | DUPLICATE CONCENTRATION (mg/L) | RPD % | Q | METHOD |
|---|---|---|---|---|---|---|
| Ammonia as N | | 0.300 U | 0.300 U | | | SM4500NH3BG |

# LCS / LCS DUPLICATE RECOVERY

## E300.0

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E24008 | Laboratory ID: | 1E24008-BS1 |
| Preparation: | WC_PREP_ANIONS_W | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Chloride | 4.800 | 4.748 | 98.9 | 90 - 110 |
| Nitrate as N | 3.616 | 3.572 | 98.8 | 90 - 110 |
| Sulfate as SO4 | 24.00 | 23.21 | 96.7 | 90 - 110 |

# LCS / LCS DUPLICATE RECOVERY

## E300.0

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E25011 | Laboratory ID: | 1E25011-BS1 |
| Preparation: | WC_PREP_ANIONS_W | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Chloride | 4.800 | 4.737 | 98.7 | 90 - 110 |
| Nitrate as N | 3.616 | 3.577 | 98.9 | 90 - 110 |
| Sulfate as SO4 | 24.00 | 23.43 | 97.6 | 90 - 110 |

# LCS / LCS DUPLICATE RECOVERY

## E300.0

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E26024 | Laboratory ID: | 1E26024-BS1 |
| Preparation: | WC_PREP_ANIONS_W | Initial/Final: | 5 mL / 5 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Chloride | 4.800 | 4.837 | 101 | 90 - 110 |
| Nitrate as N | 3.616 | 3.631 | 100 | 90 - 110 |
| Sulfate as SO4 | 24.00 | 23.95 | 99.8 | 90 - 110 |

# LCS / LCS DUPLICATE RECOVERY

## SM4500S2CF

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1E27011 | Laboratory ID: | 1E27011-BS1 |
| Preparation: | pNone | Initial/Final: | 3 mL / 250 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Sulfide | 1387 | 1300 | 93.7 | 80 - 120 |

| ANALYTE | SPIKE ADDED (mg/L) | LCSD CONCENTRATION (mg/L) | LCSD % REC. # | % RPD # | QC LIMITS RPD | QC LIMITS REC. |
|---|---|---|---|---|---|---|
| Sulfide | 1387 | 1282 | 92.5 | 1.36 | 20 | 80 - 120 |

# LCS / LCS DUPLICATE RECOVERY

## SM2320B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F06012 | Laboratory ID: | 1F06012-BS1 |
| Preparation: | pNone | Initial/Final: | 5 mL / 25 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Alkalinity, Total (as CACO3) | 1000 | 1092 | 109 | 80 - 120 |

# LCS / LCS DUPLICATE RECOVERY

## SM2320B

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F08005 | Laboratory ID: | 1F08005-BS1 |
| Preparation: | pNone | Initial/Final: | 5 mL / 25 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Alkalinity, Total (as CACO3) | 1000 | 853.1 | 85.3 | 80 - 120 |

# LCS / LCS DUPLICATE RECOVERY

## SM4500NH3BG

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F09001 | Laboratory ID: | 1F09001-BS1 |
| Preparation: | pNone | Initial/Final: | 100 mL / 100 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Ammonia as N | 5.000 | 4.569 | 91.4 | 80 - 120 |

# LCS / LCS DUPLICATE RECOVERY

## SM4500NH3BG

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Matrix: | Water | | |
| Batch: | 1F13029 | Laboratory ID: | 1F13029-BS1 |
| Preparation: | pNone | Initial/Final: | 100 mL / 100 mL |

| ANALYTE | SPIKE ADDED (mg/L) | LCS CONCENTRATION (mg/L) | LCS % REC. | QC LIMITS REC. |
|---|---|---|---|---|
| Ammonia as N | 5.000 | 4.663 | 93.3 | 80 - 120 |

# METHOD DETECTION AND REPORTING LIMITS

**Laboratory:** Empirical Laboratories, LLC **SDG:** Kirtland_014

**Client:** Shaw E & I (I700) **Project:** Kirtland AFB 2011

**Matrix:** Water **Instrument:**

| Analyte | MDL | MRL | Units | Method |
|---|---|---|---|---|
| Alkalinity, Bicarbonate (as CACO3) | 1.00 | 1.00 | mg/L | SM2320B |
| Alkalinity, Carbonate (as CACO3) | 1.00 | 1.00 | mg/L | SM2320B |
| Sulfide | 0.800 | 4.00 | mg/L | SM4500S2CF |

# METHOD DETECTION AND REPORTING LIMITS

**Laboratory:** Empirical Laboratories, LLC **SDG:** Kirtland_014

**Client:** Shaw E & I (I700) **Project:** Kirtland AFB 2011

**Matrix:** Water **Instrument:** WC-IC

| Analyte | MDL | MRL | Units | Method |
|---|---|---|---|---|
| Chloride | 0.170 | 0.500 | mg/L | E300.0 |
| Nitrate as N | 0.0330 | 0.200 | mg/L | E300.0 |
| Sulfate as SO4 | 0.330 | 2.00 | mg/L | E300.0 |

# METHOD DETECTION AND REPORTING LIMITS

**Laboratory:** Empirical Laboratories, LLC
**SDG:** Kirtland_014
**Client:** Shaw E & I (I700)
**Project:** Kirtland AFB 2011
**Matrix:** Water
**Instrument:** WC-Lachat

| Analyte | MDL | MRL | Units | Method |
|---|---|---|---|---|
| Ammonia as N | 0.110 | 0.300 | mg/L | SM4500NH3BG |

# PREPARATION BATCH SUMMARY

## E300.0

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E24008 Batch Matrix: Water Preparation: WC_PREP_ANIONS_W

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 05/24/11 10:06 | 5.00 | 5.00 |
| GW0102 | 1105208-01 | 05/24/11 10:06 | 5.00 | 5.00 |
| Blank | 1E24008-BLK1 | 05/24/11 10:06 | 5.00 | 5.00 |
| LCS | 1E24008-BS1 | 05/24/11 10:06 | 5.00 | 5.00 |

# PREPARATION BATCH SUMMARY

## E300.0

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E25011 Batch Matrix: Water Preparation: WC_PREP_ANIONS_W

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0064 | 1105217-01 | 05/25/11 14:15 | 5.00 | 5.00 |
| GW0064 | 1105217-01 | 05/25/11 14:15 | 5.00 | 5.00 |
| Blank | 1E25011-BLK1 | 05/25/11 14:15 | 5.00 | 5.00 |
| LCS | 1E25011-BS1 | 05/25/11 14:15 | 5.00 | 5.00 |
| GW0064 | 1E25011-DUP1 | 05/25/11 14:15 | 5.00 | 5.00 |
| GW0064 | 1E25011-MS1 | 05/25/11 14:15 | 22.50 | 25.00 |
| GW0064 | 1E25011-MSD1 | 05/25/11 14:15 | 22.50 | 25.00 |

# PREPARATION BATCH SUMMARY

## E300.0

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E26024 Batch Matrix: Water Preparation: WC_PREP_ANIONS_W

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0065 | 1105225-01 | 05/26/11 17:13 | 5.00 | 5.00 |
| GW0065 | 1105225-01 | 05/26/11 17:13 | 5.00 | 5.00 |
| GW0066 | 1105225-03 | 05/26/11 17:13 | 5.00 | 5.00 |
| GW0066 | 1105225-03 | 05/26/11 17:13 | 5.00 | 5.00 |
| Blank | 1E26024-BLK1 | 05/26/11 17:13 | 5.00 | 5.00 |
| LCS | 1E26024-BS1 | 05/26/11 17:13 | 5.00 | 5.00 |

# PREPARATION BATCH SUMMARY

## SM4500S2CF

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1E27011 Batch Matrix: Water Preparation: pNone

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 05/27/11 11:27 | 290.00 | 200.00 |
| GW0064 | 1105217-01 | 05/27/11 11:27 | 295.00 | 200.00 |
| GW0065 | 1105225-01 | 05/27/11 11:27 | 290.00 | 200.00 |
| GW0066 | 1105225-03 | 05/27/11 11:27 | 275.00 | 200.00 |
| Blank | 1E27011-BLK1 | 05/27/11 11:27 | 250.00 | 200.00 |
| LCS | 1E27011-BS1 | 05/27/11 11:27 | 3.00 | 250.00 |
| LCS Dup | 1E27011-BSD1 | 05/27/11 11:27 | 3.00 | 250.00 |

# PREPARATION BATCH SUMMARY

## SM2320B

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F06012 Batch Matrix: Water Preparation: pNone

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 06/06/11 11:00 | 25.00 | 25.00 |
| GW0064 | 1105217-01 | 06/06/11 11:00 | 25.00 | 25.00 |
| Blank | 1F06012-BLK1 | 06/06/11 11:00 | 25.00 | 25.00 |
| LCS | 1F06012-BS1 | 06/06/11 11:00 | 5.00 | 25.00 |
| GW0102 | 1F06012-MS1 | 06/06/11 11:00 | 22.50 | 25.00 |
| GW0102 | 1F06012-MSD1 | 06/06/11 11:00 | 22.50 | 25.00 |

# PREPARATION BATCH SUMMARY

## SM2320B

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F08005 Batch Matrix: Water Preparation: pNone

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0065 | 1105225-01 | 06/08/11 08:53 | 25.00 | 25.00 |
| GW0066 | 1105225-03 | 06/08/11 08:53 | 25.00 | 25.00 |
| Blank | 1F08005-BLK1 | 06/08/11 08:53 | 25.00 | 25.00 |
| LCS | 1F08005-BS1 | 06/08/11 08:53 | 5.00 | 25.00 |

# PREPARATION BATCH SUMMARY

## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F09001 Batch Matrix: Water Preparation: pNone

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0102 | 1105208-01 | 06/09/11 06:58 | 100.00 | 100.00 |
| GW0064 | 1105217-01 | 06/09/11 06:58 | 100.00 | 100.00 |
| Blank | 1F09001-BLK1 | 06/09/11 06:58 | 100.00 | 100.00 |
| LCS | 1F09001-BS1 | 06/09/11 06:58 | 100.00 | 100.00 |
| GW0102 | 1F09001-DUP1 | 06/09/11 06:58 | 100.00 | 100.00 |

# PREPARATION BATCH SUMMARY

## SM4500NH3BG

Laboratory: Empirical Laboratories, LLC SDG: Kirtland_014

Client: Shaw E & I (I700) Project: Kirtland AFB 2011

Batch: 1F13029 Batch Matrix: Water Preparation: pNone

| SAMPLE NAME | LAB SAMPLE ID | DATE PREPARED | INITIAL VOL./WEIGHT | FINAL VOL. |
|---|---|---|---|---|
| GW0065 | 1105225-01 | 06/13/11 14:25 | 100.00 | 100.00 |
| GW0066 | 1105225-03 | 06/13/11 14:25 | 100.00 | 100.00 |
| Blank | 1F13029-BLK1 | 06/13/11 14:25 | 100.00 | 100.00 |
| LCS | 1F13029-BS1 | 06/13/11 14:25 | 100.00 | 100.00 |
| GW0065 | 1F13029-DUP1 | 06/13/11 14:25 | 100.00 | 100.00 |

# ANALYSIS SEQUENCE SUMMARY

## SM2320B

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Sequence:

Instrument:

Calibration:

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| LCS | 1F06012-BS1 | 060611-003 | 06/06/11 11:40 |
| Blank | 1F06012-BLK1 | 060611-004 | 06/06/11 11:55 |
| GW0102 | 1F06012-MS1 | 060611-010 | 06/06/11 13:20 |
| GW0102 | 1F06012-MSD1 | 060611-011 | 06/06/11 13:54 |
| LCS | 1F08005-BS1 | 060811-003 | 06/08/11 11:02 |
| Blank | 1F08005-BLK1 | 060811-004 | 06/08/11 11:20 |

# ANALYSIS SEQUENCE SUMMARY

## SM4500S2CF

Laboratory: Empirical Laboratories, LLC

SDG: Kirtland_014

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Sequence:

Instrument:

Calibration:

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Blank | 1E27011-BLK1 | 052711-004 | 05/27/11 13:22 |
| LCS | 1E27011-BS1 | 052711-002 | 05/27/11 13:24 |
| LCS Dup | 1E27011-BSD1 | 052711-003 | 05/27/11 13:25 |

# ANALYSIS SEQUENCE SUMMARY

## E300.0

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E12407 | Instrument: | WC-IC |
| Calibration: | 1124002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1E12407-CAL1 | 040911-003 | 04/09/11 12:05 |
| Cal Standard | 1E12407-CAL2 | 040911-004 | 04/09/11 12:22 |
| Cal Standard | 1E12407-CAL3 | 040911-005 | 04/09/11 12:39 |
| Cal Standard | 1E12407-CAL4 | 040911-006 | 04/09/11 12:57 |
| Cal Standard | 1E12407-CAL5 | 040911-007 | 04/09/11 13:14 |
| Cal Standard | 1E12407-CAL6 | 040911-008 | 04/09/11 13:32 |
| Cal Standard | 1E12407-CAL7 | 040911-009 | 04/09/11 13:49 |
| Cal Standard | 1E12407-CAL8 | 040911-010 | 04/09/11 14:07 |
| Initial Cal Check | 1E12407-ICV1 | 040911-011 | 04/09/11 14:24 |
| Initial Cal Blank | 1E12407-ICB1 | 040911-012 | 04/09/11 14:41 |

# ANALYSIS SEQUENCE SUMMARY

## E300.0

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1E14412 | Instrument: | WC-IC |
| Calibration: | 1124002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1E14412-CCV1 | 052411-002 | 05/24/11 11:03 |
| Calibration Blank | 1E14412-CCB1 | 052411-003 | 05/24/11 11:20 |
| Instrument RL Check | 1E14412-CRL1 | 052411-004 | 05/24/11 11:38 |
| Instrument RL Check | 1E14412-CRL2 | 052411-005 | 05/24/11 11:55 |
| Instrument RL Check | 1E14412-CRL3 | 052411-006 | 05/24/11 12:12 |
| LCS | 1E24008-BS1 | 052411-007 | 05/24/11 12:30 |
| Blank | 1E24008-BLK1 | 052411-008 | 05/24/11 12:47 |
| Calibration Check | 1E14412-CCV2 | 052411-014 | 05/24/11 14:32 |
| Calibration Blank | 1E14412-CCB2 | 052411-015 | 05/24/11 14:49 |
| Calibration Check | 1E14412-CCV4 | 052411-037 | 05/24/11 21:12 |
| Calibration Blank | 1E14412-CCB4 | 052411-038 | 05/24/11 21:29 |
| GW0102 | 1105208-01 | 052411-043 | 05/24/11 22:56 |
| Calibration Check | 1E14412-CCV5 | 052411-049 | 05/25/11 00:41 |
| Calibration Blank | 1E14412-CCB5 | 052411-050 | 05/25/11 00:58 |

# ANALYSIS SEQUENCE SUMMARY

## E300.0

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15423 | Instrument: | WC-IC |
| Calibration: | 1124002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1F15423-CCV1 | 052511-002 | 05/25/11 14:54 |
| Calibration Blank | 1F15423-CCB1 | 052511-003 | 05/25/11 15:11 |
| Instrument RL Check | 1F15423-CRL1 | 052511-004 | 05/25/11 15:29 |
| Instrument RL Check | 1F15423-CRL2 | 052511-005 | 05/25/11 15:46 |
| LCS | 1E25011-BS1 | 052511-006 | 05/25/11 16:04 |
| Blank | 1E25011-BLK1 | 052511-007 | 05/25/11 16:21 |
| Calibration Check | 1F15423-CCV2 | 052511-014 | 05/25/11 18:23 |
| Calibration Blank | 1F15423-CCB2 | 052511-015 | 05/25/11 18:40 |
| GW0064 | 1105217-01 | 052511-016 | 05/25/11 18:58 |
| GW0064 | 1E25011-MS1 | 052511-017 | 05/25/11 19:15 |
| GW0064 | 1E25011-MSD1 | 052511-018 | 05/25/11 19:33 |
| GW0064 | 1E25011-DUP1 | 052511-019 | 05/25/11 19:50 |
| Calibration Check | 1F15423-CCV3 | 052511-026 | 05/25/11 21:52 |
| Calibration Blank | 1F15423-CCB3 | 052511-027 | 05/25/11 22:09 |

# ANALYSIS SEQUENCE SUMMARY

## E300.0

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F15709 | Instrument: | WC-IC |
| Calibration: | 1124002 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Calibration Check | 1F15709-CCV1 | 052611-002 | 05/26/11 18:18 |
| Calibration Blank | 1F15709-CCB1 | 052611-003 | 05/26/11 18:35 |
| Instrument RL Check | 1F15709-CRL1 | 052611-004 | 05/26/11 18:53 |
| Instrument RL Check | 1F15709-CRL2 | 052611-005 | 05/26/11 19:10 |
| LCS | 1E26024-BS1 | 052611-006 | 05/26/11 19:28 |
| Blank | 1E26024-BLK1 | 052611-007 | 05/26/11 19:45 |
| GW0065 | 1105225-01 | 052611-008 | 05/26/11 20:02 |
| GW0066 | 1105225-03 | 052611-009 | 05/26/11 20:20 |
| Calibration Check | 1F15709-CCV2 | 052611-019 | 05/26/11 23:14 |
| Calibration Blank | 1F15709-CCB2 | 052611-020 | 05/26/11 23:31 |

# ANALYSIS SEQUENCE SUMMARY

## SM4500NH3BG

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F16013 | Instrument: | WC-Lachat |
| Calibration: | 1161003 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1F16013-CAL1 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:23 |
| Cal Standard | 1F16013-CAL2 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:24 |
| Cal Standard | 1F16013-CAL3 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:25 |
| Cal Standard | 1F16013-CAL4 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:26 |
| Cal Standard | 1F16013-CAL5 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:27 |
| Cal Standard | 1F16013-CAL6 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:28 |
| Cal Standard | 1F16013-CAL7 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:29 |
| Cal Standard | 1F16013-CAL8 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:30 |
| Initial Cal Check | 1F16013-ICV1 | )M_6-9-2011_03-22-08PM-00 | 06/09/11 15:31 |
| Initial Cal Blank | 1F16013-ICB1 | )M_6-9-2011_03-22-08PM-01 | 06/09/11 15:32 |
| Blank | 1F09001-BLK1 | )M_6-9-2011_03-22-08PM-01 | 06/09/11 15:33 |
| LCS | 1F09001-BS1 | )M_6-9-2011_03-22-08PM-01 | 06/09/11 15:33 |
| GW0102 | 1105208-01 | )M_6-9-2011_03-22-08PM-01 | 06/09/11 15:34 |
| GW0102 | 1F09001-DUP1 | )M_6-9-2011_03-22-08PM-01 | 06/09/11 15:35 |
| GW0064 | 1105217-01 | )M_6-9-2011_03-22-08PM-01 | 06/09/11 15:36 |
| Calibration Check | 1F16013-CCV1 | )M_6-9-2011_03-22-08PM-01 | 06/09/11 15:39 |
| Calibration Blank | 1F16013-CCB1 | )M_6-9-2011_03-22-08PM-01 | 06/09/11 15:40 |

# ANALYSIS SEQUENCE SUMMARY

## SM4500NH3BG

| | | | |
|---|---|---|---|
| Laboratory: | Empirical Laboratories, LLC | SDG: | Kirtland_014 |
| Client: | Shaw E & I (I700) | Project: | Kirtland AFB 2011 |
| Sequence: | 1F16608 | Instrument: | WC-Lachat |
| Calibration: | 1166003 | | |

| Sample Name | Lab Sample ID | Lab File ID | Analysis Date/Time |
|---|---|---|---|
| Cal Standard | 1F16608-CAL1 | M_6-15-2011_02-56-13PM-00 | 06/15/11 14:57 |
| Cal Standard | 1F16608-CAL2 | M_6-15-2011_02-56-13PM-00 | 06/15/11 14:58 |
| Cal Standard | 1F16608-CAL3 | M_6-15-2011_02-56-13PM-00 | 06/15/11 14:59 |
| Cal Standard | 1F16608-CAL4 | M_6-15-2011_02-56-13PM-00 | 06/15/11 15:00 |
| Cal Standard | 1F16608-CAL5 | M_6-15-2011_02-56-13PM-00 | 06/15/11 15:01 |
| Cal Standard | 1F16608-CAL6 | M_6-15-2011_02-56-13PM-00 | 06/15/11 15:02 |
| Cal Standard | 1F16608-CAL7 | M_6-15-2011_02-56-13PM-00 | 06/15/11 15:03 |
| Cal Standard | 1F16608-CAL8 | M_6-15-2011_02-56-13PM-00 | 06/15/11 15:04 |
| Initial Cal Check | 1F16608-ICV1 | M_6-15-2011_02-56-13PM-00 | 06/15/11 15:05 |
| Initial Cal Blank | 1F16608-ICB1 | M_6-15-2011_02-56-13PM-01 | 06/15/11 15:06 |
| Blank | 1F13029-BLK1 | M_6-15-2011_02-56-13PM-01 | 06/15/11 15:07 |
| LCS | 1F13029-BS1 | M_6-15-2011_02-56-13PM-01 | 06/15/11 15:08 |
| GW0065 | 1105225-01 | M_6-15-2011_02-56-13PM-01 | 06/15/11 15:08 |
| GW0065 | 1F13029-DUP1 | M_6-15-2011_02-56-13PM-01 | 06/15/11 15:09 |
| GW0066 | 1105225-03 | M_6-15-2011_02-56-13PM-01 | 06/15/11 15:10 |
| Calibration Check | 1F16608-CCV1 | M_6-15-2011_02-56-13PM-02 | 06/15/11 15:20 |
| Calibration Blank | 1F16608-CCB1 | M_6-15-2011_02-56-13PM-02 | 06/15/11 15:21 |