ANALYTICAL DATA PACKAGE
SDG # KIRTLAND_072

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

SUBMITTAL TO:
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THIS DOCUMENT MEETS DoD QSM 4.2 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.

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. Sample prep and dilution information is provided within the final results report and at the beginning of each form set. 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 following continuing calibration verifications exceeded criteria:
2K32002-CCV1 with a negative bias for Bromomethane and a positive bias for 2-Butanone and 4-Methyl-2-pentanone
2K32506-CCV1 with a positive bias for 2-Butanone and 4-Methyl-2-pentanone
2K32507-CCV1 with a negative bias for Acetone and a positive bias for Hexachlorobutadiene
2K32611-CCV1 with a negative bias for Bromomethane and a positive bias for Carbon Disulifde and Hexachlorobutadiene

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

SW8270D BNA:
Note – All surrogates were diluted out in sample 1211133-01 due to the high dilutions due to the high concentration of Acetophenone.

The following continuing calibration verifications exceeded criteria:
2K32113-CCV1 with a positive bias for Benzo(b)fluoranthene and Terphenyl-d14
2K32113-CCV2 with a positive bias for Benzidine, Caprolactam, and 3,3'-Dichlorobenzidine
2K32508-CCV2 with a positive bias for Benzidine and Caprolactam

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

SW8011:
Note - Surrogate spike is not a method requirement, as such, surrogate limits are advisory. Surrogates were not provided for sample 1211133-01RE1 due to the high dilutions necessary to bring 1,2-Dibromoethane into linear range and the surrogate being diluted out.

The following continuing calibration verifications exceeded criteria:
2K32303-CCV2 with a negative bias for 1,3-Dibromopropane on column 2

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

SW8015B DRO:
The following surrogates exceeded criteria:
o-Terphenyl with a positive bias in 1211133-01RE1; note – the sample was at a 50X

dilution.

The following continuing calibration verifications exceeded criteria:
2K32408-CCVA with a negative bias for o-Terphenyl

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

SW8015B GRO:
The following surrogates exceeded criteria:
Bromofluorobenzene with a positive bias in 2K15028-BLK1

The following continuing calibration verifications exceeded criteria:
2K33114-CCV1 with a positive bias for Bromofluorobenzene
2K33114-CCV2 with a positive bias for Bromofluorobenzene
2K33317-CCV1 with a positive bias for Bromofluorobenzene
2K33317-CCV2 with a positive bias for Bromofluorobenzene

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

SW6010B:
The following blanks have reported results:
2K31912-CCB3 for Iron (dissolved)
2K14027-BLK1 for Iron (dissolved)
Note – The concentrations for Iron in the blanks is less than ½ the LOQ.

No additional anomalies or deviations are noted.

Wet Chemistry:
The following compounds are qualified with an M to indicate that the LOQ was raised to the level of the reporting limit standard within criteria:
Sulfate as SO4 (2.5 mg/L) in 1211133-01 and 1211147-01

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

DL: The detection limit (DL) 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 DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.

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 4.2 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 4.2 as the lowest concentration that produces a quantitative result within specified limits of precision and bias.

*****: Exceeding quality control criteria are 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 LOQ. One should feel confident that the result is greater than zero and less than the LOQ.

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 DL/LOD/LOQ have 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 relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.

S: The associated internal standard exceeded 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, the Data Quality Manager, Technical Directors or Project Managers are authorized to sign this Statement of Data Authenticity.

Lorraine Noronha for

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

1211132/1211133

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-GW243

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

Samples Shipment Date: 13 NOV 2012
Lab Destination: Empirical Laboratories, Inc.
Lab Contact: Sonya Gordon
Project Contact: Pamela Moss
Carrier/Waybill No.: Fed Ex/488306620026

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) D. Shaw Date: 11/13/12 Time: 1600
2. Relinquished By (Signature/Affiliation) Date: Time:
3. Relinquished By (Signature/Affiliation) Date: Time:

1. Received By (Signature/Affiliation) Date: Time:
2. Received By (Signature/Affiliation) Date: Time:
3. Received By (Signature/Affiliation) jack deville Date: 11-14-12 Time: 830

Comments:

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
01 GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	40 mL VOA VIAL	3	HCl<pH 2	VOCs by SW846 8260B			N		
GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	40 mL VOA VIAL	3	None except cool to 4 C	EDB by SW846 8011			N		
GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	1000 mL A GLASS	1	None except cool to 4 C	TPH as Diesel by SW846 8015B			N		
GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	40 mL VOA VIAL	3	HCl<pH 2	TPH as Gasoline by SW846 8015B			N		
GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	250 mL HDPE	1	HNO3<pH 2	Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C			N		
GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	250 mL HDPE	1	None except cool to 4 C	Chloride and Sulfate by EPA 300, Alkalinity by SM2320B			N		

Kirtland_072

1211132/1211133

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Reference Document No: 140705-GW243

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
01	GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	250 mL HDPE	1	Zinc Acetate and NaOH>9	Sulfide by SM4500S-2CF			N		
	GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	1000 mL A GLASS	2	None except cool to 4 C	SVOCs by SW846 8270C			N		
	GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	250 mL HDPE	1	H2SO4<pH 2	Nitrate plus Nitrite by EPA 353.2, Ammonia by SM4500B			N		
02	GW0756	KAFB-106005-WG-GW0756-REG	12 NOV 2012	10:57	250 mL HDPE	1	HNO3<pH 2	Dissolved Iron and Manganese by SW846 6010C			N		
01	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	40 mL VOA VIAL	3	HCl<pH 2	TPH as Gasoline by SW846 8015B			N		
	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	1000 mL A GLASS	1	None except cool to 4 C	TPH as Diesel by SW846 8015B			N		
02	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	250 mL HDPE	1	HNO3<pH 2	Dissolved Iron and Manganese by SW846 6010C			N		
01	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	250 mL HDPE	1	HNO3<pH 2	Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C			N		
	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	40 mL VOA VIAL	3	HCl<pH 2	VOCs by SW846 8260B			N		
	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	250 mL HDPE	1	H2SO4<pH 2	Nitrate plus Nitrite by EPA 353.2, Ammonia by SM4500B			N		
	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	40 mL VOA VIAL	3	None except cool to 4 C	EDB by SW846 8011			N		
	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	1000 mL A GLASS	2	None except cool to 4 C	SVOCs by SW846 8270C			N		
	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	250 mL HDPE	1	Zinc Acetate and NaOH>9	Sulfide by SM4500S-2CF			N		
	GW0873	KAFB-106203-WG-GW0873-REG	13 NOV 2012	12:20	250 mL HDPE	1	None except cool to 4 C	Chloride and Sulfate by EPA 300, Alkalinity by SM2320B			N		
03	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	40 mL VOA VIAL	3	HCl<pH 2	TPH as Gasoline by SW846 8015B			N		
	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	1000 mL A GLASS	1	None except cool to 4 C	TPH as Diesel by SW846 8015B			N		
04	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	250 mL HDPE	1	HNO3<pH 2	Dissolved Iron and Manganese by SW846 6010C			N		
03	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	40 mL VOA VIAL	3	None except cool to 4 C	EDB by SW846 8011			N		
	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	40 mL VOA VIAL	3	HCl<pH 2	VOCs by SW846 8260B			N		
	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	250 mL HDPE	1	HNO3<pH 2	Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C			N		
	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	250 mL HDPE	1	H2SO4<pH 2	Nitrate plus Nitrite by EPA 353.2, Ammonia by SM4500B			N		
	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	1000 mL A GLASS	2	None except cool to 4 C	SVOCs by SW846 8270C			N		
	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	250 mL HDPE	1	Zinc Acetate and NaOH>9	Sulfide by SM4500S-2CF			N		
	GW0874	KAFB-106203-WG-GW0874-FD	13 NOV 2012	12:20	250 mL HDPE	1	None except cool to 4 C	Chloride and Sulfate by EPA 300, Alkalinity by SM2320B			N		
05	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	1000 mL A GLASS	1	None except cool to 4 C	TPH as Diesel by SW846 8015B			N		
	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	250 mL HDPE	1	HNO3<pH 2	Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C			N		
06	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	250 mL HDPE	1	HNO3<pH 2	Dissolved Iron and Manganese by			N		

1211132/1211133

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Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-GW243

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
								SW846 6010C					
05	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	40 mL VOA VIAL	3	HCl<pH 2	TPH as Gasoline by SW846 8015B			N		
	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	40 mL VOA VIAL	3	None except cool to 4 C	EDB by SW846 8011			N		
	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	40 mL VOA VIAL	3	HCl<pH 2	VOCs by SW846 8260B			N		
	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	250 mL HDPE	1	None except cool to 4 C	Chloride and Sulfate by EPA 300, Alkalinity by SM2320B			N		
	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	250 mL HDPE	1	H2SO4<pH 2	Nitrate plus Nitrite by EPA 353.2, Ammonia by SM4500B			N		
	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	250 mL HDPE	1	Zinc Acetate and NaOH>!	Sulfide by SM4500S-2CF			N		
	GW0875	KAFB-106204-WG-GW0875-REG	13 NOV 2012	15:04	1000 mL A GLASS	2	None except cool to 4 C	SVOCs by SW846 8270C			N		
03	GW8063-AB	FIELDQC-BW-GW8063-AB-AB	13 NOV 2012	12:20	40 mL VOA VIAL	2	HCl<pH 2	VOCs by SW846 8260B			N		
04	GW8064-AB	FIELDQC-BW-GW8064-AB-AB	13 NOV 2012	15:04	40 mL VOA VIAL	2	HCl<pH 2	VOCs by SW846 8260B			N		
05	GW8243-TB	FIELDQC-BW-GW8243-TB-TB	12 NOV 2012	08:00	40 mL VOA VIAL	2	HCl<pH 2	VOCs by SW846 8260B			N		

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 11/14/12 @ 0830 Workorder# 1211132/1211133

1. Tracking # 0026 (last 4 digits, FedEx)

   Courier: ___FEDEX

2. Temperature of rep. sample or temp blank when opened: 0.2 °C + *correction factor (+ 0.2)* = 0.4 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 1 FRONT

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) JD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing material used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13. a. Were VOA vials received? YES...NO...NA

    b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) JD

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

    b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JD

I certify that I attached a label with the unique LIMS number to each container (initial) JD

I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial) _____

21. Were there Non-Conformance issues at login? YES NO Was a NCR generated? YES NO...# —

Additional Details:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 11/14/12 @ 0830 Workorder# 1211132/1211133

1. Tracking # 0048 (last 4 digits, FedEx)

   Courier: ___FEDEX

2. Temperature of rep. sample or temp blank when opened: 2.8 °C + *correction factor (+ 0.2)* = 3.0 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 1 FRONT

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) JD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing material used: Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13. a. Were VOA vials received? YES...NO...NA

    b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (initial) JD

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

    b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JD

I certify that I attached a label with the unique LIMS number to each container (initial) JD

I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial) _____

21. Were there Non-Conformance issues at login? YES NO Was a NCR generated? YES NO ..# ~

Additional Details:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 11/14/12 @ 0830 Workorder# 1211132/1211133

1. Tracking # 0037 (last 4 digits, FedEx)

   Courier: ___FEDEX

2. Temperature of rep. sample or temp blank when opened: 1.9 °C + *correction factor (+ 0.2)* = 2.1 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES (NO)...NA

4. Were custody seals on outside of cooler? (YES)..NO...NA

   If yes, how many and where: 1 2-FRONT

5. Were the seals intact, signed, and dated correctly? (YES)...NO...NA

6. Were custody papers inside cooler? (YES)...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES (NO) and Intact YES...NO..(NA)

   Were these signed and dated correctly? YES...NO..(NA)

8. Packing material used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? (YES)..NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? (YES)...NO...NA

12. Did all container labels and tags agree with custody papers? (YES)...NO...NA

13. a. Were VOA vials received? YES..(NO)...NA

    b. Was there any observable headspace present in any VOA vial? YES...NO..(NA)

14. Was there a Trip Blank in this cooler? YES...NO..(NA) If multiple coolers, sequence # 3

I certify that I unloaded the cooler and answered questions 7-14 (initial) JD

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? (YES)...NO...NA

    b. Did the bottle labels indicate that the correct preservatives were used (YES)...NO...NA

16. Was residual chlorine present? YES...NO..(NA)

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JD

17. Were custody papers properly filled out (ink, signed, etc)? (YES)...NO...NA

18. Did you sign the custody papers in the appropriate place? (YES)..NO...NA

19. Were correct containers used for the analysis requested? (YES)...NO...NA

20. Was sufficient amount of sample sent in each container? (YES)..NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JD

I certify that I attached a label with the unique LIMS number to each container (initial) JD

I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial) _____

21. Were there Non-Conformance issues at login? YES (NO) Was a NCR generated? YES (NO)..#✓

Additional Details:

1211146/1211147

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-GW244

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

Samples Shipment Date: 15 NOV 2012
Lab Destination: Empirical Laboratories, Inc.
Lab Contact: Sonya Gordon
Project Contact: Pamela Moss
Carrier/Waybill No.: Fed Ex/488306620059

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 ☐ Unknown ☐ Radiological ☐

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

1. Relinquished By (Signature/Affiliation) DJA Shaw Date: 11-15-12 Time: 1200hrs
1. Received By (Signature/Affiliation) Date: Time:
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) jack Deville jr. Date: 11-16-12 Time: 830

Comments:

Sample No	Sample Name	Sample Date	Sample Time	Container	Ctr Qty	Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
01 GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	40 mL VOA VIAL	3	HCl<pH 2	VOCs by SW846 8260B			N		
GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	40 mL VOA VIAL	3	None except cool to 4 C	EDB by SW846 8011			N		
GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	1000 mL A GLASS	1	None except cool to 4 C	TPH as Diesel by SW846 8015B			N		
GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	40 mL VOA VIAL	3	HCl<pH 2	TPH as Gasoline by SW846 8015B			N		
GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	250 mL HDPE	1	HNO3<pH 2	Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C			N		
GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	250 mL HDPE	1	None except cool to 4 C	Chloride and Sulfate by EPA 300, Alkalinity by SM2320B			N		

1211146 / 1211147

Shaw™
Shaw E & I, Inc.

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

Reference Document No: 140705-GW244

	Sample No	Sample Name	Sample Date	Sample Time	Container		Preservative	Requested Testing Program	Sample Vol	Units	Fil	CID	Condition On Receipt
01	GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	250 mL HDPE	1	Zinc Acetate and NaOH>9	Sulfide by SM4500S-2CF			N		
	GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	1000 mL A GLASS	2	None except cool to 4 C	SVOCs by SW846 8270C			N		
	GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	250 mL HDPE	1	H2SO4<pH 2	Nitrate plus Nitrite by EPA 353.2, Ammonia by SM4500B			N		
02	GW0860	KAFB-106100-WG-GW0860-REG	14 NOV 2012	16:06	250 mL HDPE	1	HNO3<pH 2	Dissolved Iron and Manganese by SW846 6010C			N		
01	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	40 mL VOA VIAL	3	None except cool to 4 C	EDB by SW846 8011			N		
	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	40 mL VOA VIAL	3	HCl<pH 2	TPH as Gasoline by SW846 8015B			N		
	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	1000 mL A GLASS	1	None except cool to 4 C	TPH as Diesel by SW846 8015B			N		
	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	250 mL HDPE	1	HNO3<pH 2	Total Calcium, Potassium, Magnesium, Sodium, and Lead by SW846 6010C			N		
	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	40 mL VOA VIAL	3	HCl<pH 2	VOCs by SW846 8260B			N		
02	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	250 mL HDPE	1	HNO3<pH 2	Dissolved Iron and Manganese by SW846 6010C			N		
01	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	250 mL HDPE	1	None except cool to 4 C	Chloride and Sulfate by EPA 300, Alkalinity by SM2320B			N		
	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	250 mL HDPE	1	H2SO4<pH 2	Nitrate plus Nitrite by EPA 353.2, Ammonia by SM4500B			N		
	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	250 mL HDPE	1	Zinc Acetate and NaOH>9	Sulfide by SM4500S-2CF			N		
	GW0871	KAFB-106201-WG-GW0871-REG	14 NOV 2012	11:35	1000 mL A GLASS	2	None except cool to 4 C	SVOCs by SW846 8270C			N		
03	GW8065-AB	FIELDQC-BW-GW8065-AB-AB	14 NOV 2012	16:06	40 mL VOA VIAL	2	HCl<pH 2	VOCs by SW846 8260B			N		
04	GW8244-TB	FIELDQC-BW-GW8244-TB-TB	14 NOV 2012	08:00	40 mL VOA VIAL	2	HCl<pH 2	VOCs by SW846 8260B			N		

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 11/16/12 @ 0830 Workorder# 1211146/1211147

1. Tracking # 0059 (last 4 digits, FedEx)

   Courier: ___FED-EX

2. Temperature of rep. sample or temp blank when opened: 0.1 °C + *correction factor (+ 0.2)* = 0.3 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 1-BACK

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) _____

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing material used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13. a. Were VOA vials received? YES...NO...NA

    b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 1

I certify that I unloaded the cooler and answered questions 7-14 (initial) JD

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

    b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JD

I certify that I attached a label with the unique LIMS number to each container (initial) JD

I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial) _____

21. Were there Non-Conformance issues at login? YES NO Was a NCR generated? YES NO...# ___

Additional Details:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

Cooler Received/Opened On: 11/16/12 @ 0830 Workorder# 1211146 / 1211147

1. Tracking # 0060 (last 4 digits, FedEx)

   Courier: ___FED-EX

2. Temperature of rep. sample or temp blank when opened: 2.7 °C + *correction factor (+ 0.2)* = 2.9 °C

3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO...NA

4. Were custody seals on outside of cooler? YES...NO...NA

   If yes, how many and where: 1 FRONT

5. Were the seals intact, signed, and dated correctly? YES...NO...NA

6. Were custody papers inside cooler? YES...NO...NA

I certify that I opened the cooler and answered questions 1-6 (initial) JD

7. Were custody seals on containers: YES NO and Intact YES...NO...NA

   Were these signed and dated correctly? YES...NO...NA

8. Packing material used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None

9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? YES...NO...NA

13. a. Were VOA vials received? YES...NO...NA

    b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # 2

I certify that I unloaded the cooler and answered questions 7-14 (initial) JD

15. a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA

    b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA

16. Was residual chlorine present? YES...NO...NA

I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) JD

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial) JD

I certify that I attached a label with the unique LIMS number to each container (initial) JD

I certify that I have performed a second check of the LIMS information against the COC to confirm accuracy (initial) _____

21. Were there Non-Conformance issues at login? YES NO Was a NCR generated? YES NO...# ___

Additional Details:

Kirtland 073 20

WORK ORDER

Printed: 11/15/2012 4:56:07PM

1211133

Empirical Laboratories, LLC

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

Project Manager: Lorraine Noronha
Project Number: SHW_Kirtland

Report To:
Shaw E & I (I700)
Pamela Moss
9201 East Dry Creek
Denver, CO 80112
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

Due to Client: 12/07/2012 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Jack Deville
Date Received: 11/14/2012 08:30
Logged In By: Jack Deville
Date Logged In: 11/14/2012 09:52

Samples Received at: **0.4°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Method	Test Code	Due	TAT	Expires	Comments
1211133-01 GW0756 [Water] Sampled 11/12/2012 10:57 Eastern 'Client Sample'					
SM4500S2CF	WC_SULFIDE_4500S2CF	12/04/2012 14:00	15	11/19/2012 09:57	
E353.2	WC_NO3NO2_N_353.2	12/04/2012 14:00	15	12/10/2012 09:57	
E300.0	WC_ANIONS_300.0 (Regular)	12/04/2012 14:00	15	12/10/2012 09:57	Cl, SO4
SM4500NH3BG	WC_AMMONIA_PHENATE_4500NH3BG	12/04/2012 14:00	15	12/10/2012 09:57	
SM2320B	WC_ALKALINITY_2320B	12/04/2012 14:00	15	11/26/2012 09:57	carb/bicarb
SW8260B	VOC_8260B_REG	12/04/2012 14:00	15	11/26/2012 09:57	naphthalene must be reported
SW8015B GRO	VGC_GRO_8015B	12/04/2012 14:00	15	11/26/2012 09:57	
SW8270D	SMS_BNA_8270D_3510_REG	12/04/2012 14:00	15	11/19/2012 09:57	requires 3-Methlphenol/4-Methylphenol/Naphthalene
SW8011	SGC_EDB_8011	12/04/2012 14:00	15	11/26/2012 09:57	Run dilutions based on 8260 results!
SW8015B DRO	SGC_DRO_8015B_3510	12/04/2012 14:00	15	11/19/2012 09:57	
SW6010B	MET_ICP_6010B_FULL	12/04/2012 14:00	15	05/11/2013 09:57	Ca, Pb, K, Na, Mg
1211133-02 GW0756 [Water] Sampled 11/12/2012 10:57 Eastern 'Client Sample'					
SW6010B	MET_ICP_6010B_FULL_DIS	12/04/2012 14:00	15	05/11/2013 09:57	Fe & Mn
1211133-03 GW8063-AB [Water] Sampled 11/13/2012 12:20 Eastern 'Ambient Blank'					
SW8260B	VOC_8260B_REG	12/04/2012 14:00	15	11/27/2012 11:20	naphthalene must be reported
1211133-04 GW8064-AB [Water] Sampled 11/13/2012 15:04 Eastern 'Ambient Blank'					
SW8260B	VOC_8260B_REG	12/04/2012 14:00	15	11/27/2012 14:04	naphthalene must be reported

1211133

Empirical Laboratories, LLC

Client:	**Shaw E & I (I700)**	**Project Manager:**	**Lorraine Noronha**
Project:	**Kirtland AFB 2011**	**Project Number:**	**SHW_Kirtland**

Method	Test Code	Due	TAT	Expires	Comments
1211133-05 GW8243-TB [Water] Sampled 11/12/2012 08:00 Eastern 'Trip Blank'					
SW8260B	VOC_8260B_REG	12/04/2012 14:00	15	11/26/2012 07:00	naphthalene must be reported

Reviewed By

Date

WORK ORDER

Printed: 11/16/2012 11:04:47AM

1211147

Empirical Laboratories, LLC

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

Project Manager: Lorraine Noronha
Project Number: SHW_Kirtland

Report To:
Shaw E & I (I700)
Susan Huang
4005 Port Chicago Highway
Concord, CA 94520
Phone: (925) 288-2099
Fax: (925) 288-0888

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

Due to Client: 12/11/2012 16:00 *This is the projected due date to the client, at the time of receipt, and is for report delivery via upload, and/or email, and/or shipment to meet TAT as setup by project*

Received By: Jack Deville
Date Received: 11/16/2012 08:30
Logged In By: Jack Deville
Date Logged In: 11/16/2012 09:02

Samples Received at: **0.3°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Method	Test Code	Due	TAT	Expires	Comments
1211147-01 GW0860 [Water] Sampled 11/14/2012 16:06 Mountain 'Client Sample'					
SM4500S2CF	WC_SULFIDE_4500S2CF	12/06/2012 14:00	15	11/21/2012 17:06	
E353.2	WC_NO3NO2_N_353.2	12/06/2012 14:00	15	12/12/2012 17:06	
E300.0	WC_ANIONS_300.0 (Regular)	12/06/2012 14:00	15	12/12/2012 17:06	Cl, SO4
SM4500NH3BG	WC_AMMONIA_PHENATE_4500NH3BG	12/06/2012 14:00	15	12/12/2012 17:06	
SM2320B	WC_ALKALINITY_2320B	12/06/2012 14:00	15	11/28/2012 17:06	carb/bicarb
SW8260B	VOC_8260B_REG	12/06/2012 14:00	15	11/28/2012 17:06	naphthalene must be reported
SW8015B GRO	VGC_GRO_8015B	12/06/2012 14:00	15	11/28/2012 17:06	
SW8270D	SMS_BNA_8270D_3510_REG	12/06/2012 14:00	15	11/21/2012 17:06	requires 3-Methlphenol/4-Methylphenol/Naphthalene
SW8011	SGC_EDB_8011	12/06/2012 14:00	15	11/28/2012 17:06	Run dilutions based on 8260 results!
SW8015B DRO	SGC_DRO_8015B_3510	12/06/2012 14:00	15	11/21/2012 17:06	
SW6010B	MET_ICP_6010B_FULL	12/06/2012 14:00	15	05/13/2013 17:06	Ca, Pb, K, Na, Mg
1211147-02 GW0860 [Water] Sampled 11/14/2012 16:06 Mountain 'Client Sample'					
SW6010B	MET_ICP_6010B_FULL_DIS	12/06/2012 14:00	15	05/13/2013 17:06	Fe & Mn
1211147-03 GW8065-AB [Water] Sampled 11/14/2012 16:06 Mountain 'Ambient Blank'					
SW8260B	VOC_8260B_REG	12/06/2012 14:00	15	11/28/2012 17:06	naphthalene must be reported
1211147-04 GW8244-TB [Water] Sampled 11/14/2012 08:00 Mountain 'Trip Blank'					
SW8260B	VOC_8260B_REG	12/06/2012 14:00	15	11/28/2012 09:00	naphthalene must be reported

Reviewed By

Date

1211147

Empirical Laboratories, LLC

Client:	**Shaw E & I (I700)**	**Project Manager:**	**Lorraine Noronha**
Project:	**Kirtland AFB 2011**	**Project Number:**	**SHW_Kirtland**

Reviewed By

Date

Sample Delivery Group Assignment Form

CLIENT: Shaw E & I (I700)
PROJECT NAME: Kirtland AFB 2011
SDG #: Kirtland_072

QC LEVEL: Level IV
Report Due: 12/7/2012 - 12/11/2012
Client Sample Count: 4

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	E300.0	E353.2	SM2320B	SM4500NH3BG	SM4500S2CF
Client Sample	11/12/2012	11/14/2012	1211133-01	GW0756	Water	X	X			X
Client Sample	11/12/2012	11/14/2012	1211133-02	GW0756	Water			X	X	
Ambient Blank	11/13/2012	11/14/2012	1211133-03	GW8063-AB	Water					
Ambient Blank	11/13/2012	11/14/2012	1211133-04	GW8064-AB	Water					
Trip Blank	11/12/2012	11/14/2012	1211133-05	GW8243-TB	Water					
Client Sample	11/14/2012	11/16/2012	1211147-01	GW0860	Water	X	X	X	X	X
Client Sample	11/14/2012	11/16/2012	1211147-02	GW0860	Water					
Ambient Blank	11/14/2012	11/16/2012	1211147-03	GW8065-AB	Water					
Trip Blank	11/14/2012	11/16/2012	1211147-04	GW8244-TB	Water					

Sample Type	Sampled	Received	Lab ID	Client ID	Report Matrix	SW6010B	SW8011	SW8015B DRO	SW8015B GRO	SW8260B	SW8270D
Client Sample	11/12/2012	11/14/2012	1211133-01	GW0756	Water	X	X	X	X	X	X
Client Sample	11/12/2012	11/14/2012	1211133-02	GW0756	Water	X					
Ambient Blank	11/13/2012	11/14/2012	1211133-03	GW8063-AB	Water					X	
Ambient Blank	11/13/2012	11/14/2012	1211133-04	GW8064-AB	Water					X	
Trip Blank	11/12/2012	11/14/2012	1211133-05	GW8243-TB	Water					X	
Client Sample	11/14/2012	11/16/2012	1211147-01	GW0860	Water	X	X	X	X	X	X
Client Sample	11/14/2012	11/16/2012	1211147-02	GW0860	Water	X					
Ambient Blank	11/14/2012	11/16/2012	1211147-03	GW8065-AB	Water					X	
Trip Blank	11/14/2012	11/16/2012	1211147-04	GW8244-TB	Water					X	

Data for SW8260B Forms

Sample Extraction Data

Prep Method: 5030B-SW8260B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-03 [GW8063-AB]	2K15002	5.00/5.00	5.00	5.00	1.00			11/15/12
1211133-04 [GW8064-AB]	2K15002	5.00/5.00	5.00	5.00	1.00			11/15/12
1211133-05 [GW8243-TB]	2K15002	5.00/5.00	5.00	5.00	1.00			11/15/12

Sample Extraction Data

Prep Method: 5030B-SW8260B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-03 [GW8065-AB]	2K19015	5.00/5.00	5.00	5.00	1.00			11/19/12
1211147-04 [GW8244-TB]	2K19015	5.00/5.00	5.00	5.00	1.00			11/19/12

Sample Extraction Data

Prep Method: 5030B-SW8260B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-01 [GW0860]	2K19025	5.00/5.00	5.00	5.00	1.00			11/19/12

Sample Extraction Data

Prep Method: 5030B-SW8260B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01RE1 [GW0756]	2K20013	5.00/5.00	5.00	5.00	10.00			11/20/12

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01RE1	File ID:	1113301D.D
Sampled:	11/12/12 10:57	Prepared:	11/20/12 12:55	Analyzed:	11/20/12 12:55
Solids:		Preparation:	5030B	Dilution:	10

Batch: 2K20013 Sequence: 2K32611 Calibration: 2291001 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	**39.4**	25.0	50.0	100	JD
71-43-2	Benzene	**546**	2.50	5.00	10.0	D
108-86-1	Bromobenzene		2.50	5.00	10.0	U
74-97-5	Bromochloromethane		2.50	5.00	10.0	U
75-27-4	Bromodichloromethane		2.50	5.00	10.0	U
75-25-2	Bromoform		2.50	5.00	10.0	U
74-83-9	Bromomethane		5.00	10.0	20.0	UY
104-51-8	n-Butylbenzene	**2.60**	2.50	5.00	10.0	JD
78-93-3	2-Butanone	**31.5**	25.0	50.0	100	JD
135-98-8	sec-Butylbenzene	**3.20**	2.50	5.00	10.0	JD
98-06-6	tert-Butylbenzene		2.50	5.00	10.0	U
75-15-0	Carbon disulfide		2.50	5.00	10.0	UX
56-23-5	Carbon tetrachloride		2.50	5.00	10.0	U
108-90-7	Chlorobenzene		2.50	5.00	10.0	U
75-00-3	Chloroethane		5.00	10.0	20.0	U
67-66-3	Chloroform		2.50	5.00	10.0	U
74-87-3	Chloromethane		2.50	5.00	10.0	U
95-49-8	2-Chlorotoluene		2.50	5.00	10.0	U
106-43-4	4-Chlorotoluene		2.50	5.00	10.0	U
124-48-1	Dibromochloromethane		2.50	5.00	10.0	U
96-12-8	1,2-Dibromo-3-chloropropane		5.00	10.0	20.0	U
106-93-4	1,2-Dibromoethane (EDB)	**4.40**	2.50	5.00	10.0	JD
74-95-3	Dibromomethane		2.50	5.00	10.0	U
95-50-1	1,2-Dichlorobenzene		2.50	5.00	10.0	U
541-73-1	1,3-Dichlorobenzene		2.50	5.00	10.0	U
106-46-7	1,4-Dichlorobenzene		2.50	5.00	10.0	U
75-71-8	Dichlorodifluoromethane		5.00	10.0	20.0	U
75-34-3	1,1-Dichloroethane		2.50	5.00	10.0	U
107-06-2	1,2-Dichloroethane		2.50	5.00	10.0	U
75-35-4	1,1-Dichloroethene		2.50	5.00	10.0	U
156-59-2	cis-1,2-Dichloroethene		2.50	5.00	10.0	U
156-60-5	trans-1,2-Dichloroethene		2.50	5.00	10.0	U
78-87-5	1,2-Dichloropropane		2.50	5.00	10.0	U
142-28-9	1,3-Dichloropropane		2.50	5.00	10.0	U
594-20-7	2,2-Dichloropropane		2.50	5.00	10.0	U
563-58-6	1,1-Dichloropropene		2.50	5.00	10.0	U
10061-01-5	cis-1,3-Dichloropropene		2.50	5.00	10.0	U
10061-02-6	trans-1,3-Dichloropropene		2.50	5.00	10.0	U
100-41-4	Ethylbenzene	**127**	2.50	5.00	10.0	D
87-68-3	Hexachlorobutadiene		2.50	5.00	20.0	UX

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01RE1	File ID:	1113301D.D
Sampled:	11/12/12 10:57	Prepared:	11/20/12 12:55	Analyzed:	11/20/12 12:55
Solids:		Preparation:	5030B	Dilution:	10

Batch: 2K20013 Sequence: 2K32611 Calibration: 2291001 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	**24.2**	12.5	25.0	50.0	JD
98-82-8	Isopropylbenzene	**10.9**	2.50	5.00	10.0	D
99-87-6	p-Isopropyltoluene	**4.80**	2.50	5.00	10.0	JD
75-09-2	Methylene chloride		5.00	10.0	20.0	U
91-20-3	Naphthalene	**44.0**	2.50	5.00	20.0	D
108-10-1	4-Methyl-2-pentanone	**36.0**	12.5	25.0	50.0	JD
1634-04-4	Methyl t-Butyl Ether		2.50	5.00	10.0	U
103-65-1	n-Propylbenzene	**9.50**	2.50	5.00	10.0	JD
100-42-5	Styrene		2.50	5.00	10.0	U
79-34-5	1,1,2,2-Tetrachloroethane		2.50	5.00	10.0	U
630-20-6	1,1,1,2-Tetrachloroethane		2.50	5.00	10.0	U
127-18-4	Tetrachloroethene		2.50	5.00	10.0	U
108-88-3	Toluene	**756**	2.50	5.00	10.0	D
87-61-6	1,2,3-Trichlorobenzene		2.50	5.00	20.0	U
120-82-1	1,2,4-Trichlorobenzene		2.50	5.00	20.0	U
79-00-5	1,1,2-Trichloroethane		2.50	5.00	10.0	U
71-55-6	1,1,1-Trichloroethane		2.50	5.00	10.0	U
79-01-6	Trichloroethene		2.50	5.00	10.0	U
75-69-4	Trichlorofluoromethane		5.00	10.0	20.0	U
96-18-4	1,2,3-Trichloropropane		5.00	10.0	20.0	U
108-67-8	1,3,5-Trimethylbenzene	**25.5**	2.50	5.00	10.0	D
95-63-6	1,2,4-Trimethylbenzene	**61.2**	2.50	5.00	10.0	D
75-01-4	Vinyl chloride		2.50	5.00	10.0	U
1330-20-7	Xylenes (total)	**363**	7.50	15.0	30.0	D

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	28.54	95.1	75 - 120	
Dibromofluoromethane	30.00	28.89	96.3	85 - 115	
1,2-Dichloroethane-d4	30.00	31.25	104	70 - 120	
Toluene-d8	30.00	29.27	97.6	85 - 120	

ANALYSIS DATA SHEET

GW8063-AB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-03	File ID:	1113303.D
Sampled:	11/13/12 12:20	Prepared:	11/15/12 14:34	Analyzed:	11/15/12 14:34
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 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	UY
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	UX
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	2.00	U

ANALYSIS DATA SHEET

GW8063-AB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-03	File ID:	1113303.D
Sampled:	11/13/12 12:20	Prepared:	11/15/12 14:34	Analyzed:	11/15/12 14:34
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 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	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	UX
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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.76	92.5	75 - 120	
Dibromofluoromethane	30.00	29.57	98.6	85 - 115	
1,2-Dichloroethane-d4	30.00	32.15	107	70 - 120	
Toluene-d8	30.00	29.82	99.4	85 - 120	

ANALYSIS DATA SHEET

GW8064-AB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-04	File ID:	1113304.D
Sampled:	11/13/12 15:04	Prepared:	11/15/12 15:02	Analyzed:	11/15/12 15:02
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 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	UY
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	UX
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	2.00	U

ANALYSIS DATA SHEET

GW8064-AB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-04	File ID:	1113304.D
Sampled:	11/13/12 15:04	Prepared:	11/15/12 15:02	Analyzed:	11/15/12 15:02
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 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	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	UX
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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.55	91.8	75 - 120	
Dibromofluoromethane	30.00	29.63	98.8	85 - 115	
1,2-Dichloroethane-d4	30.00	30.94	103	70 - 120	
Toluene-d8	30.00	29.68	98.9	85 - 120	

ANALYSIS DATA SHEET

GW8243-TB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-05	File ID:	1113305.D
Sampled:	11/12/12 08:00	Prepared:	11/15/12 15:30	Analyzed:	11/15/12 15:30
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 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	UY
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	UX
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	2.00	U

ANALYSIS DATA SHEET

GW8243-TB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-05	File ID:	1113305.D
Sampled:	11/12/12 08:00	Prepared:	11/15/12 15:30	Analyzed:	11/15/12 15:30
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 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	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	UX
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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.76	92.5	75 - 120	
Dibromofluoromethane	30.00	29.38	97.9	85 - 115	
1,2-Dichloroethane-d4	30.00	31.11	104	70 - 120	
Toluene-d8	30.00	29.78	99.3	85 - 120	

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01	File ID:	1114701.D
Sampled:	11/14/12 16:06	Prepared:	11/19/12 23:47	Analyzed:	11/19/12 23:47
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K19025 Sequence: 2K32507 Calibration: 2291001 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone		2.50	5.00	10.0	UY
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	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	2.00	UX

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01	File ID:	1114701.D
Sampled:	11/14/12 16:06	Prepared:	11/19/12 23:47	Analyzed:	11/19/12 23:47
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K19025 Sequence: 2K32507 Calibration: 2291001 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	2.00	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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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	**0.430**	0.250	0.500	1.00	J
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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.53	91.8	75 - 120	
Dibromofluoromethane	30.00	29.36	97.9	85 - 115	
1,2-Dichloroethane-d4	30.00	30.99	103	70 - 120	
Toluene-d8	30.00	29.23	97.4	85 - 120	

ANALYSIS DATA SHEET

GW8065-AB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-03	File ID:	1114703.D
Sampled:	11/14/12 16:06	Prepared:	11/19/12 09:54	Analyzed:	11/19/12 09:54
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K19015 Sequence: 2K32506 Calibration: 2291001 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	U
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	UX
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	2.00	U

ANALYSIS DATA SHEET

GW8065-AB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-03	File ID:	1114703.D
Sampled:	11/14/12 16:06	Prepared:	11/19/12 09:54	Analyzed:	11/19/12 09:54
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K19015 Sequence: 2K32506 Calibration: 2291001 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	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	UX
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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.21	90.7	75 - 120	
Dibromofluoromethane	30.00	29.27	97.6	85 - 115	
1,2-Dichloroethane-d4	30.00	29.97	99.9	70 - 120	
Toluene-d8	30.00	28.58	95.3	85 - 120	

ANALYSIS DATA SHEET

GW8244-TB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-04	File ID:	1114704.D
Sampled:	11/14/12 08:00	Prepared:	11/19/12 10:22	Analyzed:	11/19/12 10:22
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K19015 Sequence: 2K32506 Calibration: 2291001 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	U
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	UX
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	2.00	U

ANALYSIS DATA SHEET

GW8244-TB

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-04	File ID:	1114704.D
Sampled:	11/14/12 08:00	Prepared:	11/19/12 10:22	Analyzed:	11/19/12 10:22
Solids:		Preparation:	5030B	Dilution:	1

Batch: 2K19015 Sequence: 2K32506 Calibration: 2291001 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	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	UX
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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

Total Target Analytes Reported: 64

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.81	92.7	75 - 120	
Dibromofluoromethane	30.00	29.18	97.3	85 - 115	
1,2-Dichloroethane-d4	30.00	30.47	102	70 - 120	
Toluene-d8	30.00	29.34	97.8	85 - 120	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32002	Instrument:	MS-VOA5
		Calibration:	2291001

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32002-CCV1) ug/L				Lab File ID: 1115CCV1.D		Analyzed: 11/15/12 06:41		
Bromofluorobenzene	30.00	98.8	80 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	98.8	80 - 120	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	103	80 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	99.7	80 - 120	9.31	9.31	0.0000	+/-1.000	
LCS (2K15002-BS1) ug/L				Lab File ID: 1115LCS1.D		Analyzed: 11/15/12 07:09		
Bromofluorobenzene	30.00	98.6	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	97.9	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	98.9	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	100	85 - 120	9.31	9.31	0.0000	+/-1.000	
Blank (2K15002-BLK1) ug/L				Lab File ID: 1115BLK1.D		Analyzed: 11/15/12 08:32		
Bromofluorobenzene	30.00	93.1	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	97.0	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	98.8	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	98.0	85 - 120	9.3	9.31	-0.0100	+/-1.000	
GW8063-AB (1211133-03) ug/L				Lab File ID: 1113303.D		Analyzed: 11/15/12 14:34		
Bromofluorobenzene	30.00	92.5	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	98.6	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	107	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	99.4	85 - 120	9.31	9.31	0.0000	+/-1.000	
GW8064-AB (1211133-04) ug/L				Lab File ID: 1113304.D		Analyzed: 11/15/12 15:02		
Bromofluorobenzene	30.00	91.8	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	98.8	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	103	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	98.9	85 - 120	9.31	9.31	0.0000	+/-1.000	
GW8243-TB (1211133-05) ug/L				Lab File ID: 1113305.D		Analyzed: 11/15/12 15:30		
Bromofluorobenzene	30.00	92.5	75 - 120	11.95	11.94	0.0100	+/-1.000	
Dibromofluoromethane	30.00	97.9	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	104	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	99.3	85 - 120	9.31	9.31	0.0000	+/-1.000	
LCS Dup (2K15002-BSD1) ug/L				Lab File ID: 1115LCD1.D		Analyzed: 11/15/12 17:49		
Bromofluorobenzene	30.00	98.3	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	99.7	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	106	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	99.9	85 - 120	9.31	9.31	0.0000	+/-1.000	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32506	Instrument:	MS-VOA5
		Calibration:	2291001

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32506-CCV1) ug/L				Lab File ID: 1119CCV1.D		Analyzed: 11/19/12 07:04		
Bromofluorobenzene	30.00	99.2	80 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	99.1	80 - 120	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	99.3	80 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	99.2	80 - 120	9.31	9.31	0.0000	+/-1.000	
LCS (2K19015-BS1) ug/L				Lab File ID: 1119LCS1.D		Analyzed: 11/19/12 07:32		
Bromofluorobenzene	30.00	99.4	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	95.9	85 - 115	6.55	6.56	-0.0100	+/-1.000	
1,2-Dichloroethane-d4	30.00	102	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	99.9	85 - 120	9.3	9.31	-0.0100	+/-1.000	
Blank (2K19015-BLK1) ug/L				Lab File ID: 1119BLK1.D		Analyzed: 11/19/12 08:55		
Bromofluorobenzene	30.00	90.1	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	97.4	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	101	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	96.3	85 - 120	9.31	9.31	0.0000	+/-1.000	
GW8065-AB (1211147-03) ug/L				Lab File ID: 1114703.D		Analyzed: 11/19/12 09:54		
Bromofluorobenzene	30.00	90.7	75 - 120	11.93	11.94	-0.0100	+/-1.000	
Dibromofluoromethane	30.00	97.6	85 - 115	6.55	6.56	-0.0100	+/-1.000	
1,2-Dichloroethane-d4	30.00	99.9	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	95.3	85 - 120	9.3	9.31	-0.0100	+/-1.000	
GW8244-TB (1211147-04) ug/L				Lab File ID: 1114704.D		Analyzed: 11/19/12 10:22		
Bromofluorobenzene	30.00	92.7	75 - 120	11.93	11.94	-0.0100	+/-1.000	
Dibromofluoromethane	30.00	97.3	85 - 115	6.55	6.56	-0.0100	+/-1.000	
1,2-Dichloroethane-d4	30.00	102	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	97.8	85 - 120	9.3	9.31	-0.0100	+/-1.000	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32507	Instrument:	MS-VOA5
		Calibration:	2291001

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32507-CCV1) ug/L				Lab File ID: 1119CCVE.D		Analyzed: 11/19/12 19:10		
Bromofluorobenzene	30.00	100	80 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	99.6	80 - 120	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	102	80 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	101	80 - 120	9.31	9.31	0.0000	+/-1.000	
LCS (2K19025-BS1) ug/L				Lab File ID: 1119LCSE.D		Analyzed: 11/19/12 19:37		
Bromofluorobenzene	30.00	100	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	98.4	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	105	70 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	100	85 - 120	9.31	9.31	0.0000	+/-1.000	
Blank (2K19025-BLK1) ug/L				Lab File ID: 1119BLKE.D		Analyzed: 11/19/12 21:01		
Bromofluorobenzene	30.00	92.3	75 - 120	11.95	11.94	0.0100	+/-1.000	
Dibromofluoromethane	30.00	96.4	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	101	70 - 120	7.07	7.06	0.0100	+/-1.000	
Toluene-d8	30.00	97.9	85 - 120	9.3	9.31	-0.0100	+/-1.000	
GW0860 (1211147-01) ug/L				Lab File ID: 1114701.D		Analyzed: 11/19/12 23:47		
Bromofluorobenzene	30.00	91.8	75 - 120	11.95	11.94	0.0100	+/-1.000	
Dibromofluoromethane	30.00	97.9	85 - 115	6.57	6.56	0.0100	+/-1.000	
1,2-Dichloroethane-d4	30.00	103	70 - 120	7.07	7.06	0.0100	+/-1.000	
Toluene-d8	30.00	97.4	85 - 120	9.32	9.31	0.0100	+/-1.000	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32611	Instrument:	MS-VOA5
		Calibration:	2291001

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32611-CCV1) ug/L				Lab File ID: 1120CCV1.D		Analyzed: 11/20/12 07:21		
Bromofluorobenzene	30.00	99.8	80 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	96.9	80 - 120	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	99.6	80 - 120	7.06	7.06	0.0000	+/-1.000	
Toluene-d8	30.00	99.1	80 - 120	9.31	9.31	0.0000	+/-1.000	
LCS (2K20013-BS1) ug/L				Lab File ID: 1120LCS1.D		Analyzed: 11/20/12 07:49		
Bromofluorobenzene	30.00	102	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	95.5	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	97.0	70 - 120	7.07	7.06	0.0100	+/-1.000	
Toluene-d8	30.00	101	85 - 120	9.31	9.31	0.0000	+/-1.000	
Blank (2K20013-BLK1) ug/L				Lab File ID: 1120BLK1.D		Analyzed: 11/20/12 09:12		
Bromofluorobenzene	30.00	92.7	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	96.0	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	106	70 - 120	7.07	7.06	0.0100	+/-1.000	
Toluene-d8	30.00	99.3	85 - 120	9.31	9.31	0.0000	+/-1.000	
GW0756 (1211133-01RE1) ug/L				Lab File ID: 1113301D.D		Analyzed: 11/20/12 12:55		
Bromofluorobenzene	30.00	95.1	75 - 120	11.94	11.94	0.0000	+/-1.000	
Dibromofluoromethane	30.00	96.3	85 - 115	6.56	6.56	0.0000	+/-1.000	
1,2-Dichloroethane-d4	30.00	104	70 - 120	7.07	7.06	0.0100	+/-1.000	
Toluene-d8	30.00	97.6	85 - 120	9.31	9.31	0.0000	+/-1.000	

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K15002	Laboratory ID:	2K15002-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	96.0	96.0	40 - 140
Benzene	50.00	50.7	101	80 - 120
Bromobenzene	50.00	44.4	88.7	75 - 125
Bromochloromethane	50.00	47.6	95.3	65 - 130
Bromodichloromethane	50.00	50.9	102	75 - 120
Bromoform	50.00	45.5	91.1	70 - 130
Bromomethane	50.00	36.1	72.2	30 - 145
n-Butylbenzene	50.00	52.2	104	70 - 135
2-Butanone	100.0	114	114	30 - 150
sec-Butylbenzene	50.00	50.5	101	70 - 125
tert-Butylbenzene	50.00	49.7	99.4	70 - 130
Carbon disulfide	50.00	54.1	108	35 - 160
Carbon tetrachloride	50.00	50.7	101	65 - 140
Chlorobenzene	50.00	48.2	96.4	80 - 120
Chloroethane	50.00	46.5	93.0	60 - 135
Chloroform	50.00	46.2	92.4	65 - 135
Chloromethane	50.00	44.2	88.4	40 - 125
2-Chlorotoluene	50.00	45.7	91.4	75 - 125
4-Chlorotoluene	50.00	46.8	93.6	75 - 130
Dibromochloromethane	50.00	51.9	104	60 - 135
1,2-Dibromo-3-chloropropane	50.00	49.2	98.4	50 - 130
1,2-Dibromoethane (EDB)	50.00	47.7	95.4	80 - 120
Dibromomethane	50.00	45.9	91.9	75 - 125
1,2-Dichlorobenzene	50.00	45.4	90.9	70 - 120
1,3-Dichlorobenzene	50.00	44.9	89.8	75 - 125
1,4-Dichlorobenzene	50.00	46.0	92.0	75 - 125
Dichlorodifluoromethane	50.00	49.6	99.2	30 - 155
1,1-Dichloroethane	50.00	47.6	95.2	70 - 135
1,2-Dichloroethane	50.00	44.5	88.9	70 - 130
1,1-Dichloroethene	50.00	51.2	102	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K15002	Laboratory ID:	2K15002-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	48.7	97.4	70 - 125
trans-1,2-Dichloroethene	50.00	48.3	96.6	60 - 140
1,2-Dichloropropane	50.00	48.1	96.1	75 - 125
1,3-Dichloropropane	50.00	49.0	98.0	75 - 125
2,2-Dichloropropane	50.00	47.9	95.8	70 - 135
1,1-Dichloropropene	50.00	48.4	96.9	75 - 130
cis-1,3-Dichloropropene	50.00	50.6	101	70 - 130
trans-1,3-Dichloropropene	50.00	49.6	99.1	55 - 140
Ethylbenzene	50.00	49.9	99.8	75 - 125
Hexachlorobutadiene	50.00	58.6	117	50 - 140
2-Hexanone	100.0	112	112	55 - 130
Isopropylbenzene	50.00	52.0	104	75 - 125
p-Isopropyltoluene	50.00	51.0	102	75 - 130
Methylene chloride	50.00	46.5	93.1	55 - 140
Naphthalene	50.00	44.6	89.1	55 - 140
4-Methyl-2-pentanone	100.0	119	119	60 - 135
Methyl t-Butyl Ether	50.00	47.7	95.4	65 - 125
n-Propylbenzene	50.00	47.6	95.1	70 - 130
Styrene	50.00	50.9	102	65 - 135
1,1,2,2-Tetrachloroethane	50.00	46.2	92.3	65 - 130
1,1,1,2-Tetrachloroethane	50.00	50.5	101	80 - 130
Tetrachloroethene	50.00	46.9	93.8	45 - 150
Toluene	50.00	49.9	99.9	75 - 120
1,2,3-Trichlorobenzene	50.00	49.4	98.9	55 - 140
1,2,4-Trichlorobenzene	50.00	50.1	100	65 - 135
1,1,2-Trichloroethane	50.00	48.9	97.7	75 - 125
1,1,1-Trichloroethane	50.00	48.0	96.1	65 - 130
Trichloroethene	50.00	45.1	90.2	70 - 125
Trichlorofluoromethane	50.00	47.3	94.6	60 - 145
1,2,3-Trichloropropane	50.00	51.0	102	75 - 125

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K15002	Laboratory ID:	2K15002-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	48.6	97.1	75 - 130
1,2,4-Trimethylbenzene	50.00	49.9	99.8	75 - 130
Vinyl chloride	50.00	40.3	80.6	50 - 145
Xylenes (total)	150.0	151	101	75 - 130

ANALYTE	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acetone	100.0	75.8	75.8	23.6	30	40 - 140
Benzene	50.00	51.0	102	0.609	30	80 - 120
Bromobenzene	50.00	45.5	91.1	2.60	30	75 - 125
Bromochloromethane	50.00	49.1	98.2	3.04	30	65 - 130
Bromodichloromethane	50.00	51.3	103	0.744	30	75 - 120
Bromoform	50.00	44.9	89.8	1.35	30	70 - 130
Bromomethane	50.00	36.2	72.5	0.442	30	30 - 145
n-Butylbenzene	50.00	51.3	103	1.85	30	70 - 135
2-Butanone	100.0	94.2	94.2	19.3	30	30 - 150
sec-Butylbenzene	50.00	51.1	102	1.22	30	70 - 125
tert-Butylbenzene	50.00	49.9	99.8	0.482	30	70 - 130
Carbon disulfide	50.00	53.6	107	0.911	30	35 - 160
Carbon tetrachloride	50.00	49.2	98.3	3.12	30	65 - 140
Chlorobenzene	50.00	48.5	97.0	0.682	30	80 - 120
Chloroethane	50.00	45.2	90.4	2.81	30	60 - 135
Chloroform	50.00	48.0	95.9	3.70	30	65 - 135
Chloromethane	50.00	42.6	85.2	3.69	30	40 - 125
2-Chlorotoluene	50.00	45.4	90.9	0.570	30	75 - 125
4-Chlorotoluene	50.00	46.9	93.7	0.192	30	75 - 130
Dibromochloromethane	50.00	51.7	103	0.483	30	60 - 135
1,2-Dibromo-3-chloropropane	50.00	49.2	98.4	0.0407	30	50 - 130
1,2-Dibromoethane (EDB)	50.00	47.9	95.8	0.460	30	80 - 120
Dibromomethane	50.00	49.0	98.1	6.55	30	75 - 125

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K15002	Laboratory ID:	2K15002-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.
1,2-Dichlorobenzene	50.00	47.1	94.2	3.55	30	70 - 120
1,3-Dichlorobenzene	50.00	45.9	91.9	2.31	30	75 - 125
1,4-Dichlorobenzene	50.00	47.1	94.2	2.34	30	75 - 125
Dichlorodifluoromethane	50.00	46.4	92.7	6.79	30	30 - 155
1,1-Dichloroethane	50.00	48.0	96.0	0.795	30	70 - 135
1,2-Dichloroethane	50.00	45.2	90.4	1.65	30	70 - 130
1,1-Dichloroethene	50.00	51.4	103	0.312	30	70 - 130
cis-1,2-Dichloroethene	50.00	50.2	100	2.91	30	70 - 125
trans-1,2-Dichloroethene	50.00	50.1	100	3.76	30	60 - 140
1,2-Dichloropropane	50.00	49.2	98.4	2.32	30	75 - 125
1,3-Dichloropropane	50.00	49.8	99.7	1.72	30	75 - 125
2,2-Dichloropropane	50.00	46.4	92.9	3.03	30	70 - 135
1,1-Dichloropropene	50.00	47.6	95.2	1.73	30	75 - 130
cis-1,3-Dichloropropene	50.00	51.1	102	0.905	30	70 - 130
trans-1,3-Dichloropropene	50.00	48.2	96.3	2.89	30	55 - 140
Ethylbenzene	50.00	49.8	99.6	0.281	30	75 - 125
Hexachlorobutadiene	50.00	54.9	110	6.56	30	50 - 140
2-Hexanone	100.0	86.5	86.5	25.9	30	55 - 130
Isopropylbenzene	50.00	52.0	104	0.0961	30	75 - 125
p-Isopropyltoluene	50.00	51.2	102	0.470	30	75 - 130
Methylene chloride	50.00	47.1	94.2	1.22	30	55 - 140
Naphthalene	50.00	42.3	84.6	5.25	30	55 - 140
4-Methyl-2-pentanone	100.0	95.5	95.5	21.8	30	60 - 135
Methyl t-Butyl Ether	50.00	48.1	96.2	0.919	30	65 - 125
n-Propylbenzene	50.00	47.6	95.2	0.0841	30	70 - 130
Styrene	50.00	51.4	103	0.938	30	65 - 135
1,1,2,2-Tetrachloroethane	50.00	45.9	91.9	0.499	30	65 - 130
1,1,1,2-Tetrachloroethane	50.00	50.4	101	0.317	30	80 - 130
Tetrachloroethene	50.00	45.9	91.8	2.09	30	45 - 150
Toluene	50.00	49.4	98.8	1.13	30	75 - 120

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K15002	Laboratory ID:	2K15002-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.
1,2,3-Trichlorobenzene	50.00	47.9	95.8	3.18	30	55 - 140
1,2,4-Trichlorobenzene	50.00	47.4	94.7	5.56	30	65 - 135
1,1,2-Trichloroethane	50.00	50.1	100	2.55	30	75 - 125
1,1,1-Trichloroethane	50.00	48.0	95.9	0.146	30	65 - 130
Trichloroethene	50.00	46.4	92.9	2.93	30	70 - 125
Trichlorofluoromethane	50.00	46.6	93.2	1.47	30	60 - 145
1,2,3-Trichloropropane	50.00	49.9	99.9	2.16	30	75 - 125
1,3,5-Trimethylbenzene	50.00	47.5	95.0	2.14	30	75 - 130
1,2,4-Trimethylbenzene	50.00	49.2	98.5	1.35	30	75 - 130
Vinyl chloride	50.00	36.5	73.0	9.82	30	50 - 145
Xylenes (total)	150.0	150	100	0.743	30	75 - 130

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19015	Laboratory ID:	2K19015-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	80.0	80.0	40 - 140
Benzene	50.00	52.5	105	80 - 120
Bromobenzene	50.00	45.8	91.7	75 - 125
Bromochloromethane	50.00	49.6	99.1	65 - 130
Bromodichloromethane	50.00	51.9	104	75 - 120
Bromoform	50.00	48.9	97.8	70 - 130
Bromomethane	50.00	41.9	83.9	30 - 145
n-Butylbenzene	50.00	50.1	100	70 - 135
2-Butanone	100.0	95.7	95.7	30 - 150
sec-Butylbenzene	50.00	50.8	102	70 - 125
tert-Butylbenzene	50.00	50.1	100	70 - 130
Carbon disulfide	50.00	56.4	113	35 - 160
Carbon tetrachloride	50.00	51.7	103	65 - 140
Chlorobenzene	50.00	48.9	97.7	80 - 120
Chloroethane	50.00	41.4	82.8	60 - 135
Chloroform	50.00	47.5	95.0	65 - 135
Chloromethane	50.00	37.9	75.7	40 - 125
2-Chlorotoluene	50.00	44.5	89.1	75 - 125
4-Chlorotoluene	50.00	45.8	91.7	75 - 130
Dibromochloromethane	50.00	54.8	110	60 - 135
1,2-Dibromo-3-chloropropane	50.00	52.8	106	50 - 130
1,2-Dibromoethane (EDB)	50.00	48.3	96.7	80 - 120
Dibromomethane	50.00	47.0	94.1	75 - 125
1,2-Dichlorobenzene	50.00	46.5	93.0	70 - 120
1,3-Dichlorobenzene	50.00	45.9	91.8	75 - 125
1,4-Dichlorobenzene	50.00	46.4	92.9	75 - 125
Dichlorodifluoromethane	50.00	46.6	93.3	30 - 155
1,1-Dichloroethane	50.00	50.0	100	70 - 135
1,2-Dichloroethane	50.00	44.1	88.2	70 - 130
1,1-Dichloroethene	50.00	52.4	105	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19015	Laboratory ID:	2K19015-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	100	70 - 125
trans-1,2-Dichloroethene	50.00	50.9	102	60 - 140
1,2-Dichloropropane	50.00	49.8	99.6	75 - 125
1,3-Dichloropropane	50.00	50.5	101	75 - 125
2,2-Dichloropropane	50.00	47.9	95.7	70 - 135
1,1-Dichloropropene	50.00	49.4	98.7	75 - 130
cis-1,3-Dichloropropene	50.00	52.3	105	70 - 130
trans-1,3-Dichloropropene	50.00	50.2	100	55 - 140
Ethylbenzene	50.00	51.4	103	75 - 125
Hexachlorobutadiene	50.00	62.0	124	50 - 140
2-Hexanone	100.0	94.6	94.6	55 - 130
Isopropylbenzene	50.00	53.8	108	75 - 125
p-Isopropyltoluene	50.00	51.2	102	75 - 130
Methylene chloride	50.00	48.6	97.2	55 - 140
Naphthalene	50.00	47.0	94.1	55 - 140
4-Methyl-2-pentanone	100.0	101	101	60 - 135
Methyl t-Butyl Ether	50.00	49.6	99.2	65 - 125
n-Propylbenzene	50.00	47.0	94.0	70 - 130
Styrene	50.00	52.1	104	65 - 135
1,1,2,2-Tetrachloroethane	50.00	45.9	91.8	65 - 130
1,1,1,2-Tetrachloroethane	50.00	53.2	106	80 - 130
Tetrachloroethene	50.00	48.6	97.2	45 - 150
Toluene	50.00	50.7	101	75 - 120
1,2,3-Trichlorobenzene	50.00	52.3	105	55 - 140
1,2,4-Trichlorobenzene	50.00	52.1	104	65 - 135
1,1,2-Trichloroethane	50.00	51.8	104	75 - 125
1,1,1-Trichloroethane	50.00	49.3	98.5	65 - 130
Trichloroethene	50.00	47.5	95.0	70 - 125
Trichlorofluoromethane	50.00	48.8	97.7	60 - 145
1,2,3-Trichloropropane	50.00	51.6	103	75 - 125

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19015	Laboratory ID:	2K19015-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	46.4	92.7	75 - 130
1,2,4-Trimethylbenzene	50.00	48.1	96.1	75 - 130
Vinyl chloride	50.00	37.6	75.2	50 - 145
Xylenes (total)	150.0	152	102	75 - 130

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19025	Laboratory ID:	2K19025-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	71.2	71.2	40 - 140
Benzene	50.00	50.7	101	80 - 120
Bromobenzene	50.00	45.6	91.2	75 - 125
Bromochloromethane	50.00	49.4	98.9	65 - 130
Bromodichloromethane	50.00	49.8	99.5	75 - 120
Bromoform	50.00	46.3	92.7	70 - 130
Bromomethane	50.00	39.6	79.1	30 - 145
n-Butylbenzene	50.00	49.9	99.7	70 - 135
2-Butanone	100.0	87.3	87.3	30 - 150
sec-Butylbenzene	50.00	49.7	99.4	70 - 125
tert-Butylbenzene	50.00	50.4	101	70 - 130
Carbon disulfide	50.00	53.5	107	35 - 160
Carbon tetrachloride	50.00	48.5	97.1	65 - 140
Chlorobenzene	50.00	48.8	97.5	80 - 120
Chloroethane	50.00	37.1	74.3	60 - 135
Chloroform	50.00	46.4	92.8	65 - 135
Chloromethane	50.00	35.1	70.1	40 - 125
2-Chlorotoluene	50.00	44.5	88.9	75 - 125
4-Chlorotoluene	50.00	45.6	91.3	75 - 130
Dibromochloromethane	50.00	53.7	107	60 - 135
1,2-Dibromo-3-chloropropane	50.00	50.8	102	50 - 130
1,2-Dibromoethane (EDB)	50.00	48.0	96.0	80 - 120
Dibromomethane	50.00	46.4	92.9	75 - 125
1,2-Dichlorobenzene	50.00	46.9	93.8	70 - 120
1,3-Dichlorobenzene	50.00	46.4	92.7	75 - 125
1,4-Dichlorobenzene	50.00	46.0	91.9	75 - 125
Dichlorodifluoromethane	50.00	42.3	84.6	30 - 155
1,1-Dichloroethane	50.00	48.6	97.1	70 - 135
1,2-Dichloroethane	50.00	42.9	85.9	70 - 130
1,1-Dichloroethene	50.00	50.6	101	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19025	Laboratory ID:	2K19025-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	48.4	96.9	70 - 125
trans-1,2-Dichloroethene	50.00	49.1	98.2	60 - 140
1,2-Dichloropropane	50.00	47.3	94.6	75 - 125
1,3-Dichloropropane	50.00	48.3	96.7	75 - 125
2,2-Dichloropropane	50.00	44.2	88.4	70 - 135
1,1-Dichloropropene	50.00	47.0	94.0	75 - 130
cis-1,3-Dichloropropene	50.00	49.5	99.0	70 - 130
trans-1,3-Dichloropropene	50.00	47.6	95.3	55 - 140
Ethylbenzene	50.00	49.6	99.2	75 - 125
Hexachlorobutadiene	50.00	63.1	126	50 - 140
2-Hexanone	100.0	84.2	84.2	55 - 130
Isopropylbenzene	50.00	52.7	105	75 - 125
p-Isopropyltoluene	50.00	50.8	102	75 - 130
Methylene chloride	50.00	46.8	93.6	55 - 140
Naphthalene	50.00	49.4	98.9	55 - 140
4-Methyl-2-pentanone	100.0	90.4	90.4	60 - 135
Methyl t-Butyl Ether	50.00	48.5	97.0	65 - 125
n-Propylbenzene	50.00	46.2	92.4	70 - 130
Styrene	50.00	51.4	103	65 - 135
1,1,2,2-Tetrachloroethane	50.00	46.3	92.6	65 - 130
1,1,1,2-Tetrachloroethane	50.00	51.9	104	80 - 130
Tetrachloroethene	50.00	48.5	97.1	45 - 150
Toluene	50.00	49.8	99.6	75 - 120
1,2,3-Trichlorobenzene	50.00	54.4	109	55 - 140
1,2,4-Trichlorobenzene	50.00	53.1	106	65 - 135
1,1,2-Trichloroethane	50.00	50.5	101	75 - 125
1,1,1-Trichloroethane	50.00	47.0	94.1	65 - 130
Trichloroethene	50.00	44.8	89.7	70 - 125
Trichlorofluoromethane	50.00	45.8	91.6	60 - 145
1,2,3-Trichloropropane	50.00	50.3	101	75 - 125

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19025	Laboratory ID:	2K19025-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	46.2	92.5	75 - 130
1,2,4-Trimethylbenzene	50.00	47.9	95.8	75 - 130
Vinyl chloride	50.00	35.2	70.3	50 - 145
Xylenes (total)	150.0	150	100	75 - 130

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K20013	Laboratory ID:	2K20013-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	77.7	77.7	40 - 140
Benzene	50.00	51.1	102	80 - 120
Bromobenzene	50.00	46.4	92.8	75 - 125
Bromochloromethane	50.00	49.3	98.5	65 - 130
Bromodichloromethane	50.00	50.1	100	75 - 120
Bromoform	50.00	46.1	92.1	70 - 130
Bromomethane	50.00	35.1	70.3	30 - 145
n-Butylbenzene	50.00	53.8	108	70 - 135
2-Butanone	100.0	98.8	98.8	30 - 150
sec-Butylbenzene	50.00	51.3	103	70 - 125
tert-Butylbenzene	50.00	51.2	102	70 - 130
Carbon disulfide	50.00	54.4	109	35 - 160
Carbon tetrachloride	50.00	49.4	98.8	65 - 140
Chlorobenzene	50.00	49.6	99.3	80 - 120
Chloroethane	50.00	39.0	78.1	60 - 135
Chloroform	50.00	46.6	93.2	65 - 135
Chloromethane	50.00	35.1	70.2	40 - 125
2-Chlorotoluene	50.00	44.7	89.3	75 - 125
4-Chlorotoluene	50.00	46.0	92.0	75 - 130
Dibromochloromethane	50.00	54.4	109	60 - 135
1,2-Dibromo-3-chloropropane	50.00	51.4	103	50 - 130
1,2-Dibromoethane (EDB)	50.00	49.2	98.4	80 - 120
Dibromomethane	50.00	46.8	93.5	75 - 125
1,2-Dichlorobenzene	50.00	48.1	96.2	70 - 120
1,3-Dichlorobenzene	50.00	46.5	93.0	75 - 125
1,4-Dichlorobenzene	50.00	47.0	94.1	75 - 125
Dichlorodifluoromethane	50.00	46.6	93.1	30 - 155
1,1-Dichloroethane	50.00	48.3	96.6	70 - 135
1,2-Dichloroethane	50.00	43.9	87.9	70 - 130
1,1-Dichloroethene	50.00	52.7	105	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K20013	Laboratory ID:	2K20013-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	48.4	96.8	70 - 125
trans-1,2-Dichloroethene	50.00	49.5	98.9	60 - 140
1,2-Dichloropropane	50.00	48.5	97.1	75 - 125
1,3-Dichloropropane	50.00	50.0	99.9	75 - 125
2,2-Dichloropropane	50.00	45.7	91.4	70 - 135
1,1-Dichloropropene	50.00	48.0	96.0	75 - 130
cis-1,3-Dichloropropene	50.00	49.4	98.8	70 - 130
trans-1,3-Dichloropropene	50.00	48.1	96.2	55 - 140
Ethylbenzene	50.00	51.4	103	75 - 125
Hexachlorobutadiene	50.00	66.2	132	50 - 140
2-Hexanone	100.0	93.1	93.1	55 - 130
Isopropylbenzene	50.00	53.5	107	75 - 125
p-Isopropyltoluene	50.00	52.6	105	75 - 130
Methylene chloride	50.00	46.6	93.1	55 - 140
Naphthalene	50.00	55.3	111	55 - 140
4-Methyl-2-pentanone	100.0	97.6	97.6	60 - 135
Methyl t-Butyl Ether	50.00	48.9	97.8	65 - 125
n-Propylbenzene	50.00	47.2	94.5	70 - 130
Styrene	50.00	52.8	106	65 - 135
1,1,2,2-Tetrachloroethane	50.00	47.2	94.4	65 - 130
1,1,1,2-Tetrachloroethane	50.00	52.6	105	80 - 130
Tetrachloroethene	50.00	50.3	101	45 - 150
Toluene	50.00	50.6	101	75 - 120
1,2,3-Trichlorobenzene	50.00	58.8	118	55 - 140
1,2,4-Trichlorobenzene	50.00	57.3	115	65 - 135
1,1,2-Trichloroethane	50.00	50.2	100	75 - 125
1,1,1-Trichloroethane	50.00	47.6	95.2	65 - 130
Trichloroethene	50.00	45.3	90.6	70 - 125
Trichlorofluoromethane	50.00	48.1	96.3	60 - 145
1,2,3-Trichloropropane	50.00	50.9	102	75 - 125

LCS / LCS DUPLICATE RECOVERY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K20013	Laboratory ID:	2K20013-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	48.7	97.3	75 - 130
1,2,4-Trimethylbenzene	50.00	50.9	102	75 - 130
Vinyl chloride	50.00	36.0	71.9	50 - 145
Xylenes (total)	150.0	152	102	75 - 130

PREPARATION BATCH SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K15002 Batch Matrix: Water Preparation: 5030B

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW8063-AB	1211133-03	11/15/12 14:34	5.00	5.00
GW8064-AB	1211133-04	11/15/12 15:02	5.00	5.00
GW8243-TB	1211133-05	11/15/12 15:30	5.00	5.00
Blank	2K15002-BLK1	11/15/12 08:32	5.00	5.00
LCS	2K15002-BS1	11/15/12 07:09	5.00	5.00
LCS Dup	2K15002-BSD1	11/15/12 17:49	5.00	5.00

PREPARATION BATCH SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K19015 Batch Matrix: Water Preparation: 5030B

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW8065-AB	1211147-03	11/19/12 09:54	5.00	5.00
GW8244-TB	1211147-04	11/19/12 10:22	5.00	5.00
Blank	2K19015-BLK1	11/19/12 08:55	5.00	5.00
LCS	2K19015-BS1	11/19/12 07:32	5.00	5.00

PREPARATION BATCH SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K19025 Batch Matrix: Water Preparation: 5030B

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0860	1211147-01	11/19/12 23:47	5.00	5.00
Blank	2K19025-BLK1	11/19/12 21:01	5.00	5.00
LCS	2K19025-BS1	11/19/12 19:37	5.00	5.00

PREPARATION BATCH SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K20013 Batch Matrix: Water Preparation: 5030B

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01RE1	11/20/12 12:55	5.00	5.00
Blank	2K20013-BLK1	11/20/12 09:12	5.00	5.00
LCS	2K20013-BS1	11/20/12 07:49	5.00	5.00

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K15002-BLK1 File ID: 1115BLK1.D

Sampled: Prepared: Analyzed: 11/15/12 08:32

Solids: Preparation: 5030B Dilution:

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 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	UY
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	UX
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	2.00	U

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K15002-BLK1 File ID: 1115BLK1.D

Sampled: Prepared: Analyzed: 11/15/12 08:32

Solids: Preparation: 5030B Dilution:

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 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	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	UX
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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.94	93.1	75 - 120	
Dibromofluoromethane	30.00	29.09	97.0	85 - 115	
1,2-Dichloroethane-d4	30.00	29.65	98.8	70 - 120	
Toluene-d8	30.00	29.39	98.0	85 - 120	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC | SDG: kirtland_072

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

Matrix: | Laboratory ID: 2K15002-BS1 | File ID: 1115LCS1.D

Sampled: | Prepared: | Analyzed: 11/15/12 07:09

Solids: | Preparation: 5030B | Dilution:

Batch: 2K15002 | Sequence: 2K32002 | Calibration: 2291001 | Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	**96.0**	2.50	5.00	10.0	
71-43-2	Benzene	**50.7**	0.250	0.500	1.00	
108-86-1	Bromobenzene	**44.4**	0.250	0.500	1.00	
74-97-5	Bromochloromethane	**47.6**	0.250	0.500	1.00	
75-27-4	Bromodichloromethane	**50.9**	0.250	0.500	1.00	
75-25-2	Bromoform	**45.5**	0.250	0.500	1.00	
74-83-9	Bromomethane	**36.1**	0.500	1.00	2.00	Y
104-51-8	n-Butylbenzene	**52.2**	0.250	0.500	1.00	
78-93-3	2-Butanone	**114**	2.50	5.00	10.0	X
135-98-8	sec-Butylbenzene	**50.5**	0.250	0.500	1.00	
98-06-6	tert-Butylbenzene	**49.7**	0.250	0.500	1.00	
75-15-0	Carbon disulfide	**54.1**	0.250	0.500	1.00	
56-23-5	Carbon tetrachloride	**50.7**	0.250	0.500	1.00	
108-90-7	Chlorobenzene	**48.2**	0.250	0.500	1.00	
75-00-3	Chloroethane	**46.5**	0.500	1.00	2.00	
67-66-3	Chloroform	**46.2**	0.250	0.500	1.00	
74-87-3	Chloromethane	**44.2**	0.250	0.500	1.00	
95-49-8	2-Chlorotoluene	**45.7**	0.250	0.500	1.00	
106-43-4	4-Chlorotoluene	**46.8**	0.250	0.500	1.00	
124-48-1	Dibromochloromethane	**51.9**	0.250	0.500	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	**49.2**	0.500	1.00	2.00	
106-93-4	1,2-Dibromoethane (EDB)	**47.7**	0.250	0.500	1.00	
74-95-3	Dibromomethane	**45.9**	0.250	0.500	1.00	
95-50-1	1,2-Dichlorobenzene	**45.4**	0.250	0.500	1.00	
541-73-1	1,3-Dichlorobenzene	**44.9**	0.250	0.500	1.00	
106-46-7	1,4-Dichlorobenzene	**46.0**	0.250	0.500	1.00	
75-71-8	Dichlorodifluoromethane	**49.6**	0.500	1.00	2.00	
75-34-3	1,1-Dichloroethane	**47.6**	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	**51.2**	0.250	0.500	1.00	
156-59-2	cis-1,2-Dichloroethene	**48.7**	0.250	0.500	1.00	
156-60-5	trans-1,2-Dichloroethene	**48.3**	0.250	0.500	1.00	
78-87-5	1,2-Dichloropropane	**48.1**	0.250	0.500	1.00	
142-28-9	1,3-Dichloropropane	**49.0**	0.250	0.500	1.00	
594-20-7	2,2-Dichloropropane	**47.9**	0.250	0.500	1.00	
563-58-6	1,1-Dichloropropene	**48.4**	0.250	0.500	1.00	
10061-01-5	cis-1,3-Dichloropropene	**50.6**	0.250	0.500	1.00	
10061-02-6	trans-1,3-Dichloropropene	**49.6**	0.250	0.500	1.00	
100-41-4	Ethylbenzene	**49.9**	0.250	0.500	1.00	
87-68-3	Hexachlorobutadiene	**58.6**	0.250	0.500	2.00	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC | SDG: kirtland_072

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

Matrix: | Laboratory ID: 2K15002-BS1 | File ID: 1115LCS1.D

Sampled: | Prepared: | Analyzed: 11/15/12 07:09

Solids: | Preparation: 5030B | Dilution:

Batch: 2K15002 | Sequence: 2K32002 | Calibration: 2291001 | Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	**112**	1.25	2.50	5.00	
98-82-8	Isopropylbenzene	**52.0**	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene	**51.0**	0.250	0.500	1.00	
75-09-2	Methylene chloride	**46.5**	0.500	1.00	2.00	
91-20-3	Naphthalene	**44.6**	0.250	0.500	2.00	
108-10-1	4-Methyl-2-pentanone	**119**	1.25	2.50	5.00	X
1634-04-4	Methyl t-Butyl Ether	**47.7**	0.250	0.500	1.00	
103-65-1	n-Propylbenzene	**47.6**	0.250	0.500	1.00	
100-42-5	Styrene	**50.9**	0.250	0.500	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	**46.2**	0.250	0.500	1.00	
630-20-6	1,1,1,2-Tetrachloroethane	**50.5**	0.250	0.500	1.00	
127-18-4	Tetrachloroethene	**46.9**	0.250	0.500	1.00	
108-88-3	Toluene	**49.9**	0.250	0.500	1.00	
87-61-6	1,2,3-Trichlorobenzene	**49.4**	0.250	0.500	2.00	
120-82-1	1,2,4-Trichlorobenzene	**50.1**	0.250	0.500	2.00	
79-00-5	1,1,2-Trichloroethane	**48.9**	0.250	0.500	1.00	
71-55-6	1,1,1-Trichloroethane	**48.0**	0.250	0.500	1.00	
79-01-6	Trichloroethene	**45.1**	0.250	0.500	1.00	
75-69-4	Trichlorofluoromethane	**47.3**	0.500	1.00	2.00	
96-18-4	1,2,3-Trichloropropane	**51.0**	0.500	1.00	2.00	
108-67-8	1,3,5-Trimethylbenzene	**48.6**	0.250	0.500	1.00	
95-63-6	1,2,4-Trimethylbenzene	**49.9**	0.250	0.500	1.00	
75-01-4	Vinyl chloride	**40.3**	0.250	0.500	1.00	
1330-20-7	Xylenes (total)	**151**	0.750	1.50	3.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	29.59	98.6	75 - 120	
Dibromofluoromethane	30.00	29.38	97.9	85 - 115	
1,2-Dichloroethane-d4	30.00	29.67	98.9	70 - 120	
Toluene-d8	30.00	30.09	100	85 - 120	

ANALYSIS DATA SHEET

LCS Dup

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K15002-BSD1 File ID: 1115LCD1.D

Sampled: Prepared: Analyzed: 11/15/12 17:49

Solids: Preparation: 5030B Dilution:

Batch: 2K15002 Sequence: 2K32002 Calibration: 2291001 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	**75.8**	2.50	5.00	10.0	
71-43-2	Benzene	**51.0**	0.250	0.500	1.00	
108-86-1	Bromobenzene	**45.5**	0.250	0.500	1.00	
74-97-5	Bromochloromethane	**49.1**	0.250	0.500	1.00	
75-27-4	Bromodichloromethane	**51.3**	0.250	0.500	1.00	
75-25-2	Bromoform	**44.9**	0.250	0.500	1.00	
74-83-9	Bromomethane	**36.2**	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	**94.2**	2.50	5.00	10.0	X
135-98-8	sec-Butylbenzene	**51.1**	0.250	0.500	1.00	
98-06-6	tert-Butylbenzene	**49.9**	0.250	0.500	1.00	
75-15-0	Carbon disulfide	**53.6**	0.250	0.500	1.00	
56-23-5	Carbon tetrachloride	**49.2**	0.250	0.500	1.00	
108-90-7	Chlorobenzene	**48.5**	0.250	0.500	1.00	
75-00-3	Chloroethane	**45.2**	0.500	1.00	2.00	
67-66-3	Chloroform	**48.0**	0.250	0.500	1.00	
74-87-3	Chloromethane	**42.6**	0.250	0.500	1.00	
95-49-8	2-Chlorotoluene	**45.4**	0.250	0.500	1.00	
106-43-4	4-Chlorotoluene	**46.9**	0.250	0.500	1.00	
124-48-1	Dibromochloromethane	**51.7**	0.250	0.500	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	**49.2**	0.500	1.00	2.00	
106-93-4	1,2-Dibromoethane (EDB)	**47.9**	0.250	0.500	1.00	
74-95-3	Dibromomethane	**49.0**	0.250	0.500	1.00	
95-50-1	1,2-Dichlorobenzene	**47.1**	0.250	0.500	1.00	
541-73-1	1,3-Dichlorobenzene	**45.9**	0.250	0.500	1.00	
106-46-7	1,4-Dichlorobenzene	**47.1**	0.250	0.500	1.00	
75-71-8	Dichlorodifluoromethane	**46.4**	0.500	1.00	2.00	
75-34-3	1,1-Dichloroethane	**48.0**	0.250	0.500	1.00	
107-06-2	1,2-Dichloroethane	**45.2**	0.250	0.500	1.00	
75-35-4	1,1-Dichloroethene	**51.4**	0.250	0.500	1.00	
156-59-2	cis-1,2-Dichloroethene	**50.2**	0.250	0.500	1.00	
156-60-5	trans-1,2-Dichloroethene	**50.1**	0.250	0.500	1.00	
78-87-5	1,2-Dichloropropane	**49.2**	0.250	0.500	1.00	
142-28-9	1,3-Dichloropropane	**49.8**	0.250	0.500	1.00	
594-20-7	2,2-Dichloropropane	**46.4**	0.250	0.500	1.00	
563-58-6	1,1-Dichloropropene	**47.6**	0.250	0.500	1.00	
10061-01-5	cis-1,3-Dichloropropene	**51.1**	0.250	0.500	1.00	
10061-02-6	trans-1,3-Dichloropropene	**48.2**	0.250	0.500	1.00	
100-41-4	Ethylbenzene	**49.8**	0.250	0.500	1.00	
87-68-3	Hexachlorobutadiene	**54.9**	0.250	0.500	2.00	

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K15002-BSD1	File ID:	1115LCD1.D
Sampled:		Prepared:		Analyzed:	11/15/12 17:49
Solids:		Preparation:	5030B	Dilution:	

Batch:	2K15002	Sequence:	2K32002	Calibration:	2291001	Instrument:	MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	**86.5**	1.25	2.50	5.00	
98-82-8	Isopropylbenzene	**52.0**	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene	**51.2**	0.250	0.500	1.00	
75-09-2	Methylene chloride	**47.1**	0.500	1.00	2.00	
91-20-3	Naphthalene	**42.3**	0.250	0.500	2.00	
108-10-1	4-Methyl-2-pentanone	**95.5**	1.25	2.50	5.00	X
1634-04-4	Methyl t-Butyl Ether	**48.1**	0.250	0.500	1.00	
103-65-1	n-Propylbenzene	**47.6**	0.250	0.500	1.00	
100-42-5	Styrene	**51.4**	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	**50.4**	0.250	0.500	1.00	
127-18-4	Tetrachloroethene	**45.9**	0.250	0.500	1.00	
108-88-3	Toluene	**49.4**	0.250	0.500	1.00	
87-61-6	1,2,3-Trichlorobenzene	**47.9**	0.250	0.500	2.00	
120-82-1	1,2,4-Trichlorobenzene	**47.4**	0.250	0.500	2.00	
79-00-5	1,1,2-Trichloroethane	**50.1**	0.250	0.500	1.00	
71-55-6	1,1,1-Trichloroethane	**48.0**	0.250	0.500	1.00	
79-01-6	Trichloroethene	**46.4**	0.250	0.500	1.00	
75-69-4	Trichlorofluoromethane	**46.6**	0.500	1.00	2.00	
96-18-4	1,2,3-Trichloropropane	**49.9**	0.500	1.00	2.00	
108-67-8	1,3,5-Trimethylbenzene	**47.5**	0.250	0.500	1.00	
95-63-6	1,2,4-Trimethylbenzene	**49.2**	0.250	0.500	1.00	
75-01-4	Vinyl chloride	**36.5**	0.250	0.500	1.00	
1330-20-7	Xylenes (total)	**150**	0.750	1.50	3.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	29.48	98.3	75 - 120	
Dibromofluoromethane	30.00	29.91	99.7	85 - 115	
1,2-Dichloroethane-d4	30.00	31.68	106	70 - 120	
Toluene-d8	30.00	29.96	99.9	85 - 120	

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K19015-BLK1 File ID: 1119BLK1.D

Sampled: Prepared: Analyzed: 11/19/12 08:55

Solids: Preparation: 5030B Dilution:

Batch: 2K19015 Sequence: 2K32506 Calibration: 2291001 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	U
104-51-8	n-Butylbenzene		0.250	0.500	1.00	U
78-93-3	2-Butanone		2.50	5.00	10.0	UX
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	2.00	U

ANALYSIS DATA SHEET

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Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K19015-BLK1 File ID: 1119BLK1.D

Sampled: Prepared: Analyzed: 11/19/12 08:55

Solids: Preparation: 5030B Dilution:

Batch: 2K19015 Sequence: 2K32506 Calibration: 2291001 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	2.00	U
108-10-1	4-Methyl-2-pentanone		1.25	2.50	5.00	UX
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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.03	90.1	75 - 120	
Dibromofluoromethane	30.00	29.22	97.4	85 - 115	
1,2-Dichloroethane-d4	30.00	30.27	101	70 - 120	
Toluene-d8	30.00	28.89	96.3	85 - 120	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K19015-BS1 File ID: 1119LCS1.D

Sampled: Prepared: Analyzed: 11/19/12 07:32

Solids: Preparation: 5030B Dilution:

Batch: 2K19015 Sequence: 2K32506 Calibration: 2291001 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	**80.0**	2.50	5.00	10.0	
71-43-2	Benzene	**52.5**	0.250	0.500	1.00	
108-86-1	Bromobenzene	**45.8**	0.250	0.500	1.00	
74-97-5	Bromochloromethane	**49.6**	0.250	0.500	1.00	
75-27-4	Bromodichloromethane	**51.9**	0.250	0.500	1.00	
75-25-2	Bromoform	**48.9**	0.250	0.500	1.00	
74-83-9	Bromomethane	**41.9**	0.500	1.00	2.00	
104-51-8	n-Butylbenzene	**50.1**	0.250	0.500	1.00	
78-93-3	2-Butanone	**95.7**	2.50	5.00	10.0	X
135-98-8	sec-Butylbenzene	**50.8**	0.250	0.500	1.00	
98-06-6	tert-Butylbenzene	**50.1**	0.250	0.500	1.00	
75-15-0	Carbon disulfide	**56.4**	0.250	0.500	1.00	
56-23-5	Carbon tetrachloride	**51.7**	0.250	0.500	1.00	
108-90-7	Chlorobenzene	**48.9**	0.250	0.500	1.00	
75-00-3	Chloroethane	**41.4**	0.500	1.00	2.00	
67-66-3	Chloroform	**47.5**	0.250	0.500	1.00	
74-87-3	Chloromethane	**37.9**	0.250	0.500	1.00	
95-49-8	2-Chlorotoluene	**44.5**	0.250	0.500	1.00	
106-43-4	4-Chlorotoluene	**45.8**	0.250	0.500	1.00	
124-48-1	Dibromochloromethane	**54.8**	0.250	0.500	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	**52.8**	0.500	1.00	2.00	
106-93-4	1,2-Dibromoethane (EDB)	**48.3**	0.250	0.500	1.00	
74-95-3	Dibromomethane	**47.0**	0.250	0.500	1.00	
95-50-1	1,2-Dichlorobenzene	**46.5**	0.250	0.500	1.00	
541-73-1	1,3-Dichlorobenzene	**45.9**	0.250	0.500	1.00	
106-46-7	1,4-Dichlorobenzene	**46.4**	0.250	0.500	1.00	
75-71-8	Dichlorodifluoromethane	**46.6**	0.500	1.00	2.00	
75-34-3	1,1-Dichloroethane	**50.0**	0.250	0.500	1.00	
107-06-2	1,2-Dichloroethane	**44.1**	0.250	0.500	1.00	
75-35-4	1,1-Dichloroethene	**52.4**	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	**50.9**	0.250	0.500	1.00	
78-87-5	1,2-Dichloropropane	**49.8**	0.250	0.500	1.00	
142-28-9	1,3-Dichloropropane	**50.5**	0.250	0.500	1.00	
594-20-7	2,2-Dichloropropane	**47.9**	0.250	0.500	1.00	
563-58-6	1,1-Dichloropropene	**49.4**	0.250	0.500	1.00	
10061-01-5	cis-1,3-Dichloropropene	**52.3**	0.250	0.500	1.00	
10061-02-6	trans-1,3-Dichloropropene	**50.2**	0.250	0.500	1.00	
100-41-4	Ethylbenzene	**51.4**	0.250	0.500	1.00	
87-68-3	Hexachlorobutadiene	**62.0**	0.250	0.500	2.00	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC | SDG: kirtland_072

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

Matrix: | Laboratory ID: 2K19015-BS1 | File ID: 1119LCS1.D

Sampled: | Prepared: | Analyzed: 11/19/12 07:32

Solids: | Preparation: 5030B | Dilution:

Batch: 2K19015 | Sequence: 2K32506 | Calibration: 2291001 | Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	**94.6**	1.25	2.50	5.00	
98-82-8	Isopropylbenzene	**53.8**	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene	**51.2**	0.250	0.500	1.00	
75-09-2	Methylene chloride	**48.6**	0.500	1.00	2.00	
91-20-3	Naphthalene	**47.0**	0.250	0.500	2.00	
108-10-1	4-Methyl-2-pentanone	**101**	1.25	2.50	5.00	X
1634-04-4	Methyl t-Butyl Ether	**49.6**	0.250	0.500	1.00	
103-65-1	n-Propylbenzene	**47.0**	0.250	0.500	1.00	
100-42-5	Styrene	**52.1**	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	**53.2**	0.250	0.500	1.00	
127-18-4	Tetrachloroethene	**48.6**	0.250	0.500	1.00	
108-88-3	Toluene	**50.7**	0.250	0.500	1.00	
87-61-6	1,2,3-Trichlorobenzene	**52.3**	0.250	0.500	2.00	
120-82-1	1,2,4-Trichlorobenzene	**52.1**	0.250	0.500	2.00	
79-00-5	1,1,2-Trichloroethane	**51.8**	0.250	0.500	1.00	
71-55-6	1,1,1-Trichloroethane	**49.3**	0.250	0.500	1.00	
79-01-6	Trichloroethene	**47.5**	0.250	0.500	1.00	
75-69-4	Trichlorofluoromethane	**48.8**	0.500	1.00	2.00	
96-18-4	1,2,3-Trichloropropane	**51.6**	0.500	1.00	2.00	
108-67-8	1,3,5-Trimethylbenzene	**46.4**	0.250	0.500	1.00	
95-63-6	1,2,4-Trimethylbenzene	**48.1**	0.250	0.500	1.00	
75-01-4	Vinyl chloride	**37.6**	0.250	0.500	1.00	
1330-20-7	Xylenes (total)	**152**	0.750	1.50	3.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	29.83	99.4	75 - 120	
Dibromofluoromethane	30.00	28.78	95.9	85 - 115	
1,2-Dichloroethane-d4	30.00	30.75	102	70 - 120	
Toluene-d8	30.00	29.96	99.9	85 - 120	

ANALYSIS DATA SHEET

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Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K19025-BLK1 File ID: 1119BLKE.D

Sampled: Prepared: Analyzed: 11/19/12 21:01

Solids: Preparation: 5030B Dilution:

Batch: 2K19025 Sequence: 2K32507 Calibration: 2291001 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone		2.50	5.00	10.0	UY
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	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	2.00	UX

ANALYSIS DATA SHEET

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Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K19025-BLK1 File ID: 1119BLKE.D

Sampled: Prepared: Analyzed: 11/19/12 21:01

Solids: Preparation: 5030B Dilution:

Batch: 2K19025 Sequence: 2K32507 Calibration: 2291001 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	2.00	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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.70	92.3	75 - 120	
Dibromofluoromethane	30.00	28.93	96.4	85 - 115	
1,2-Dichloroethane-d4	30.00	30.24	101	70 - 120	
Toluene-d8	30.00	29.36	97.9	85 - 120	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC | SDG: kirtland_072

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

Matrix: | Laboratory ID: 2K19025-BS1 | File ID: 1119LCSE.D

Sampled: | Prepared: | Analyzed: 11/19/12 19:37

Solids: | Preparation: 5030B | Dilution:

Batch: 2K19025 | Sequence: 2K32507 | Calibration: 2291001 | Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	**71.2**	2.50	5.00	10.0	Y
71-43-2	Benzene	**50.7**	0.250	0.500	1.00	
108-86-1	Bromobenzene	**45.6**	0.250	0.500	1.00	
74-97-5	Bromochloromethane	**49.4**	0.250	0.500	1.00	
75-27-4	Bromodichloromethane	**49.8**	0.250	0.500	1.00	
75-25-2	Bromoform	**46.3**	0.250	0.500	1.00	
74-83-9	Bromomethane	**39.6**	0.500	1.00	2.00	
104-51-8	n-Butylbenzene	**49.9**	0.250	0.500	1.00	
78-93-3	2-Butanone	**87.3**	2.50	5.00	10.0	
135-98-8	sec-Butylbenzene	**49.7**	0.250	0.500	1.00	
98-06-6	tert-Butylbenzene	**50.4**	0.250	0.500	1.00	
75-15-0	Carbon disulfide	**53.5**	0.250	0.500	1.00	
56-23-5	Carbon tetrachloride	**48.5**	0.250	0.500	1.00	
108-90-7	Chlorobenzene	**48.8**	0.250	0.500	1.00	
75-00-3	Chloroethane	**37.1**	0.500	1.00	2.00	
67-66-3	Chloroform	**46.4**	0.250	0.500	1.00	
74-87-3	Chloromethane	**35.1**	0.250	0.500	1.00	
95-49-8	2-Chlorotoluene	**44.5**	0.250	0.500	1.00	
106-43-4	4-Chlorotoluene	**45.6**	0.250	0.500	1.00	
124-48-1	Dibromochloromethane	**53.7**	0.250	0.500	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	**50.8**	0.500	1.00	2.00	
106-93-4	1,2-Dibromoethane (EDB)	**48.0**	0.250	0.500	1.00	
74-95-3	Dibromomethane	**46.4**	0.250	0.500	1.00	
95-50-1	1,2-Dichlorobenzene	**46.9**	0.250	0.500	1.00	
541-73-1	1,3-Dichlorobenzene	**46.4**	0.250	0.500	1.00	
106-46-7	1,4-Dichlorobenzene	**46.0**	0.250	0.500	1.00	
75-71-8	Dichlorodifluoromethane	**42.3**	0.500	1.00	2.00	
75-34-3	1,1-Dichloroethane	**48.6**	0.250	0.500	1.00	
107-06-2	1,2-Dichloroethane	**42.9**	0.250	0.500	1.00	
75-35-4	1,1-Dichloroethene	**50.6**	0.250	0.500	1.00	
156-59-2	cis-1,2-Dichloroethene	**48.4**	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	**47.3**	0.250	0.500	1.00	
142-28-9	1,3-Dichloropropane	**48.3**	0.250	0.500	1.00	
594-20-7	2,2-Dichloropropane	**44.2**	0.250	0.500	1.00	
563-58-6	1,1-Dichloropropene	**47.0**	0.250	0.500	1.00	
10061-01-5	cis-1,3-Dichloropropene	**49.5**	0.250	0.500	1.00	
10061-02-6	trans-1,3-Dichloropropene	**47.6**	0.250	0.500	1.00	
100-41-4	Ethylbenzene	**49.6**	0.250	0.500	1.00	
87-68-3	Hexachlorobutadiene	**63.1**	0.250	0.500	2.00	X

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC | SDG: kirtland_072

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

Matrix: | Laboratory ID: 2K19025-BS1 | File ID: 1119LCSE.D

Sampled: | Prepared: | Analyzed: 11/19/12 19:37

Solids: | Preparation: 5030B | Dilution:

Batch: 2K19025 | Sequence: 2K32507 | Calibration: 2291001 | Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	**84.2**	1.25	2.50	5.00	
98-82-8	Isopropylbenzene	**52.7**	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene	**50.8**	0.250	0.500	1.00	
75-09-2	Methylene chloride	**46.8**	0.500	1.00	2.00	
91-20-3	Naphthalene	**49.4**	0.250	0.500	2.00	
108-10-1	4-Methyl-2-pentanone	**90.4**	1.25	2.50	5.00	
1634-04-4	Methyl t-Butyl Ether	**48.5**	0.250	0.500	1.00	
103-65-1	n-Propylbenzene	**46.2**	0.250	0.500	1.00	
100-42-5	Styrene	**51.4**	0.250	0.500	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	**46.3**	0.250	0.500	1.00	
630-20-6	1,1,1,2-Tetrachloroethane	**51.9**	0.250	0.500	1.00	
127-18-4	Tetrachloroethene	**48.5**	0.250	0.500	1.00	
108-88-3	Toluene	**49.8**	0.250	0.500	1.00	
87-61-6	1,2,3-Trichlorobenzene	**54.4**	0.250	0.500	2.00	
120-82-1	1,2,4-Trichlorobenzene	**53.1**	0.250	0.500	2.00	
79-00-5	1,1,2-Trichloroethane	**50.5**	0.250	0.500	1.00	
71-55-6	1,1,1-Trichloroethane	**47.0**	0.250	0.500	1.00	
79-01-6	Trichloroethene	**44.8**	0.250	0.500	1.00	
75-69-4	Trichlorofluoromethane	**45.8**	0.500	1.00	2.00	
96-18-4	1,2,3-Trichloropropane	**50.3**	0.500	1.00	2.00	
108-67-8	1,3,5-Trimethylbenzene	**46.2**	0.250	0.500	1.00	
95-63-6	1,2,4-Trimethylbenzene	**47.9**	0.250	0.500	1.00	
75-01-4	Vinyl chloride	**35.2**	0.250	0.500	1.00	
1330-20-7	Xylenes (total)	**150**	0.750	1.50	3.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	29.99	100	75 - 120	
Dibromofluoromethane	30.00	29.53	98.4	85 - 115	
1,2-Dichloroethane-d4	30.00	31.36	105	70 - 120	
Toluene-d8	30.00	30.06	100	85 - 120	

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K20013-BLK1 File ID: 1120BLK1.D

Sampled: Prepared: Analyzed: 11/20/12 09:12

Solids: Preparation: 5030B Dilution:

Batch: 2K20013 Sequence: 2K32611 Calibration: 2291001 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	UY
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	UX
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	2.00	UX

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K20013-BLK1 File ID: 1120BLK1.D

Sampled: Prepared: Analyzed: 11/20/12 09:12

Solids: Preparation: 5030B Dilution:

Batch: 2K20013 Sequence: 2K32611 Calibration: 2291001 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	2.00	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	2.00	U
120-82-1	1,2,4-Trichlorobenzene		0.250	0.500	2.00	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
1330-20-7	Xylenes (total)		0.750	1.50	3.00	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	27.80	92.7	75 - 120	
Dibromofluoromethane	30.00	28.79	96.0	85 - 115	
1,2-Dichloroethane-d4	30.00	31.94	106	70 - 120	
Toluene-d8	30.00	29.79	99.3	85 - 120	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K20013-BS1 File ID: 1120LCS1.D

Sampled: Prepared: Analyzed: 11/20/12 07:49

Solids: Preparation: 5030B Dilution:

Batch: 2K20013 Sequence: 2K32611 Calibration: 2291001 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
67-64-1	Acetone	**77.7**	2.50	5.00	10.0	
71-43-2	Benzene	**51.1**	0.250	0.500	1.00	
108-86-1	Bromobenzene	**46.4**	0.250	0.500	1.00	
74-97-5	Bromochloromethane	**49.3**	0.250	0.500	1.00	
75-27-4	Bromodichloromethane	**50.1**	0.250	0.500	1.00	
75-25-2	Bromoform	**46.1**	0.250	0.500	1.00	
74-83-9	Bromomethane	**35.1**	0.500	1.00	2.00	Y
104-51-8	n-Butylbenzene	**53.8**	0.250	0.500	1.00	
78-93-3	2-Butanone	**98.8**	2.50	5.00	10.0	
135-98-8	sec-Butylbenzene	**51.3**	0.250	0.500	1.00	
98-06-6	tert-Butylbenzene	**51.2**	0.250	0.500	1.00	
75-15-0	Carbon disulfide	**54.4**	0.250	0.500	1.00	X
56-23-5	Carbon tetrachloride	**49.4**	0.250	0.500	1.00	
108-90-7	Chlorobenzene	**49.6**	0.250	0.500	1.00	
75-00-3	Chloroethane	**39.0**	0.500	1.00	2.00	
67-66-3	Chloroform	**46.6**	0.250	0.500	1.00	
74-87-3	Chloromethane	**35.1**	0.250	0.500	1.00	
95-49-8	2-Chlorotoluene	**44.7**	0.250	0.500	1.00	
106-43-4	4-Chlorotoluene	**46.0**	0.250	0.500	1.00	
124-48-1	Dibromochloromethane	**54.4**	0.250	0.500	1.00	
96-12-8	1,2-Dibromo-3-chloropropane	**51.4**	0.500	1.00	2.00	
106-93-4	1,2-Dibromoethane (EDB)	**49.2**	0.250	0.500	1.00	
74-95-3	Dibromomethane	**46.8**	0.250	0.500	1.00	
95-50-1	1,2-Dichlorobenzene	**48.1**	0.250	0.500	1.00	
541-73-1	1,3-Dichlorobenzene	**46.5**	0.250	0.500	1.00	
106-46-7	1,4-Dichlorobenzene	**47.0**	0.250	0.500	1.00	
75-71-8	Dichlorodifluoromethane	**46.6**	0.500	1.00	2.00	
75-34-3	1,1-Dichloroethane	**48.3**	0.250	0.500	1.00	
107-06-2	1,2-Dichloroethane	**43.9**	0.250	0.500	1.00	
75-35-4	1,1-Dichloroethene	**52.7**	0.250	0.500	1.00	
156-59-2	cis-1,2-Dichloroethene	**48.4**	0.250	0.500	1.00	
156-60-5	trans-1,2-Dichloroethene	**49.5**	0.250	0.500	1.00	
78-87-5	1,2-Dichloropropane	**48.5**	0.250	0.500	1.00	
142-28-9	1,3-Dichloropropane	**50.0**	0.250	0.500	1.00	
594-20-7	2,2-Dichloropropane	**45.7**	0.250	0.500	1.00	
563-58-6	1,1-Dichloropropene	**48.0**	0.250	0.500	1.00	
10061-01-5	cis-1,3-Dichloropropene	**49.4**	0.250	0.500	1.00	
10061-02-6	trans-1,3-Dichloropropene	**48.1**	0.250	0.500	1.00	
100-41-4	Ethylbenzene	**51.4**	0.250	0.500	1.00	
87-68-3	Hexachlorobutadiene	**66.2**	0.250	0.500	2.00	X

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K20013-BS1 File ID: 1120LCS1.D

Sampled: Prepared: Analyzed: 11/20/12 07:49

Solids: Preparation: 5030B Dilution:

Batch: 2K20013 Sequence: 2K32611 Calibration: 2291001 Instrument: MS-VOA5

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
591-78-6	2-Hexanone	**93.1**	1.25	2.50	5.00	
98-82-8	Isopropylbenzene	**53.5**	0.250	0.500	1.00	
99-87-6	p-Isopropyltoluene	**52.6**	0.250	0.500	1.00	
75-09-2	Methylene chloride	**46.6**	0.500	1.00	2.00	
91-20-3	Naphthalene	**55.3**	0.250	0.500	2.00	
108-10-1	4-Methyl-2-pentanone	**97.6**	1.25	2.50	5.00	
1634-04-4	Methyl t-Butyl Ether	**48.9**	0.250	0.500	1.00	
103-65-1	n-Propylbenzene	**47.2**	0.250	0.500	1.00	
100-42-5	Styrene	**52.8**	0.250	0.500	1.00	
79-34-5	1,1,2,2-Tetrachloroethane	**47.2**	0.250	0.500	1.00	
630-20-6	1,1,1,2-Tetrachloroethane	**52.6**	0.250	0.500	1.00	
127-18-4	Tetrachloroethene	**50.3**	0.250	0.500	1.00	
108-88-3	Toluene	**50.6**	0.250	0.500	1.00	
87-61-6	1,2,3-Trichlorobenzene	**58.8**	0.250	0.500	2.00	
120-82-1	1,2,4-Trichlorobenzene	**57.3**	0.250	0.500	2.00	
79-00-5	1,1,2-Trichloroethane	**50.2**	0.250	0.500	1.00	
71-55-6	1,1,1-Trichloroethane	**47.6**	0.250	0.500	1.00	
79-01-6	Trichloroethene	**45.3**	0.250	0.500	1.00	
75-69-4	Trichlorofluoromethane	**48.1**	0.500	1.00	2.00	
96-18-4	1,2,3-Trichloropropane	**50.9**	0.500	1.00	2.00	
108-67-8	1,3,5-Trimethylbenzene	**48.7**	0.250	0.500	1.00	
95-63-6	1,2,4-Trimethylbenzene	**50.9**	0.250	0.500	1.00	
75-01-4	Vinyl chloride	**36.0**	0.250	0.500	1.00	
1330-20-7	Xylenes (total)	**152**	0.750	1.50	3.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	30.00	30.55	102	75 - 120	
Dibromofluoromethane	30.00	28.65	95.5	85 - 115	
1,2-Dichloroethane-d4	30.00	29.10	97.0	70 - 120	
Toluene-d8	30.00	30.41	101	85 - 120	

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	1012TUN2.D	Injection Date:	10/12/12
Instrument ID:	MS-VOA5	Injection Time:	14:29
Sequence:	2J29101	Lab Sample ID:	2J29101-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	26.6	PASS
75	30 - 60% of 95	50.8	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.98	PASS
173	Less than 2% of 174	0	PASS
174	50 - 200% of 95	75.5	PASS
175	5 - 9% of 174	7.42	PASS
176	95 - 101% of 174	95.6	PASS
177	5 - 9% of 176	6.6	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	1012TUN3.D	Injection Date:	10/16/12
Instrument ID:	MS-VOA5	Injection Time:	13:45
Sequence:	2J29101	Lab Sample ID:	2J29101-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	25.7	PASS
75	30 - 60% of 95	49.1	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.69	PASS
173	Less than 2% of 174	0	PASS
174	50 - 200% of 95	77.7	PASS
175	5 - 9% of 174	7.11	PASS
176	95 - 101% of 174	97.4	PASS
177	5 - 9% of 176	6.57	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	1115TUN1.D	Injection Date:	11/15/12
Instrument ID:	MS-VOA5	Injection Time:	06:12
Sequence:	2K32002	Lab Sample ID:	2K32002-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	25.5	PASS
75	30 - 60% of 95	49.3	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.05	PASS
173	Less than 2% of 174	0	PASS
174	50 - 200% of 95	76.6	PASS
175	5 - 9% of 174	8.26	PASS
176	95 - 101% of 174	95.4	PASS
177	5 - 9% of 176	7.2	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	1119TUN1.D	Injection Date:	11/19/12
Instrument ID:	MS-VOA5	Injection Time:	06:36
Sequence:	2K32506	Lab Sample ID:	2K32506-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	24.5	PASS
75	30 - 60% of 95	49.9	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	77.6	PASS
175	5 - 9% of 174	8.36	PASS
176	95 - 101% of 174	96.4	PASS
177	5 - 9% of 176	6.97	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	1119TUNE.D	Injection Date:	11/19/12
Instrument ID:	MS-VOA5	Injection Time:	18:42
Sequence:	2K32507	Lab Sample ID:	2K32507-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	22.9	PASS
75	30 - 60% of 95	47.1	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.43	PASS
173	Less than 2% of 174	0	PASS
174	50 - 200% of 95	78.4	PASS
175	5 - 9% of 174	8.49	PASS
176	95 - 101% of 174	96.6	PASS
177	5 - 9% of 176	6.82	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	1120TUN1.D	Injection Date:	11/20/12
Instrument ID:	MS-VOA5	Injection Time:	06:52
Sequence:	2K32611	Lab Sample ID:	2K32611-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	23.8	PASS
75	30 - 60% of 95	48.3	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.09	PASS
173	Less than 2% of 174	0	PASS
174	50 - 200% of 95	77	PASS
175	5 - 9% of 174	8.09	PASS
176	95 - 101% of 174	97.3	PASS
177	5 - 9% of 176	6.86	PASS

ANALYSIS SEQUENCE SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2J29101	Instrument:	MS-VOA5
Calibration:	2291001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	2J29101-TUN1	1012TUN2.D	10/12/12 14:29
Cal Standard	2J29101-CAL1	1012CAL1.D	10/12/12 15:24
Cal Standard	2J29101-CAL2	1012CAL2.D	10/12/12 15:52
Cal Standard	2J29101-CAL3	1012CAL3.D	10/12/12 16:20
Cal Standard	2J29101-CAL4	1012CAL4.D	10/12/12 16:48
Cal Standard	2J29101-CAL5	1012CAL5.D	10/12/12 17:15
Cal Standard	2J29101-CAL6	1012CAL6.D	10/12/12 17:43
Cal Standard	2J29101-CAL7	1012CAL7.D	10/12/12 18:11
Cal Standard	2J29101-CAL8	1012CAL8.D	10/12/12 18:38
Cal Standard	2J29101-CAL9	1012CAL9.D	10/12/12 19:06
Initial Cal Check	2J29101-ICV2	1012ICV2.D	10/12/12 20:29
MS Tune	2J29101-TUN2	1012TUN3.D	10/16/12 13:45
Initial Cal Check	2J29101-ICV3	1012ICV3.D	10/16/12 14:13

ANALYSIS SEQUENCE SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32002	Instrument:	MS-VOA5
Calibration:	2291001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	2K32002-TUN1	1115TUN1.D	11/15/12 06:12
Calibration Check	2K32002-CCV1	1115CCV1.D	11/15/12 06:41
LCS	2K15002-BS1	1115LCS1.D	11/15/12 07:09
Blank	2K15002-BLK1	1115BLK1.D	11/15/12 08:32
GW8063-AB	1211133-03	1113303.D	11/15/12 14:34
GW8064-AB	1211133-04	1113304.D	11/15/12 15:02
GW8243-TB	1211133-05	1113305.D	11/15/12 15:30
LCS Dup	2K15002-BSD1	1115LCD1.D	11/15/12 17:49

ANALYSIS SEQUENCE SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32506	Instrument:	MS-VOA5
Calibration:	2291001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	2K32506-TUN1	1119TUN1.D	11/19/12 06:36
Calibration Check	2K32506-CCV1	1119CCV1.D	11/19/12 07:04
LCS	2K19015-BS1	1119LCS1.D	11/19/12 07:32
Blank	2K19015-BLK1	1119BLK1.D	11/19/12 08:55
GW8065-AB	1211147-03	1114703.D	11/19/12 09:54
GW8244-TB	1211147-04	1114704.D	11/19/12 10:22

ANALYSIS SEQUENCE SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32507	Instrument:	MS-VOA5
Calibration:	2291001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	2K32507-TUN1	1119TUNE.D	11/19/12 18:42
Calibration Check	2K32507-CCV1	1119CCVE.D	11/19/12 19:10
LCS	2K19025-BS1	1119LCSE.D	11/19/12 19:37
Blank	2K19025-BLK1	1119BLKE.D	11/19/12 21:01
GW0860	1211147-01	1114701.D	11/19/12 23:47

ANALYSIS SEQUENCE SUMMARY

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32611	Instrument:	MS-VOA5
Calibration:	2291001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	2K32611-TUN1	1120TUN1.D	11/20/12 06:52
Calibration Check	2K32611-CCV1	1120CCV1.D	11/20/12 07:21
LCS	2K20013-BS1	1120LCS1.D	11/20/12 07:49
Blank	2K20013-BLK1	1120BLK1.D	11/20/12 09:12
GW0756	1211133-01RE1	1113301D.D	11/20/12 12:55

INTERNAL STANDARD AREA AND RT SUMMARY
SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32002	Instrument:	MS-VOA5
		Calibration:	2291001

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (2K32002-CCV1)			Lab File ID: 1115CCV1.D			Analyzed: 11/15/12 06:41			
Fluorobenzene	1202786	7.59	1190594	7.62	101	50 - 200	-0.0300	+/-0.50	
Chlorobenzene-d5	475052	10.74	471003	10.76	101	50 - 200	-0.0200	+/-0.50	
1,4-Dichlorobenzene-d4	407706	13.14	335738	13.15	121	50 - 200	-0.0100	+/-0.50	
LCS (2K15002-BS1)			Lab File ID: 1115LCS1.D			Analyzed: 11/15/12 07:09			
Fluorobenzene	1243281	7.59	1202786	7.59	103	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	483819	10.74	475052	10.74	102	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	406041	13.14	407706	13.14	100	50 - 200	0.0000	+/-0.50	
Blank (2K15002-BLK1)			Lab File ID: 1115BLK1.D			Analyzed: 11/15/12 08:32			
Fluorobenzene	1165433	7.6	1202786	7.59	97	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	461878	10.74	475052	10.74	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	299130	13.14	407706	13.14	73	50 - 200	0.0000	+/-0.50	
GW8063-AB (1211133-03)			Lab File ID: 1113303.D			Analyzed: 11/15/12 14:34			
Fluorobenzene	1133322	7.59	1202786	7.59	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	447798	10.75	475052	10.74	94	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	296835	13.14	407706	13.14	73	50 - 200	0.0000	+/-0.50	
GW8064-AB (1211133-04)			Lab File ID: 1113304.D			Analyzed: 11/15/12 15:02			
Fluorobenzene	1147130	7.6	1202786	7.59	95	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	454124	10.75	475052	10.74	96	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	293460	13.14	407706	13.14	72	50 - 200	0.0000	+/-0.50	
GW8243-TB (1211133-05)			Lab File ID: 1113305.D			Analyzed: 11/15/12 15:30			
Fluorobenzene	1142318	7.6	1202786	7.59	95	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	455116	10.75	475052	10.74	96	50 - 200	0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	293709	13.15	407706	13.14	72	50 - 200	0.0100	+/-0.50	
LCS Dup (2K15002-BSD1)			Lab File ID: 1115LCD1.D			Analyzed: 11/15/12 17:49			
Fluorobenzene	1184914	7.59	1202786	7.59	99	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	474705	10.74	475052	10.74	100	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	398563	13.14	407706	13.14	98	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32506	Instrument:	MS-VOA5
		Calibration:	2291001

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (2K32506-CCV1)			Lab File ID: 1119CCV1.D			Analyzed: 11/19/12 07:04			
Fluorobenzene	1322713	7.59	1190594	7.62	111	50 - 200	-0.0300	+/-0.50	
Chlorobenzene-d5	521115	10.74	471003	10.76	111	50 - 200	-0.0200	+/-0.50	
1,4-Dichlorobenzene-d4	445397	13.14	335738	13.15	133	50 - 200	-0.0100	+/-0.50	
LCS (2K19015-BS1)			Lab File ID: 1119LCS1.D			Analyzed: 11/19/12 07:32			
Fluorobenzene	1328402	7.6	1322713	7.59	100	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	518398	10.74	521115	10.74	99	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	451898	13.14	445397	13.14	101	50 - 200	0.0000	+/-0.50	
Blank (2K19015-BLK1)			Lab File ID: 1119BLK1.D			Analyzed: 11/19/12 08:55			
Fluorobenzene	1279353	7.6	1322713	7.59	97	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	516379	10.74	521115	10.74	99	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	326952	13.13	445397	13.14	73	50 - 200	-0.0100	+/-0.50	
GW8065-AB (1211147-03)			Lab File ID: 1114703.D			Analyzed: 11/19/12 09:54			
Fluorobenzene	1269744	7.6	1322713	7.59	96	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	511421	10.74	521115	10.74	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	316978	13.14	445397	13.14	71	50 - 200	0.0000	+/-0.50	
GW8244-TB (1211147-04)			Lab File ID: 1114704.D			Analyzed: 11/19/12 10:22			
Fluorobenzene	1249146	7.6	1322713	7.59	94	50 - 200	0.0100	+/-0.50	
Chlorobenzene-d5	500815	10.74	521115	10.74	96	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	315318	13.14	445397	13.14	71	50 - 200	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32507	Instrument:	MS-VOA5
		Calibration:	2291001

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (2K32507-CCV1)			Lab File ID: 1119CCVE.D			Analyzed: 11/19/12 19:10			
Fluorobenzene	1283939	7.6	1190594	7.62	108	50 - 200	-0.0200	+/-0.50	
Chlorobenzene-d5	499672	10.75	471003	10.76	106	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	432003	13.14	335738	13.15	129	50 - 200	-0.0100	+/-0.50	
LCS (2K19025-BS1)			Lab File ID: 1119LCSE.D			Analyzed: 11/19/12 19:37			
Fluorobenzene	1299819	7.6	1283939	7.6	101	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	505114	10.75	499672	10.75	101	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	437337	13.14	432003	13.14	101	50 - 200	0.0000	+/-0.50	
Blank (2K19025-BLK1)			Lab File ID: 1119BLKE.D			Analyzed: 11/19/12 21:01			
Fluorobenzene	1230775	7.6	1283939	7.6	96	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	495252	10.74	499672	10.75	99	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	314877	13.14	432003	13.14	73	50 - 200	0.0000	+/-0.50	
GW0860 (1211147-01)			Lab File ID: 1114701.D			Analyzed: 11/19/12 23:47			
Fluorobenzene	1214606	7.6	1283939	7.6	95	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	487581	10.75	499672	10.75	98	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	318855	13.15	432003	13.14	74	50 - 200	0.0100	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32611	Instrument:	MS-VOA5
		Calibration:	2291001

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (2K32611-CCV1)			Lab File ID: 1120CCV1.D			Analyzed: 11/20/12 07:21			
Fluorobenzene	1278904	7.61	1190594	7.62	107	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	500047	10.75	471003	10.76	106	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	424904	13.14	335738	13.15	127	50 - 200	-0.0100	+/-0.50	
LCS (2K20013-BS1)			Lab File ID: 1120LCS1.D			Analyzed: 11/20/12 07:49			
Fluorobenzene	1280280	7.6	1278904	7.61	100	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	490791	10.74	500047	10.75	98	50 - 200	-0.0100	+/-0.50	
1,4-Dichlorobenzene-d4	427533	13.15	424904	13.14	101	50 - 200	0.0100	+/-0.50	
Blank (2K20013-BLK1)			Lab File ID: 1120BLK1.D			Analyzed: 11/20/12 09:12			
Fluorobenzene	1222140	7.6	1278904	7.61	96	50 - 200	-0.0100	+/-0.50	
Chlorobenzene-d5	486378	10.75	500047	10.75	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	313383	13.14	424904	13.14	74	50 - 200	0.0000	+/-0.50	
GW0756 (1211133-01RE1)			Lab File ID: 1113301D.D			Analyzed: 11/20/12 12:55			
Fluorobenzene	1204123	7.61	1278904	7.61	94	50 - 200	0.0000	+/-0.50	
Chlorobenzene-d5	484700	10.75	500047	10.75	97	50 - 200	0.0000	+/-0.50	
1,4-Dichlorobenzene-d4	362686	13.15	424904	13.14	85	50 - 200	0.0100	+/-0.50	

INITIAL CALIBRATION DATA

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2291001	Instrument:	MS-VOA5
Matrix:	Water	Calibration Dates:	10/12/12 15:24 10/12/12 19:06

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	1	~~0.2093107~~	2	~~0.1838394~~	4	0.137999	10	0.1450872	20	0.1358526	100	0.1292078
Acrolein	2.508	3.822066E-02	5.015	3.074716E-02	10.03	3.095516E-02	25.08	3.189976E-02	50.15	2.502974E-02	250.8	0.0301772
Acrylonitrile	2.498	0.1037199	4.997	0.1020165	9.994	0.1058176	24.98	0.1106814	49.97	0.1079525	249.8	0.1064949
Benzene	0.5	1.028388	1	0.9816032	2	0.9599322	5	1.024188	10	1.01676	50	0.9648804
Bromobenzene	0.5	1.134099	1	1.100652	2	1.0305	5	1.086311	10	0.980951	50	0.8661369
Bromochloromethane	0.5	0.1706723	1	0.1785507	2	0.1790381	5	0.1783228	10	0.1720989	50	0.168626
Tert-Amyl Methyl Ether	0.5	0.7139939	1	0.629713	2	0.6864908	5	0.7518886	10	0.7204948	50	0.7347454
Bromodichloromethane	0.5	0.3318081	1	0.3395327	2	0.3547819	5	0.3893821	10	0.3822455	50	0.3927084
Bromoform	0.5	0.4969803	1	0.4118617	2	0.4067888	5	0.4729397	10	0.5098658	50	0.594906
Bromomethane	0.5	0.2813787	1	0.2582419	2	0.2162678	5	0.2154689	10	0.2282273	50	0.213425
Bromofluorobenzene	30	0.9075324	35	0.8971084	40	0.9064125	50	0.9009446	60	0.90352	70	0.9208705
n-Butylbenzene	0.5	1.151177	1	1.109212	2	1.094426	5	1.319833	10	1.381655	50	1.4688
2-Butanone	1	~~0.2810418~~	2	0.1631233	4	0.1907209	10	0.2079197	20	0.1927078	100	0.1970593
sec-Butylbenzene	0.5	2.094637	1	2.019257	2	2.051515	5	2.278473	10	2.222431	50	2.15841
tert-Butylbenzene	0.5	1.681985	1	1.600949	2	1.62075	5	1.884469	10	1.807701	50	1.760426
Carbon disulfide	0.5	0.6541316	1	0.6638185	2	0.6061679	5	0.6694927	10	0.6702467	50	0.6484019
Carbon tetrachloride	0.5	0.3031986	1	0.3155144	2	0.3185444	5	0.3424039	10	0.3566006	50	0.3797009
Chlorobenzene	0.5	1.684174	1	1.561415	2	1.517603	5	1.680945	10	1.647245	50	1.568832
Chloroethane	0.5	0.2022361	1	0.1907017	2	0.19219	5	0.2063172	10	0.1882053	50	0.1926207
Chloroform	0.5	0.6796314	1	0.5398314	2	0.5025939	5	0.5404865	10	0.5210218	50	0.5192739
2-Chloroethyl vinyl ether	0.9975	0.1985602	1.995	0.1580362	3.99	0.1681127	9.975	0.1930318	19.95	0.1880536	99.75	0.1827217
Chloromethane	0.5	0.5070932	1	0.4133419	2	0.3768373	5	0.3936102	10	0.385891	50	0.3773814
1-Chlorohexane	0.5	~~1.225788~~	1	0.9204429	2	0.8347791	5	0.8619435	10	0.770689	50	0.7897108
2-Chlorotoluene	0.5	2.436396	1	2.442797	2	2.109176	5	2.373815	10	2.204853	50	2.026105
4-Chlorotoluene	0.5	2.478694	1	2.411124	2	2.118618	5	2.450232	10	2.361746	50	2.212235
Cyclohexane	0.5	0.4635052	1	0.4073309	2	0.3790632	5	0.42866	10	0.4086563	50	0.4060051
Dibromochloromethane	0.5	0.6491171	1	0.7198563	2	0.67002	5	0.7713199	10	0.7552968	50	0.8202884
1,2-Dibromo-3-chloropropane	0.5	0.1443687	1	0.1479013	2	0.1092794	5	0.1470075	10	0.1440406	50	0.14606
1,2-Dibromoethane (EDB)	0.5	0.8123185	1	0.6479887	2	0.623019	5	0.7139955	10	0.7127572	50	0.6945692
Dibromomethane	0.5	0.2031172	1	0.2114179	2	0.2074405	5	0.2467592	10	0.2230423	50	0.2234644
1,2-Dichlorobenzene	0.5	1.550127	1	1.335107	2	1.349162	5	1.445306	10	1.355715	50	1.253407

INITIAL CALIBRATION DATA

SW8260B

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Calibration: 2291001

Instrument: MS-VOA5

Matrix: Water

Calibration Dates: 10/12/12 15:24 10/12/12 19:06

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	1.659347	1	1.527997	2	1.462632	5	1.537842	10	1.418009	50	1.341542
1,4-Dichlorobenzene	0.5	1.704623	1	1.621969	2	1.435676	5	1.618494	10	1.517991	50	1.472998
Dichlorodifluoromethane	0.5	0.2418851	1	0.2393317	2	0.2325231	5	0.2584256	10	0.3039863	50	0.2970737
1,1-Dichloroethane	0.5	0.5801718	1	0.5292799	2	0.5433214	5	0.5824807	10	0.5674272	50	0.5517154
1,2-Dichloroethane	0.5	0.4577003	1	0.4664608	2	0.4649445	5	0.4986183	10	0.4653561	50	0.4755698
1,1-Dichloroethene	0.5	0.2258182	1	0.2151328	2	0.1973795	5	0.2358991	10	0.2329928	50	0.226227
cis-1,2-Dichloroethene	0.5	0.3485488	1	0.2942823	2	0.278491	5	0.3126759	10	0.3089413	50	0.2947265
trans-1,2-Dichloroethene	0.5	0.3055309	1	0.3056336	2	0.2551001	5	0.2900334	10	0.2690305	50	0.2686659
1,2-Dichloroethene (total)	1	0.3270399	2	0.2999579	4	0.2667955	10	0.3013546	20	0.2889859	100	0.2816962
1,2-Dichloropropane	0.5	0.3515549	1	0.2857946	2	0.3003938	5	0.3462037	10	0.3205553	50	0.3179448
1,3-Dichloropropane	0.5	0.9764418	1	0.9567702	2	1.006722	5	1.102503	10	1.071811	50	1.064477
2,2-Dichloropropane	0.5	0.4627277	1	0.3879821	2	0.3681245	5	0.4188481	10	0.4015827	50	0.4143792
1,1-Dichloropropene	0.5	0.3584481	1	0.3979661	2	0.3595389	5	0.3879962	10	0.3880272	50	0.3832157
cis-1,3-Dichloropropene	0.5	0.4679624	1	0.4134193	2	0.4252091	5	0.4856114	10	0.476467	50	0.481817
trans-1,3-Dichloropropene	0.5	1.087745	1	0.8734273	2	0.9401482	5	1.04063	10	1.025082	50	1.06396
Diisopropyl Ether	0.5	1.656553	1	1.323716	2	1.355187	5	1.462499	10	1.448533	50	1.416893
Ethylbenzene	0.5	2.958304	1	2.712674	2	2.634324	5	2.834619	10	2.75017	50	2.725992
Ethyl tert-Butyl Ether	0.5	1.04404	1	0.9879754	2	0.9619292	5	1.052878	10	1.030574	50	1.036999
Ethyl Methacrylate	0.5	0.8323399	1	0.729102	2	0.7477697	5	0.8346571	10	0.8215563	50	0.8808551
Hexachlorobutadiene	0.5	0.327858	1	0.27678	2	0.2044853	5	0.2287677	10	0.2401323	50	0.2104516
2-Hexanone	1	0.8759393	2	0.5350726	4	0.6107579	10	0.6638047	20	0.6469072	100	0.6363296
Iodomethane	0.5	0.3814601	1	0.3595522	2	0.352467	5	0.4091521	10	0.4336084	50	0.466603
Isopropylbenzene	0.5	2.096854	1	2.039571	2	2.038669	5	2.223489	10	2.156057	50	2.185784
p-Isopropyltoluene	0.5	1.584283	1	1.521244	2	1.404971	5	1.624106	10	1.596767	50	1.722013
Methylene chloride	0.5	0.3533171	1	0.3178362	2	0.2885012	5	0.3208096	10	0.3086809	50	0.2984568
Methyl Acetate	0.5	~~0.4034874~~	1	0.2549139	2	0.2926477	5	0.2820962	10	0.2809176	50	0.2759045
Methylcyclohexane	0.5	0.2939213	1	0.2609766	2	0.2581909	5	0.286672	10	0.2793021	50	0.2830842
Naphthalene	0.5	0.8803116	1	0.6655084	2	0.7034559	5	0.83726	10	0.8517879	50	0.873391
Methyl Methacrylate	0.5	0.4218866	1	0.3140697	2	0.3161786	5	0.3386494	10	0.3366743	50	0.3418622
4-Methyl-2-pentanone	1	0.4233119	2	0.3322446	4	0.3347934	10	0.3563104	20	0.3608402	100	0.3569288
Methyl t-Butyl Ether	0.5	0.6783875	1	0.6749634	2	0.6094749	5	0.6726878	10	0.6621038	50	0.6681816

INITIAL CALIBRATION DATA

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2291001	Instrument:	MS-VOA5
Matrix:	Water	Calibration Dates:	10/12/12 15:24 10/12/12 19:06

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
n-Propylbenzene	0.5	3.263488	1	3.045531	2	2.849074	5	3.308222	10	3.159948	50	2.924052
Styrene	0.5	1.524266	1	1.363255	2	1.434808	5	1.624945	10	1.632284	50	1.722102
1,1,2,2-Tetrachloroethane	0.5	1.104709	1	0.9165126	2	0.921	5	0.9883064	10	0.9455083	50	0.8178914
1,1,1,2-Tetrachloroethane	0.5	0.6827058	1	0.5817603	2	0.5685783	5	0.6867854	10	0.6292395	50	0.6417928
tert-Butyl alcohol	2.5	2.254554E-02	5	1.637166E-02	10	2.132533E-02	25	2.155899E-02	50	2.318905E-02	250	2.262879E-02
Tetrachloroethene	0.5	0.7868965	1	0.7155285	2	0.6774597	5	0.7157279	10	0.6901926	50	0.6780332
Toluene	0.5	1.509645	1	1.488892	2	1.396716	5	1.55292	10	1.475042	50	1.464147
1,2,3-Trichlorobenzene	0.5	0.3755176	1	0.3661866	2	0.3445147	5	0.4011342	10	0.4044343	50	0.3909977
1,2,4-Trichlorobenzene	0.5	0.4722267	1	0.4608244	2	0.4037647	5	0.4728509	10	0.5014627	50	0.4849717
1,1,2-Trichloroethane	0.5	0.6098645	1	0.4990077	2	0.4691162	5	0.526175	10	0.512373	50	0.5147031
1,1,1-Trichloroethane	0.5	0.444173	1	0.4125679	2	0.4039932	5	0.4406439	10	0.4229273	50	0.4301573
Tetrahydrofuran	0.5		1	2.200603E-02	2	1.678959E-02	5	3.064017E-02	10	2.477517E-02	50	2.664395E-02
Trichloroethene	0.5	0.3151192	1	0.3054014	2	0.298117	5	0.3147773	10	0.3008742	50	0.3017606
Trichlorofluoromethane	0.5	0.5168889	1	0.4696856	2	0.4581142	5	0.4884486	10	0.481379	50	0.4732761
1,2,3-Trichloropropane	0.5	0.1645185	1	0.1940294	2	0.2058211	5	0.194572	10	0.206484	50	0.2072864
1,3,5-Trimethylbenzene	0.5	2.080538	1	2.149372	2	1.929088	5	2.251845	10	2.199486	50	2.133291
1,2,4-Trimethylbenzene	0.5	1.697474	1	1.628056	2	1.584926	5	1.869994	10	1.867937	50	1.955528
1,1,2-Trichloro-1,2,2-trifluoroethan	0.5	0.2206871	1	0.2292445	2	0.2281858	5	0.2419011	10	0.2319588	50	0.2297067
Vinyl chloride	0.5	0.3213905	1	0.2966557	2	0.2370258	5	0.1823644	10	0.229365	50	0.1869944
m,p-Xylene	1	1.873325	2	2.004391	4	1.92717	10	2.030662	20	1.989148	100	1.95425
o-Xylene	0.5	2.045351	1	1.811181	2	1.877678	5	2.037184	10	1.988475	50	2.052774
Vinyl acetate	0.996	1.021043	1.992	0.9152215	3.984	0.8650078	9.96	0.9646369	19.92	0.9415722	99.62	0.9137966
Xylenes (total)	1.5	1.930667	3	1.939988	6	1.910673	15	2.032836	30	1.988924	150	1.987091
Dibromofluoromethane	30	0.3528567	35	0.3429425	40	0.3432467	50	0.3383209	60	0.3415729	70	0.3422776
1,2-Dichloroethane-d4	30	6.444309E-02	35	6.162721E-02	40	6.201401E-02	50	6.223986E-02	60	6.230871E-02	70	6.209132E-02
Toluene-d8	30	2.287677	35	2.252852	40	2.245046	50	2.203474	60	2.148516	70	2.160796
tert-Amyl alcohol	2.5		5	1.611884E-02	10	0.0162452	25	1.764632E-02	50	1.805149E-02	250	1.781281E-02
tert-Amyl ethyl ether	0.5	0.8325782	1	0.8090635	2	0.775323	5	0.8479465	10	0.8201036	50	0.8272931

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2291001	Instrument:	MS-VOA5
Matrix:	Water	Calibration Dates:	10/12/12 15:24 10/12/12 19:06

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	200	0.1266626	300	0.1231423	400	0.1178324						
Acrolein	501.5	3.545277E-02	752.2	3.651356E-02	1003	3.745221E-02						
Acrylonitrile	499.7	0.1044768	749.6	0.1039993	999.4	0.1003698						
Benzene	100	0.9235232	150	0.8594138	200	0.7849292						
Bromobenzene	100	0.8881735	150	0.8599457	200	0.8316292						
Bromochloromethane	100	0.1667734	150	0.1606741	200	0.1579936						
Tert-Amyl Methyl Ether	100	0.7262016	150	0.6707946	200	0.6177467						
Bromodichloromethane	100	0.3929716	150	0.3702909	200	0.3476311						
Bromoform	100	0.6462845	150	~~0.6617821~~	200	~~0.659788~~						
Bromomethane	100	0.2108286	150	0.2070282	200	0.2060198						
Bromofluorobenzene	30	0.9824568	30	0.9999227	30	0.9994479						
n-Butylbenzene	100	1.523087	150	1.449184	200	1.348779						
2-Butanone	200	0.195438	300	0.1889607	400	0.1844391						
sec-Butylbenzene	100	2.112831	150	1.921296	200	1.738243						
tert-Butylbenzene	100	1.760964	150	1.674096	200	1.555494						
Carbon disulfide	100	0.6413098	150	0.6082213	200	0.6090515						
Carbon tetrachloride	100	0.3840762	150	0.3669635	200	0.3516571						
Chlorobenzene	100	1.541911	150	1.466087	200	1.381431						
Chloroethane	100	0.1836753	150	0.1742626	200	0.1667518						
Chloroform	100	0.5096551	150	0.4704461	200	0.4420506						
2-Chloroethyl vinyl ether	199.5	0.1804314	299.2	0.1684203	399	0.1572394						
Chloromethane	100	0.3578709	150	0.3365053	200	0.3209209						
1-Chlorohexane	100	0.7767257	150	0.7396203	200	0.7120631						
2-Chlorotoluene	100	1.902054	150	1.764556	200	1.587876						
4-Chlorotoluene	100	2.141204	150	1.983296	200	1.805777						
Cyclohexane	100	0.4070208	150	0.3891092	200	0.3732226						
Dibromochloromethane	100	0.8453414	150	0.8429101	200	0.8141642						
1,2-Dibromo-3-chloropropane	100	0.1572772	150	0.1614128	200	0.1546557						
1,2-Dibromoethane (EDB)	100	0.6986333	150	0.6857349	200	0.6688842						
Dibromomethane	100	0.2208477	150	0.2065651	200	0.197802						
1,2-Dichlorobenzene	100	1.251456	150	1.217215	200	1.144362						

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2291001	Instrument:	MS-VOA5
Matrix:	Water	Calibration Dates:	10/12/12 15:24 10/12/12 19:06

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	1.336381	150	1.307302	200	1.210477						
1,4-Dichlorobenzene	100	1.465122	150	1.404034	200	1.301508						
Dichlorodifluoromethane	100	0.2883207	150	0.2679091	200	0.2564453						
1,1-Dichloroethane	100	0.5468606	150	0.5220661	200	0.5052939						
1,2-Dichloroethane	100	0.4473436	150	0.4127259	200	0.3872583						
1,1-Dichloroethene	100	0.2225573	150	0.2100764	200	0.2138721						
cis-1,2-Dichloroethene	100	0.2981693	150	0.2856926	200	0.274881						
trans-1,2-Dichloroethene	100	0.2624296	150	0.2483985	200	0.2420407						
1,2-Dichloroethene (total)	200	0.2802994	300	0.2670456	400	0.2584608						
1,2-Dichloropropane	100	0.3118958	150	0.2980104	200	0.2831874						
1,3-Dichloropropane	100	1.067553	150	1.032431	200	0.9749471						
2,2-Dichloropropane	100	0.4025817	150	0.3756275	200	0.3526653						
1,1-Dichloropropene	100	0.3776621	150	0.3571731	200	0.3353771						
cis-1,3-Dichloropropene	100	0.4757073	150	0.4493707	200	0.4159489						
trans-1,3-Dichloropropene	100	1.017311	150	0.9559691	200	0.8866128						
Diisopropyl Ether	100	1.342089	150	1.225994	200	1.115844						
Ethylbenzene	100	2.576414	150	2.335666	200	2.063086						
Ethyl tert-Butyl Ether	100	1.001227	150	0.9096821	200	0.8316089						
Ethyl Methacrylate	100	0.9116472	150	0.8839081	200	0.8561447						
Hexachlorobutadiene	100	0.2507218	150	0.2632424	200	0.2650239						
2-Hexanone	200	0.6392215	300	0.6188601	400	0.5808973						
Iodomethane	100	0.4558964	150	0.4324466	200	0.4359104						
Isopropylbenzene	100	2.110598	150	1.930801	200	1.764106						
p-Isopropyltoluene	100	1.726902	150	1.613216	200	1.476111						
Methylene chloride	100	0.2911459	150	0.2911504	200	0.2826383						
Methyl Acetate	100	0.2647661	150	0.264273	200	0.2523324						
Methylcyclohexane	100	0.2888642	150	0.2710586	200	0.2594319						
Naphthalene	100	0.9609156	150	1.027227	200	0.9662239						
Methyl Methacrylate	100	0.3408883	150	0.3196133	200	0.3028905						
4-Methyl-2-pentanone	200	0.3444019	300	0.3182518	400	0.2882798						
Methyl t-Butyl Ether	100	0.6449987	150	0.607574	200	0.5808785						

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2291001	Instrument:	MS-VOA5
Matrix:	Water	Calibration Dates:	10/12/12 15:24 10/12/12 19:06

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
n-Propylbenzene	100	2.742988	150	2.4168	200	2.100691						
Styrene	100	1.722777	150	1.617389	200	1.512023						
1,1,2,2-Tetrachloroethane	100	0.8059682	150	0.7844217	200	0.7425934						
1,1,1,2-Tetrachloroethane	100	0.6655796	150	0.662686	200	0.6518395						
tert-Butyl alcohol	500	2.189285E-02	750	2.152677E-02	1000	2.206532E-02						
Tetrachloroethene	100	0.7022279	150	0.714417	200	0.7136411						
Toluene	100	1.427433	150	1.367729	200	1.304066						
1,2,3-Trichlorobenzene	100	0.441067	150	0.4788034	200	0.4724479						
1,2,4-Trichlorobenzene	100	0.5401172	150	0.5816383	200	0.5677333						
1,1,2-Trichloroethane	100	0.517336	150	0.5117101	200	0.4934725						
1,1,1-Trichloroethane	100	0.4290463	150	0.4029258	200	0.3865336						
Tetrahydrofuran	100	2.671989E-02	150	2.566542E-02	200	2.647819E-02						
Trichloroethene	100	0.2872951	150	0.2697105	200	0.2573622						
Trichlorofluoromethane	100	0.4694212	150	0.4413153	200	0.4223437						
1,2,3-Trichloropropane	100	0.2087153	150	0.2066379	200	0.2038684						
1,3,5-Trimethylbenzene	100	2.053956	150	1.864038	200	1.691768						
1,2,4-Trimethylbenzene	100	1.899135	150	1.78786	200	1.608316						
1,1,2-Trichloro-1,2,2-trifluoroethan	100	0.2283044	150	0.2158549	200	0.2123486						
Vinyl chloride	100	0.1981654	150	~~0.1639443~~	200	~~0.1466384~~						
m,p-Xylene	200	1.741986	300	1.492592	400	1.308365						
o-Xylene	100	1.940067	150	1.777874	200	1.617302						
Vinyl acetate	199.2	0.8136057	298.9	0.6943068	398.5	~~0.6040652~~						
Xylenes (total)	300	1.808013	450	1.587687	600	1.411344						
Dibromofluoromethane	30	0.3393876	30	0.342012	30	0.3453447						
1,2-Dichloroethane-d4	30	6.075024E-02	30	6.202381E-02	30	6.320841E-02						
Toluene-d8	30	2.316447	30	2.435615	30	2.422273						
tert-Amyl alcohol	500	1.824924E-02	750	1.817118E-02	1000	1.797343E-02						
tert-Amyl ethyl ether	100	0.8042518	150	0.7298337	200	0.6696996						

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory:	Empirical Laboratories, LLC		SDG:	kirtland_072	
Client:	Shaw E & I (I700)		Project:	Kirtland AFB 2011	
Calibration:	2291001		Instrument:	MS-VOA5	
Matrix:	Water		Calibration Dates:	10/12/12 15:24	10/12/12 19:06

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acetone	0.1308263	7.169947	3.421429	0.1107739			15	
Acrolein	3.293869E-02	13.03005	3.321111	0.1019839			15	
Acrylonitrile	0.1050587	2.955386	4.224444	0.1237894			15	
Benzene	0.9492909	8.620587	7.344444	7.245944E-02			15	
Bromobenzene	0.9753776	12.01047	12.10889	0.0144915			15	
Bromochloromethane	0.1703055	4.507879	6.424444	8.158399E-02			15	
Tert-Amyl Methyl Ether	0.6946744	6.768849	7.543333	6.727492E-02			15	
Bromodichloromethane	0.3668169	6.534773	8.341111	4.022106E-02			15	
Bromoform	0.505661	17.59172	11.51143	2.797771E-02		0.9999593	SPCC (0.1)	
Bromomethane	0.2263207	11.54685	2.575555	0.2053272			15	
Bromofluorobenzene	0.9353573	4.777822	11.95	2.025372E-02			15	
n-Butylbenzene	1.316239	12.26201	13.54556	4.202676E-02			15	
2-Butanone	0.1900461	6.781548	5.87	1.747658E-02			15	
sec-Butylbenzene	2.066344	7.876697	13.00556	3.835336E-02			15	
tert-Butylbenzene	1.705204	6.245025	12.77111	2.030234E-02			15	
Carbon disulfide	0.6412047	4.171366	4.406667	0.1140858			15	
Carbon tetrachloride	0.3465177	8.348462	7.311111	8.229499E-02			15	
Chlorobenzene	1.561071	6.428212	10.79111	3.598659E-02			SPCC (0.3)	
Chloroethane	0.1885512	6.604544	2.696667	0.1857631			15	
Chloroform	0.524999	12.60127	6.401111	5.547756E-02			CCC (20)	
2-Chloroethyl vinyl ether	0.1771786	8.444776	8.712222	4.758714E-02			15	
Chloromethane	0.3854947	13.93974	2.037778	0.2150863			SPCC (0.1)	
1-Chlorohexane	0.8007468	8.500716	10.7675	4.454654E-02			15	
2-Chlorotoluene	2.094181	14.4823	12.33444	4.387552E-02			15	
4-Chlorotoluene	2.218103	10.33822	12.39444	4.712388E-02			15	
Cyclohexane	0.4069526	6.67736	7.241111	4.219525E-02			15	
Dibromochloromethane	0.7653683	9.53649	10.02	1.919963E-02			15	
1,2-Dibromo-3-chloropropane	0.1457781	10.28602	14.13889	1.933973E-02			15	
1,2-Dibromoethane (EDB)	0.6953223	7.645976	10.23444	5.380092E-02			15	
Dibromomethane	0.2156063	6.867565	8.275556	6.274539E-02			15	
1,2-Dichlorobenzene	1.322429	9.319326	13.49556	3.668195E-02			15	
1,3-Dichlorobenzene	1.422392	9.765556	13.08889	4.337518E-02			15	

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory:	Empirical Laboratories, LLC		SDG:	kirtland_072	
Client:	Shaw E & I (I700)		Project:	Kirtland AFB 2011	
Calibration:	2291001		Instrument:	MS-VOA5	
Matrix:	Water		Calibration Dates:	10/12/12 15:24	10/12/12 19:06

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,4-Dichlorobenzene	1.504713	8.327264	13.18111	4.258517E-02			15	
Dichlorodifluoromethane	0.2651001	9.859331	1.845556	0.2856368			15	
1,1-Dichloroethane	0.5476241	4.780995	5.418889	5.933679E-02			SPCC (0.1)	
1,2-Dichloroethane	0.4528864	7.432713	7.172222	6.209681E-02			15	
1,1-Dichloroethene	0.219995	5.502211	3.871111	0.1550187			CCC (20)	
cis-1,2-Dichloroethene	0.299601	7.424506	6.144444	8.827927E-02			15	
trans-1,2-Dichloroethene	0.2718737	8.657721	5.04	9.962629E-02			15	
1,2-Dichloroethene (total)	0.2857373	7.486324	6.144444	8.827927E-02			15	
1,2-Dichloropropane	0.3128379	7.734725	8.164444	6.216083E-02			CCC (20)	
1,3-Dichloropropane	1.028184	5.028358	9.767778	6.969679E-02			15	
2,2-Dichloropropane	0.3982799	8.171856	6.252222	7.058938E-02			15	
1,1-Dichloropropene	0.3717116	5.417463	7.192222	6.275141E-02			15	
cis-1,3-Dichloropropene	0.4546126	6.453357	8.923333	5.284769E-02			15	
trans-1,3-Dichloropropene	0.9878761	7.795565	9.402222	4.663104E-02			15	
Diisopropyl Ether	1.371923	11.15829	5.802222	7.784852E-02			15	
Ethylbenzene	2.62125	10.36353	10.94444	4.993597E-02			CCC (20)	
Ethyl tert-Butyl Ether	0.9841015	7.438849	6.275556	8.592307E-02			15	
Ethyl Methacrylate	0.8331089	7.325389	9.6	4.887049E-02			15	
Hexachlorobutadiene	0.2519403	14.9377	15.49778	2.865142E-02			15	
2-Hexanone	0.64531	14.68557	9.708889	6.396247E-02			15	
Iodomethane	0.4141218	9.941711	4.062222	0.1064841			15	
Isopropylbenzene	2.060659	6.880268	11.84444	4.914158E-02			15	
p-Isopropyltoluene	1.585513	6.678641	13.14444	0.0373946			15	
Methylene chloride	0.3058374	7.270345	4.355556	0.121083			15	
Methyl Acetate	0.2709814	5.229151	4.21	0.1259766			15	
Methylcyclohexane	0.2757224	4.97078	8.495555	6.049599E-02			15	
Naphthalene	0.8628979	13.76505	15.36	1.759729E-02			15	
Methyl Methacrylate	0.3369681	10.31889	8.306667	5.808503E-02			15	
4-Methyl-2-pentanone	0.3461514	10.63507	8.851111	0.0427818			15	
Methyl t-Butyl Ether	0.6443611	5.590097	5.03	1.761348E-02			15	
n-Propylbenzene	2.867866	13.93909	12.25333	3.966289E-02			15	
Styrene	1.57265	7.853373	11.41889	2.195589E-02			15	

INITIAL CALIBRATION DATA (Continued)

SW8260B

Laboratory:	Empirical Laboratories, LLC		SDG:	kirtland_072	
Client:	Shaw E & I (I700)		Project:	Kirtland AFB 2011	
Calibration:	2291001		Instrument:	MS-VOA5	
Matrix:	Water		Calibration Dates:	10/12/12 15:24	10/12/12 19:06

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,2,2-Tetrachloroethane	0.891879	12.88279	11.76778	5.755305E-02			SPCC (0.3)	
1,1,1,2-Tetrachloroethane	0.6412186	6.505399	10.83444	4.503166E-02			15	
tert-Butyl alcohol	2.145603E-02	9.323035	3.998889	8.342015E-02			15	
Tetrachloroethene	0.7104583	4.599011	10.13333	5.271432E-02			15	
Toluene	1.442954	5.337669	9.4	4.407662E-03			CCC (20)	
1,2,3-Trichlorobenzene	0.4083448	11.43467	15.64778	2.504416E-02			15	
1,2,4-Trichlorobenzene	0.4983989	11.29925	15.21222	2.863628E-02			15	
1,1,2-Trichloroethane	0.5170842	7.469048	9.554445	5.725395E-02			15	
1,1,1-Trichloroethane	0.4192187	4.558507	6.966667	7.320109E-02			15	
Tetrahydrofuran	0.0249648	16.34235	6.61	0.0180108	0.9995332		0.995	
Trichloroethene	0.2944908	6.692227	8.115555	6.266205E-02			15	
Trichlorofluoromethane	0.4689858	5.793276	3.15	0.1588719			15	
1,2,3-Trichloropropane	0.1991037	7.060199	11.89111	0.0147569			15	
1,3,5-Trimethylbenzene	2.039265	8.795024	12.43333	4.248275E-02			15	
1,2,4-Trimethylbenzene	1.766581	7.92246	12.80222	4.014229E-02			15	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2264658	3.944156	3.947778	0.2110514			15	
Vinyl chloride	0.2359945	23.03148	2.175714	0.2462423	0.9988621		CCC (20)	*
m,p-Xylene	1.813543	13.97709	11.05778	5.889907E-02			15	
o-Xylene	1.905321	7.777756	11.44778	3.791632E-02			15	
Vinyl acetate	0.8911488	11.32924	5.49875	6.399563E-02			15	
Xylenes (total)	1.844136	11.38244	11.44778	3.791632E-02			15	
Dibromofluoromethane	0.3431068	1.223972	6.572222	6.593489E-02			15	
1,2-Dichloroethane-d4	6.230074E-02	1.652363	7.081111	4.893599E-02			15	
Toluene-d8	2.274744	4.528986	9.322222	4.878895E-02			15	
tert-Amyl alcohol	1.753356E-02	4.883647	6.7775	6.889731E-02			15	
tert-Amyl ethyl ether	0.790677	7.256792	8.443333	5.558737E-02			15	

INITIAL CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1012ICV2.D	Calibration Date:	10/12/12 03:24
Sequence:	2J29101	Injection Date:	10/12/12
Lab Sample ID:	2J29101-ICV2	Injection Time:	20:29

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Acetone	A	200.0	189.2	0.1308263	0.1237894		-5.4	20
Benzene	A	100.0	86.88	0.9492909	0.8247049		-13.1	20
Bromobenzene	A	100.0	81.33	0.9753776	0.7932768		-18.7	20
Bromochloromethane	A	100.0	86.26	0.1703055	0.146908		-13.7	20
Bromodichloromethane	A	100.0	91.88	0.3668169	0.3370203		-8.1	20
Bromoform	Q	100.0	93.61	0.505661	0.5989334	0.1	-6.4	20
Bromomethane	A	100.0	83.82	0.2263207	0.1897067		-16.2	20
n-Butylbenzene	A	100.0	103.7	1.316239	1.364641		3.7	20
2-Butanone	A	200.0	200.3	0.1900461	0.1903028		0.1	20
sec-Butylbenzene	A	100.0	90.33	2.066344	1.866628		-9.7	20
tert-Butylbenzene	A	100.0	90.30	1.705204	1.539855		-9.7	20
Carbon disulfide	A	100.0	87.62	0.6412047	0.5617964		-12.4	20
Carbon tetrachloride	A	100.0	95.73	0.3465177	0.3317074		-4.3	20
Chlorobenzene	A	100.0	90.63	1.561071	1.414764	0.3	-9.4	20
Chloroethane	A	100.0	83.58	0.1885512	0.1575968		-16.4	20
Chloroform	A	100.0	83.87	0.524999	0.4403183		-16.1	20
Chloromethane	A	100.0	80.20	0.3854947	0.3091732	0.1	-19.8	20
2-Chlorotoluene	A	100.0	81.73	2.094181	1.711597		-18.3	20
4-Chlorotoluene	A	100.0	85.16	2.218103	1.888959		-14.8	20
Dibromochloromethane	A	100.0	101.3	0.7653683	0.7754495		1.3	20
1,2-Dibromo-3-chloropropane	A	100.0	99.91	0.1457781	0.1456403		-0.09	20
1,2-Dibromoethane (EDB)	A	100.0	91.92	0.6953223	0.6391628		-8.1	20
Dibromomethane	A	100.0	88.98	0.2156063	0.1918446		-11.0	20
1,2-Dichlorobenzene	A	100.0	86.31	1.322429	1.141337		-13.7	20
1,3-Dichlorobenzene	A	100.0	84.66	1.422392	1.204134		-15.3	20
1,4-Dichlorobenzene	A	100.0	87.81	1.504713	1.321271		-12.2	20
Dichlorodifluoromethane	A	100.0	91.99	0.2651001	0.2438581		-8.0	20
1,1-Dichloroethane	A	100.0	88.30	0.5476241	0.4835784	0.1	-11.7	20
1,2-Dichloroethane	A	100.0	85.78	0.4528864	0.3884664		-14.2	20

INITIAL CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1012ICV2.D	Calibration Date:	10/12/12 03:24
Sequence:	2J29101	Injection Date:	10/12/12
Lab Sample ID:	2J29101-ICV2	Injection Time:	20:29

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
1,1-Dichloroethene	A	100.0	87.91	0.219995	0.1933946		-12.1	20
cis-1,2-Dichloroethene	A	100.0	87.31	0.299601	0.2615895		-12.7	20
trans-1,2-Dichloroethene	A	100.0	85.14	0.2718737	0.2314696		-14.9	20
1,2-Dichloropropane	A	100.0	88.52	0.3128379	0.2769166		-11.5	20
1,3-Dichloropropane	A	100.0	94.08	1.028184	0.9672779		-5.9	20
2,2-Dichloropropane	A	100.0	83.80	0.3982799	0.3337392		-16.2	20
1,1-Dichloropropene	A	100.0	88.15	0.3717116	0.3276608		-11.9	20
cis-1,3-Dichloropropene	A	100.0	91.20	0.4546126	0.4146255		-8.8	20
trans-1,3-Dichloropropene	A	100.0	92.25	0.9878761	0.9112792		-7.8	20
Ethylbenzene	A	100.0	89.33	2.62125	2.341602		-10.7	20
Hexachlorobutadiene	A	100.0	90.42	0.2519403	0.227815		-9.6	20
2-Hexanone	A	200.0	194.0	0.64531	0.6261081		-3.0	20
Isopropylbenzene	A	100.0	92.92	2.060659	1.914713		-7.1	20
p-Isopropyltoluene	A	100.0	94.67	1.585513	1.50102		-5.3	20
Methylene chloride	A	100.0	85.75	0.3058374	0.2622497		-14.3	20
Naphthalene	A	100.0	101.6	0.8628979	0.8768548		1.6	20
4-Methyl-2-pentanone	A	200.0	189.6	0.3461514	0.3281836		-5.2	20
Methyl t-Butyl Ether	A	100.0	88.56	0.6443611	0.570629		-11.4	20
n-Propylbenzene	A	100.0	84.42	2.867866	2.42105		-15.6	20
Styrene	A	100.0	99.54	1.57265	1.565459		-0.5	20
1,1,2,2-Tetrachloroethane	A	100.0	81.50	0.891879	0.7268652	0.3	-18.5	20
1,1,1,2-Tetrachloroethane	A	100.0	95.36	0.6412186	0.6114397		-4.6	20
Tetrachloroethene	A	100.0	90.91	0.7104583	0.6458528		-9.1	20
Toluene	A	100.0	89.65	1.442954	1.29367		-10.3	20
1,2,3-Trichlorobenzene	A	100.0	99.68	0.4083448	0.4070406		-0.3	20
1,2,4-Trichlorobenzene	A	100.0	101.4	0.4983989	0.5052836		1.4	20
1,1,2-Trichloroethane	A	100.0	92.15	0.5170842	0.4764956		-7.8	20
1,1,1-Trichloroethane	A	100.0	88.56	0.4192187	0.3712762		-11.4	20
Trichloroethene	A	100.0	84.99	0.2944908	0.2502824		-15.0	20

INITIAL CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1012ICV2.D	Calibration Date:	10/12/12 03:24
Sequence:	2J29101	Injection Date:	10/12/12
Lab Sample ID:	2J29101-ICV2	Injection Time:	20:29

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Trichlorofluoromethane	A	100.0	85.72	0.4689858	0.4019954		-14.3	20
1,2,3-Trichloropropane	A	100.0	94.83	0.1991037	0.1888084		-5.2	20
1,3,5-Trimethylbenzene	A	100.0	88.97	2.039265	1.814233		-11.0	20
1,2,4-Trimethylbenzene	A	100.0	96.97	1.766581	1.713118		-3.0	20
Xylenes (total)	A	300.0	268.6	1.844136	1.652238		-10.4	20
Bromofluorobenzene	A	30.00	31.47	0.9353573	0.981069		4.9	20
Dibromofluoromethane	A	30.00	29.34	0.3431068	0.3355545		-2.2	20
1,2-Dichloroethane-d4	A	30.00	30.49	6.230074E-02	6.332127E-02		1.6	20
Toluene-d8	A	30.00	31.27	2.274744	2.3712		4.2	20

INITIAL CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1012ICV3.D	Calibration Date:	10/12/12 03:24
Sequence:	2J29101	Injection Date:	10/16/12
Lab Sample ID:	2J29101-ICV3	Injection Time:	14:13

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Vinyl chloride	L	50.00	46.28	0.2359945	0.1820071		-7.4	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1115CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32002	Injection Date:	11/15/12
Lab Sample ID:	2K32002-CCV1	Injection Time:	06:41

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	100.0	92.99	0.1308263	0.1216521		-7.0	20
Benzene	A	50.00	51.48	0.9492909	0.9773419		3.0	20
Bromobenzene	A	50.00	44.60	0.9753776	0.8700019		-10.8	20
Bromochloromethane	A	50.00	49.32	0.1703055	0.1679895		-1.4	20
Bromodichloromethane	A	50.00	53.65	0.3668169	0.3936231		7.3	20
Bromoform	Q	50.00	45.43	0.505661	0.5339403	0.1	-9.1	20
Bromomethane	A	50.00	35.43	0.2263207	0.1603836		-29.1	20 *
n-Butylbenzene	A	50.00	53.71	1.316239	1.413795		7.4	20
2-Butanone	A	100.0	120.2	0.1900461	0.2284618		20.2	20 *
sec-Butylbenzene	A	50.00	52.92	2.066344	2.186901		5.8	20
tert-Butylbenzene	A	50.00	51.93	1.705204	1.771017		3.9	20
Carbon disulfide	A	50.00	57.98	0.6412047	0.7435617		16.0	20
Carbon tetrachloride	A	50.00	51.25	0.3465177	0.3551934		2.5	20
Chlorobenzene	A	50.00	50.91	1.561071	1.589533	0.3	1.8	20
Chloroethane	A	50.00	46.61	0.1885512	0.1757694		-6.8	20
Chloroform	A	50.00	47.93	0.524999	0.503311		-4.1	20
Chloromethane	A	50.00	48.27	0.3854947	0.372125	0.1	-3.5	20
2-Chlorotoluene	A	50.00	47.30	2.094181	1.981092		-5.4	20
4-Chlorotoluene	A	50.00	48.37	2.218103	2.145776		-3.3	20
Dibromochloromethane	A	50.00	53.33	0.7653683	0.8163793		6.7	20
1,2-Dibromo-3-chloropropane	A	50.00	48.87	0.1457781	0.142488		-2.3	20
1,2-Dibromoethane (EDB)	A	50.00	48.60	0.6953223	0.6758077		-2.8	20
Dibromomethane	A	50.00	48.36	0.2156063	0.2085368		-3.3	20
1,2-Dichlorobenzene	A	50.00	48.16	1.322429	1.273749		-3.7	20
1,3-Dichlorobenzene	A	50.00	48.15	1.422392	1.369855		-3.7	20
1,4-Dichlorobenzene	A	50.00	45.92	1.504713	1.381893		-8.2	20
Dichlorodifluoromethane	A	50.00	56.09	0.2651001	0.2974075		12.2	20
1,1-Dichloroethane	A	50.00	48.32	0.5476241	0.5292203	0.1	-3.4	20
1,2-Dichloroethane	A	50.00	46.03	0.4528864	0.4169694		-7.9	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1115CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32002	Injection Date:	11/15/12
Lab Sample ID:	2K32002-CCV1	Injection Time:	06:41

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethene	A	50.00	54.67	0.219995	0.2405495		9.3	20
cis-1,2-Dichloroethene	A	50.00	49.91	0.299601	0.2990672		-0.2	20
trans-1,2-Dichloroethene	A	50.00	49.85	0.2718737	0.2710677		-0.3	20
1,2-Dichloropropane	A	50.00	49.23	0.3128379	0.3080463		-1.5	20
1,3-Dichloropropane	A	50.00	49.83	1.028184	1.024745		-0.3	20
2,2-Dichloropropane	A	50.00	48.74	0.3982799	0.3882701		-2.5	20
1,1-Dichloropropene	A	50.00	49.53	0.3717116	0.3682286		-0.9	20
cis-1,3-Dichloropropene	A	50.00	49.40	0.4546126	0.4491916		-1.2	20
trans-1,3-Dichloropropene	A	50.00	51.59	0.9878761	1.019358		3.2	20
Ethylbenzene	A	50.00	50.73	2.62125	2.659302		1.5	20
Hexachlorobutadiene	A	50.00	52.20	0.2519403	0.2630395		4.4	20
2-Hexanone	A	100.0	113.6	0.64531	0.7330856		13.6	20
Isopropylbenzene	A	50.00	52.58	2.060659	2.167021		5.2	20
p-Isopropyltoluene	A	50.00	53.57	1.585513	1.698743		7.1	20
Methylene chloride	A	50.00	48.50	0.3058374	0.2966433		-3.0	20
Naphthalene	A	50.00	41.55	0.8628979	0.7170093		-16.9	20
4-Methyl-2-pentanone	A	100.0	123.2	0.3461514	0.4266362		23.3	20 *
Methyl t-Butyl Ether	A	50.00	48.08	0.6443611	0.6195895		-3.8	20
n-Propylbenzene	A	50.00	49.81	2.867866	2.856844		-0.4	20
Styrene	A	50.00	52.38	1.57265	1.647499		4.8	20
1,1,2,2-Tetrachloroethane	A	50.00	45.94	0.891879	0.8193743	0.3	-8.1	20
1,1,1,2-Tetrachloroethane	A	50.00	51.93	0.6412186	0.6659246		3.9	20
Tetrachloroethene	A	50.00	46.87	0.7104583	0.66597		-6.3	20
Toluene	A	50.00	50.36	1.442954	1.453357		0.7	20
1,2,3-Trichlorobenzene	A	50.00	46.98	0.4083448	0.3836441		-6.0	20
1,2,4-Trichlorobenzene	A	50.00	47.67	0.4983989	0.4751262		-4.7	20
1,1,2-Trichloroethane	A	50.00	50.52	0.5170842	0.5224645		1.0	20
1,1,1-Trichloroethane	A	50.00	49.03	0.4192187	0.4110651		-1.9	20
Trichloroethene	A	50.00	47.39	0.2944908	0.2790995		-5.2	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1115CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32002	Injection Date:	11/15/12
Lab Sample ID:	2K32002-CCV1	Injection Time:	06:41

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Trichlorofluoromethane	A	50.00	47.75	0.4689858	0.4478682		-4.5	20
1,2,3-Trichloropropane	A	50.00	51.85	0.1991037	0.2064696		3.7	20
1,3,5-Trimethylbenzene	A	50.00	48.05	2.039265	1.959659		-3.9	20
1,2,4-Trimethylbenzene	A	50.00	51.21	1.766581	1.809449		2.4	20
Vinyl chloride	L	50.00	47.49	0.2359945	0.186722		-5.0	20
Xylenes (total)	A	150.0	157.7	1.844136	1.939366		5.2	20
Bromofluorobenzene	A	30.00	29.64	0.9353573	0.9240062		-1.2	20
Dibromofluoromethane	A	30.00	29.64	0.3431068	0.3390329		-1.2	20
1,2-Dichloroethane-d4	A	30.00	30.87	6.230074E-02	6.411365E-02		2.9	20
Toluene-d8	A	30.00	29.90	2.274744	2.267478		-0.3	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1119CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32506	Injection Date:	11/19/12
Lab Sample ID:	2K32506-CCV1	Injection Time:	07:04

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	100.0	97.08	0.1308263	0.1270094		-2.9	20
Benzene	A	50.00	52.39	0.9492909	0.9945876		4.8	20
Bromobenzene	A	50.00	45.79	0.9753776	0.8931573		-8.4	20
Bromochloromethane	A	50.00	50.75	0.1703055	0.1728475		1.5	20
Bromodichloromethane	A	50.00	53.09	0.3668169	0.3894913		6.2	20
Bromoform	Q	50.00	47.94	0.505661	0.5661702	0.1	-4.1	20
Bromomethane	A	50.00	43.49	0.2263207	0.1968554		-13.0	20
n-Butylbenzene	A	50.00	49.38	1.316239	1.299914		-1.2	20
2-Butanone	A	100.0	123.6	0.1900461	0.2349285		23.6	20 *
sec-Butylbenzene	A	50.00	52.37	2.066344	2.164281		4.7	20
tert-Butylbenzene	A	50.00	51.25	1.705204	1.747727		2.5	20
Carbon disulfide	A	50.00	58.87	0.6412047	0.7548944		17.7	20
Carbon tetrachloride	A	50.00	50.69	0.3465177	0.3512871		1.4	20
Chlorobenzene	A	50.00	51.68	1.561071	1.613618	0.3	3.4	20
Chloroethane	A	50.00	43.33	0.1885512	0.1634032		-13.3	20
Chloroform	A	50.00	48.06	0.524999	0.5046473		-3.9	20
Chloromethane	A	50.00	43.77	0.3854947	0.3374773	0.1	-12.5	20
2-Chlorotoluene	A	50.00	47.12	2.094181	1.973637		-5.8	20
4-Chlorotoluene	A	50.00	48.41	2.218103	2.147742		-3.2	20
Dibromochloromethane	A	50.00	54.48	0.7653683	0.8338793		9.0	20
1,2-Dibromo-3-chloropropane	A	50.00	52.68	0.1457781	0.1536005		5.4	20
1,2-Dibromoethane (EDB)	A	50.00	48.68	0.6953223	0.676927		-2.6	20
Dibromomethane	A	50.00	48.13	0.2156063	0.2075271		-3.7	20
1,2-Dichlorobenzene	A	50.00	48.72	1.322429	1.28846		-2.6	20
1,3-Dichlorobenzene	A	50.00	48.03	1.422392	1.366417		-3.9	20
1,4-Dichlorobenzene	A	50.00	45.94	1.504713	1.382643		-8.1	20
Dichlorodifluoromethane	A	50.00	55.20	0.2651001	0.2926503		10.4	20
1,1-Dichloroethane	A	50.00	50.07	0.5476241	0.5483983	0.1	0.1	20
1,2-Dichloroethane	A	50.00	45.36	0.4528864	0.4108987		-9.3	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1119CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32506	Injection Date:	11/19/12
Lab Sample ID:	2K32506-CCV1	Injection Time:	07:04

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
1,1-Dichloroethene	A	50.00	54.84	0.219995	0.2412927		9.7	20	
cis-1,2-Dichloroethene	A	50.00	49.38	0.299601	0.2958633		-1.2	20	
trans-1,2-Dichloroethene	A	50.00	50.99	0.2718737	0.2772529		2.0	20	
1,2-Dichloropropane	A	50.00	50.61	0.3128379	0.3166814		1.2	20	
1,3-Dichloropropane	A	50.00	49.72	1.028184	1.022512		-0.6	20	
2,2-Dichloropropane	A	50.00	48.09	0.3982799	0.383084		-3.8	20	
1,1-Dichloropropene	A	50.00	49.68	0.3717116	0.3693277		-0.6	20	
cis-1,3-Dichloropropene	A	50.00	49.08	0.4546126	0.4462605		-1.8	20	
trans-1,3-Dichloropropene	A	50.00	52.26	0.9878761	1.032458		4.5	20	
Ethylbenzene	A	50.00	50.89	2.62125	2.667657		1.8	20	
Hexachlorobutadiene	A	50.00	57.23	0.2519403	0.288367		14.5	20	
2-Hexanone	A	100.0	117.3	0.64531	0.7568671		17.3	20	
Isopropylbenzene	A	50.00	52.32	2.060659	2.156339		4.6	20	
p-Isopropyltoluene	A	50.00	51.63	1.585513	1.637051		3.3	20	
Methylene chloride	A	50.00	47.91	0.3058374	0.2930631		-4.2	20	
Naphthalene	A	50.00	41.65	0.8628979	0.7187264		-16.7	20	
4-Methyl-2-pentanone	A	100.0	125.1	0.3461514	0.4329545		25.1	20	*
Methyl t-Butyl Ether	A	50.00	49.83	0.6443611	0.6421738		-0.3	20	
n-Propylbenzene	A	50.00	49.83	2.867866	2.858268		-0.3	20	
Styrene	A	50.00	53.42	1.57265	1.68014		6.8	20	
1,1,2,2-Tetrachloroethane	A	50.00	47.73	0.891879	0.8513039	0.3	-4.5	20	
1,1,1,2-Tetrachloroethane	A	50.00	53.05	0.6412186	0.6802717		6.1	20	
Tetrachloroethene	A	50.00	48.92	0.7104583	0.6951786		-2.2	20	
Toluene	A	50.00	50.29	1.442954	1.451321		0.6	20	
1,2,3-Trichlorobenzene	A	50.00	47.95	0.4083448	0.3916272		-4.1	20	
1,2,4-Trichlorobenzene	A	50.00	48.37	0.4983989	0.4821923		-3.3	20	
1,1,2-Trichloroethane	A	50.00	50.50	0.5170842	0.5223051		1.0	20	
1,1,1-Trichloroethane	A	50.00	48.10	0.4192187	0.4032471		-3.8	20	
Trichloroethene	A	50.00	47.13	0.2944908	0.2776058		-5.7	20	

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1119CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32506	Injection Date:	11/19/12
Lab Sample ID:	2K32506-CCV1	Injection Time:	07:04

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Trichlorofluoromethane	A	50.00	48.01	0.4689858	0.4503417		-4.0	20
1,2,3-Trichloropropane	A	50.00	50.66	0.1991037	0.2017156		1.3	20
1,3,5-Trimethylbenzene	A	50.00	45.48	2.039265	1.855117		-9.0	20
1,2,4-Trimethylbenzene	A	50.00	47.42	1.766581	1.67528		-5.2	20
Vinyl chloride	L	50.00	43.54	0.2359945	0.1712657		-12.9	20
Xylenes (total)	A	150.0	156.1	1.844136	1.919231		4.1	20
Bromofluorobenzene	A	30.00	29.75	0.9353573	0.9276647		-0.8	20
Dibromofluoromethane	A	30.00	29.74	0.3431068	0.3400798		-0.9	20
1,2-Dichloroethane-d4	A	30.00	29.79	6.230074E-02	6.186452E-02		-0.7	20
Toluene-d8	A	30.00	29.76	2.274744	2.256604		-0.8	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1119CCVE.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32507	Injection Date:	11/19/12
Lab Sample ID:	2K32507-CCV1	Injection Time:	19:10

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	100.0	76.99	0.1308263	0.1007251		-23.0	20 *
Benzene	A	50.00	52.96	0.9492909	1.005544		5.9	20
Bromobenzene	A	50.00	47.75	0.9753776	0.9314519		-4.5	20
Bromochloromethane	A	50.00	50.75	0.1703055	0.1728563		1.5	20
Bromodichloromethane	A	50.00	53.65	0.3668169	0.3935832		7.3	20
Bromoform	Q	50.00	47.77	0.505661	0.5640244	0.1	-4.5	20
Bromomethane	A	50.00	42.05	0.2263207	0.1903212		-15.9	20
n-Butylbenzene	A	50.00	52.57	1.316239	1.383907		5.1	20
2-Butanone	A	100.0	99.75	0.1900461	0.1895623		-0.3	20
sec-Butylbenzene	A	50.00	54.00	2.066344	2.231836		8.0	20
tert-Butylbenzene	A	50.00	54.18	1.705204	1.847776		8.4	20
Carbon disulfide	A	50.00	58.12	0.6412047	0.7453569		16.2	20
Carbon tetrachloride	A	50.00	50.26	0.3465177	0.348331		0.5	20
Chlorobenzene	A	50.00	52.92	1.561071	1.652313	0.3	5.8	20
Chloroethane	A	50.00	42.33	0.1885512	0.1596216		-15.3	20
Chloroform	A	50.00	48.66	0.524999	0.5108902		-2.7	20
Chloromethane	A	50.00	42.45	0.3854947	0.3272655	0.1	-15.1	20
2-Chlorotoluene	A	50.00	47.71	2.094181	1.998067		-4.6	20
4-Chlorotoluene	A	50.00	49.66	2.218103	2.20291		-0.7	20
Dibromochloromethane	A	50.00	54.41	0.7653683	0.83287		8.8	20
1,2-Dibromo-3-chloropropane	A	50.00	53.95	0.1457781	0.1572836		7.9	20
1,2-Dibromoethane (EDB)	A	50.00	51.28	0.6953223	0.7130566		2.6	20
Dibromomethane	A	50.00	49.37	0.2156063	0.2128825		-1.3	20
1,2-Dichlorobenzene	A	50.00	50.72	1.322429	1.34145		1.4	20
1,3-Dichlorobenzene	A	50.00	49.60	1.422392	1.411146		-0.8	20
1,4-Dichlorobenzene	A	50.00	47.14	1.504713	1.418665		-5.7	20
Dichlorodifluoromethane	A	50.00	53.57	0.2651001	0.2840294		7.1	20
1,1-Dichloroethane	A	50.00	50.18	0.5476241	0.5496327	0.1	0.4	20
1,2-Dichloroethane	A	50.00	46.20	0.4528864	0.418426		-7.6	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1119CCVE.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32507	Injection Date:	11/19/12
Lab Sample ID:	2K32507-CCV1	Injection Time:	19:10

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)	
1,1-Dichloroethene	A	50.00	55.13	0.219995	0.2425634		10.3	20	
cis-1,2-Dichloroethene	A	50.00	50.70	0.299601	0.3038238		1.4	20	
trans-1,2-Dichloroethene	A	50.00	50.61	0.2718737	0.2751878		1.2	20	
1,2-Dichloropropane	A	50.00	50.67	0.3128379	0.3170052		1.3	20	
1,3-Dichloropropane	A	50.00	51.62	1.028184	1.0616		3.3	20	
2,2-Dichloropropane	A	50.00	46.47	0.3982799	0.3701779		-7.1	20	
1,1-Dichloropropene	A	50.00	50.15	0.3717116	0.372863		0.3	20	
cis-1,3-Dichloropropene	A	50.00	48.66	0.4546126	0.4424023		-2.7	20	
trans-1,3-Dichloropropene	A	50.00	51.79	0.9878761	1.023192		3.6	20	
Ethylbenzene	A	50.00	51.94	2.62125	2.722846		3.9	20	
Hexachlorobutadiene	A	50.00	61.32	0.2519403	0.3090048		22.7	20	*
2-Hexanone	A	100.0	91.73	0.64531	0.5919127		-8.3	20	
Isopropylbenzene	A	50.00	53.88	2.060659	2.220459		7.8	20	
p-Isopropyltoluene	A	50.00	54.76	1.585513	1.736348		9.5	20	
Methylene chloride	A	50.00	48.84	0.3058374	0.2987446		-2.3	20	
Naphthalene	A	50.00	51.01	0.8628979	0.8804119		2.0	20	
4-Methyl-2-pentanone	A	100.0	100.3	0.3461514	0.3472915		0.3	20	
Methyl t-Butyl Ether	A	50.00	49.91	0.6443611	0.6432651		-0.2	20	
n-Propylbenzene	A	50.00	50.68	2.867866	2.90677		1.4	20	
Styrene	A	50.00	54.18	1.57265	1.704163		8.4	20	
1,1,2,2-Tetrachloroethane	A	50.00	48.40	0.891879	0.8632551	0.3	-3.2	20	
1,1,1,2-Tetrachloroethane	A	50.00	54.08	0.6412186	0.6935222		8.2	20	
Tetrachloroethene	A	50.00	50.15	0.7104583	0.7125967		0.3	20	
Toluene	A	50.00	51.08	1.442954	1.474041		2.2	20	
1,2,3-Trichlorobenzene	A	50.00	56.07	0.4083448	0.4578899		12.1	20	
1,2,4-Trichlorobenzene	A	50.00	55.69	0.4983989	0.55511		11.4	20	
1,1,2-Trichloroethane	A	50.00	52.09	0.5170842	0.5386734		4.2	20	
1,1,1-Trichloroethane	A	50.00	48.59	0.4192187	0.4074156		-2.8	20	
Trichloroethene	A	50.00	47.35	0.2944908	0.2788754		-5.3	20	

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1119CCVE.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32507	Injection Date:	11/19/12
Lab Sample ID:	2K32507-CCV1	Injection Time:	19:10

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Trichlorofluoromethane	A	50.00	49.08	0.4689858	0.4603256		-1.8	20
1,2,3-Trichloropropane	A	50.00	54.04	0.1991037	0.2151764		8.1	20
1,3,5-Trimethylbenzene	A	50.00	48.73	2.039265	1.987485		-2.5	20
1,2,4-Trimethylbenzene	A	50.00	51.60	1.766581	1.823278		3.2	20
Vinyl chloride	L	50.00	42.72	0.2359945	0.1680856		-14.6	20
Xylenes (total)	A	150.0	161.2	1.844136	1.982196		7.5	20
Bromofluorobenzene	A	30.00	30.13	0.9353573	0.9393802		0.4	20
Dibromofluoromethane	A	30.00	29.87	0.3431068	0.3415894		-0.4	20
1,2-Dichloroethane-d4	A	30.00	30.56	6.230074E-02	6.347031E-02		1.9	20
Toluene-d8	A	30.00	30.28	2.274744	2.296274		0.9	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1120CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32611	Injection Date:	11/20/12
Lab Sample ID:	2K32611-CCV1	Injection Time:	07:21

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	100.0	92.20	0.1308263	0.1206217		-7.8	20
Benzene	A	50.00	52.27	0.9492909	0.9924252		4.5	20
Bromobenzene	A	50.00	47.54	0.9753776	0.9273422		-4.9	20
Bromochloromethane	A	50.00	50.84	0.1703055	0.173154		1.7	20
Bromodichloromethane	A	50.00	52.52	0.3668169	0.3852857		5.0	20
Bromoform	Q	50.00	45.63	0.505661	0.536532	0.1	-8.7	20
Bromomethane	A	50.00	35.97	0.2263207	0.1628308		-28.1	20 *
n-Butylbenzene	A	50.00	53.18	1.316239	1.399926		6.4	20
2-Butanone	A	100.0	117.5	0.1900461	0.2233176		17.5	20
sec-Butylbenzene	A	50.00	53.80	2.066344	2.223569		7.6	20
tert-Butylbenzene	A	50.00	53.59	1.705204	1.827795		7.2	20
Carbon disulfide	A	50.00	61.87	0.6412047	0.7934444		23.7	20 *
Carbon tetrachloride	A	50.00	50.38	0.3465177	0.3491169		0.8	20
Chlorobenzene	A	50.00	51.90	1.561071	1.620322	0.3	3.8	20
Chloroethane	A	50.00	40.39	0.1885512	0.1523054		-19.2	20
Chloroform	A	50.00	47.63	0.524999	0.5001256		-4.7	20
Chloromethane	A	50.00	40.71	0.3854947	0.3138662	0.1	-18.6	20
2-Chlorotoluene	A	50.00	47.59	2.094181	1.993059		-4.8	20
4-Chlorotoluene	A	50.00	49.01	2.218103	2.174141		-2.0	20
Dibromochloromethane	A	50.00	54.26	0.7653683	0.8306207		8.5	20
1,2-Dibromo-3-chloropropane	A	50.00	52.82	0.1457781	0.1540075		5.6	20
1,2-Dibromoethane (EDB)	A	50.00	49.58	0.6953223	0.689448		-0.8	20
Dibromomethane	A	50.00	47.52	0.2156063	0.2049006		-5.0	20
1,2-Dichlorobenzene	A	50.00	49.69	1.322429	1.314194		-0.6	20
1,3-Dichlorobenzene	A	50.00	49.44	1.422392	1.406433		-1.1	20
1,4-Dichlorobenzene	A	50.00	47.60	1.504713	1.432635		-4.8	20
Dichlorodifluoromethane	A	50.00	54.44	0.2651001	0.288624		8.9	20
1,1-Dichloroethane	A	50.00	49.96	0.5476241	0.5472256	0.1	-0.07	20
1,2-Dichloroethane	A	50.00	45.76	0.4528864	0.4144796		-8.5	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1120CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32611	Injection Date:	11/20/12
Lab Sample ID:	2K32611-CCV1	Injection Time:	07:21

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1-Dichloroethene	A	50.00	55.46	0.219995	0.2440114		10.9	20
cis-1,2-Dichloroethene	A	50.00	50.30	0.299601	0.3014018		0.6	20
trans-1,2-Dichloroethene	A	50.00	51.36	0.2718737	0.2792837		2.7	20
1,2-Dichloropropane	A	50.00	49.17	0.3128379	0.30765		-1.7	20
1,3-Dichloropropane	A	50.00	49.65	1.028184	1.021043		-0.7	20
2,2-Dichloropropane	A	50.00	48.03	0.3982799	0.3825942		-3.9	20
1,1-Dichloropropene	A	50.00	50.31	0.3717116	0.3740106		0.6	20
cis-1,3-Dichloropropene	A	50.00	49.07	0.4546126	0.4461985		-1.9	20
trans-1,3-Dichloropropene	A	50.00	49.40	0.9878761	0.9760782		-1.2	20
Ethylbenzene	A	50.00	51.08	2.62125	2.677932		2.2	20
Hexachlorobutadiene	A	50.00	64.14	0.2519403	0.3231666		28.3	20 *
2-Hexanone	A	100.0	109.6	0.64531	0.7070137		9.6	20
Isopropylbenzene	A	50.00	53.54	2.060659	2.206618		7.1	20
p-Isopropyltoluene	A	50.00	53.71	1.585513	1.703039		7.4	20
Methylene chloride	A	50.00	48.75	0.3058374	0.2982219		-2.5	20
Naphthalene	A	50.00	48.76	0.8628979	0.8414324		-2.5	20
4-Methyl-2-pentanone	A	100.0	118.6	0.3461514	0.4103862		18.6	20
Methyl t-Butyl Ether	A	50.00	49.91	0.6443611	0.6431742		-0.2	20
n-Propylbenzene	A	50.00	50.47	2.867866	2.894807		0.9	20
Styrene	A	50.00	52.75	1.57265	1.659079		5.5	20
1,1,2,2-Tetrachloroethane	A	50.00	48.37	0.891879	0.8628029	0.3	-3.3	20
1,1,1,2-Tetrachloroethane	A	50.00	52.66	0.6412186	0.6753853		5.3	20
Tetrachloroethene	A	50.00	50.37	0.7104583	0.7157495		0.7	20
Toluene	A	50.00	50.07	1.442954	1.445111		0.1	20
1,2,3-Trichlorobenzene	A	50.00	55.65	0.4083448	0.4545003		11.3	20
1,2,4-Trichlorobenzene	A	50.00	54.31	0.4983989	0.5413675		8.6	20
1,1,2-Trichloroethane	A	50.00	51.17	0.5170842	0.5292331		2.3	20
1,1,1-Trichloroethane	A	50.00	48.66	0.4192187	0.4080011		-2.7	20
Trichloroethene	A	50.00	46.17	0.2944908	0.271941		-7.7	20

CONTINUING CALIBRATION CHECK

SW8260B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-VOA5	Calibration:	2291001
Lab File ID:	1120CCV1.D	Calibration Date:	10/12/12 03:24
Sequence:	2K32611	Injection Date:	11/20/12
Lab Sample ID:	2K32611-CCV1	Injection Time:	07:21

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Trichlorofluoromethane	A	50.00	49.94	0.4689858	0.4684114		-0.1	20
1,2,3-Trichloropropane	A	50.00	51.11	0.1991037	0.2035129		2.2	20
1,3,5-Trimethylbenzene	A	50.00	47.28	2.039265	1.928226		-5.4	20
1,2,4-Trimethylbenzene	A	50.00	49.86	1.766581	1.76179		-0.3	20
Vinyl chloride	L	50.00	40.62	0.2359945	0.15984		-18.8	20
Xylenes (total)	A	150.0	155.7	1.844136	1.913472		3.8	20
Bromofluorobenzene	A	30.00	29.95	0.9353573	0.9339542		-0.2	20
Dibromofluoromethane	A	30.00	29.08	0.3431068	0.3326247		-3.1	20
1,2-Dichloroethane-d4	A	30.00	29.89	6.230074E-02	6.206877E-02		-0.4	20
Toluene-d8	A	30.00	29.73	2.274744	2.254592		-0.9	20

HOLDING TIME SUMMARY

SW8260B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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
GW0756	11/12/12 10:57	11/14/12 08:30	11/20/12 12:55	N/A	14.00	11/20/12 12:55	8.12	14.00	
GW8063-AB	11/13/12 12:20	11/14/12 08:30	11/15/12 14:34	N/A	14.00	11/15/12 14:34	2.13	14.00	
GW8064-AB	11/13/12 15:04	11/14/12 08:30	11/15/12 15:02	N/A	14.00	11/15/12 15:02	2.04	14.00	
GW8243-TB	11/12/12 08:00	11/14/12 08:30	11/15/12 15:30	N/A	14.00	11/15/12 15:30	3.35	14.00	
GW0860	11/14/12 16:06	11/16/12 08:30	11/19/12 23:47	N/A	14.00	11/19/12 23:47	5.28	14.00	
GW8065-AB	11/14/12 16:06	11/16/12 08:30	11/19/12 09:54	N/A	14.00	11/19/12 09:54	4.70	14.00	
GW8244-TB	11/14/12 08:00	11/16/12 08:30	11/19/12 10:22	N/A	14.00	11/19/12 10:22	5.06	14.00	

PREPARATION BENCH SHEET

2K15002

Empirical Laboratories, LLC

Printed: 11/26/2012 1:47:10PM

Instrument: VOA5

Matrix: Water **Prepared using: MS - 5030B** **Surrogate used: 12F0423**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211088-01	B	VOC_8260B_REG	11/15/2012	5	5				1	2	
1211088-02	B	VOC_8260B_REG	11/15/2012	5	5				1	2	
1211088-05	B	VOC_8260B_REG	11/15/2012	5	5				1	2	
1211088-09	B	VOC_8260B_REG	11/15/2012	5	5				1	2	
1211088-12	A	VOC_8260B_REG	11/15/2012	5	5				1	2	
1211091-05	A	VOC_8260B_REG	11/15/2012	5	5				1	2	naphthalene must be reported
1211091-06	A	VOC_8260B_REG	11/15/2012	5	5				1	2	naphthalene must be reported
1211100-01	A	VOC_8260B_REG	11/15/2012	5	5				1	2	See version
1211103-01	A	VOC_8260B_REG	11/15/2012	5	5				1	7	Added for BatchQC in: 2K15002
1211103-01	A	VOC_SPLP_8260B	11/15/2012	5	5				1	7	MS/MSD.TCE only
1211103-05	A	VOC_SPLP_8260B	11/15/2012	5	5				1	7	TCE only
1211103-06	A	VOC_SPLP_8260B	11/15/2012	5	5				1	7	TCE only
1211103-07	A	VOC_SPLP_8260B	11/15/2012	5	5				1	7	TCE only
1211103-08	A	VOC_SPLP_8260B	11/15/2012	5	5				1	7	TCE only
1211103-09	A	VOC_SPLP_8260B	11/15/2012	5	5				1	7	TCE only
1211133-03	A	VOC_8260B_REG	11/15/2012	5	5				1	2	naphthalene must be reported
1211133-04	A	VOC_8260B_REG	11/15/2012	5	5				1	2	naphthalene must be reported
1211133-05	A	VOC_8260B_REG	11/15/2012	5	5				1	2	naphthalene must be reported
2K15002-BLK1		QC	11/15/2012	5	5				1	NA	
2K15002-BLK2		QC	11/15/2012	5	5				1	NA	2K14013-SPLP BLK
2K15002-BS1		QC	11/15/2012	5	5	12K0349		2.5	1	NA	
2K15002-BSD1		QC	11/15/2012	5	5	12K0349		2.5	1	NA	

PREPARATION BENCH SHEET

2K15002

Empirical Laboratories, LLC

Printed: 11/26/2012 1:47:10PM

Instrument: VOA5

Matrix: Water **Prepared using: MS - 5030B** **Surrogate used: 12F0423**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
2K15002-DUP1		QC	11/15/2012	5	5		1211103-01		1	NA	

Reagents Used:

Standard	Description
12A0699	Anti-foam-JT Baker_AFB

PREPARATION BENCH SHEET

2K19015

Empirical Laboratories, LLC

Printed: 11/26/2012 11:33:23AM

Instrument: VOA5

Matrix: Water **Prepared using: MS - 5030B** **Surrogate used: 12F0423**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211087-04	B	VOC_8260B_REG	11/19/2012	5	5				1	2	MS/MSD.LOD verification 2.5ug/kg
1211087-04	B	VOC_8260B_AP9	11/19/2012	5	5				1		Added for BatchQC in: 2K19015
1211088-06	B	VOC_8260B_AP9	11/19/2012	5	5				1		Added for BatchQC in: 2K19015
1211088-06	B	VOC_8260B_REG	11/19/2012	5	5				1	2	MS/MSD. 5XF
1211098-06	B	VOC_8260B_AP9	11/19/2012	5	5				1	2	VOAs with AP9 (see version if benzene only)
1211098-07	B	VOC_8260B_AP9	11/19/2012	5	5				1	2	VOAs with AP9 (see version if benzene only)
1211098-08	B	VOC_8260B_AP9	11/19/2012	5	5				1	2	VOAs with AP9 (see version if benzene only)
1211098-09	B	VOC_8260B_AP9	11/19/2012	5	5				1	2	VOAs with AP9 (see version if benzene only)
1211098-10	A	VOC_8260B_AP9	11/19/2012	5	5				1	2	VOAs with AP9 (see version if benzene only)
1211099-08	B	VOC_8260B_AP9	11/19/2012	5	5				1	2	versions (App I or TCLP)
1211099-10	B	VOC_8260B_AP9	11/19/2012	5	5				1	2	versions (App I or TCLP)
1211099-11	B	VOC_8260B_AP9	11/19/2012	5	5				1	2	versions (App I or TCLP)
1211101-03	B	VOC_8260B_REG	11/19/2012	5	5				1	2	See version
1211101-05	B	VOC_8260B_REG	11/19/2012	5	5				1	2	See version
1211147-03	A	VOC_8260B_REG	11/19/2012	5	5				1	2	naphthalene must be reported
1211147-04	A	VOC_8260B_REG	11/19/2012	5	5				1	2	naphthalene must be reported
1211160-01	A	VOC_8260B_REG	11/19/2012	5	5				1	2	LOD verification 2.5ug/kg
1211160-02	A	VOC_8260B_REG	11/19/2012	5	5				1	2	LOD verification 2.5ug/kg
2K19015-BLK1		QC	11/19/2012	5	5				1	NA	
2K19015-BS1		QC	11/19/2012	5	5	12K0349		2.5	1	NA	
2K19015-MS1		QC	11/19/2012	5	5	12K0349	1211087-04	2.5	1	NA	
2K19015-MS2		QC	11/19/2012	5	5	12K0349	1211088-06	12.5	1	NA	5XF

PREPARATION BENCH SHEET

2K19015

Empirical Laboratories, LLC

Printed: 11/26/2012 11:33:23AM

Instrument: VOA5

Matrix: Water **Prepared using: MS - 5030B** **Surrogate used: 12F0423**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
2K19015-MSD1		QC	11/19/2012	5	5	12K0349	1211087-04	2.5	1	NA	
2K19015-MSD2		QC	11/19/2012	5	5	12K0349	1211088-06	12.5	1	NA	5XF

Reagents Used:

Standard	Description
12A0500	Anti-foam-GE_AF72

PREPARATION BENCH SHEET

2K19025

Empirical Laboratories, LLC

Instrument: VOA5

Printed: 11/26/2012 11:34:22AM

Matrix: Water **Prepared using: MS - 5030B** **Surrogate used: 12F0423**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211099-09	B	VOC_8260B_AP9	11/19/2012	5	5				1	2	MS/MSD, versions (App I or TCLP)
1211099-09	B	VOC_8260B_REG	11/19/2012	5	5				1		Added for BatchQC in: 2K19025
1211101-04	B	VOC_8260B_AP9	11/19/2012	5	5				1		Added for BatchQC in: 2K19025
1211101-04	B	VOC_8260B_REG	11/19/2012	5	5				1	2	MS/MSD, See version
1211133-01	B	VOC_8260B_REG	11/20/2012	5	5				1	2	naphthalene must be reported
1211146-01	B	VOC_8260B_REG	11/19/2012	5	5				1	2	naphthalene must be reported
1211147-01	B	VOC_8260B_REG	11/19/2012	5	5				1	2	naphthalene must be reported
1211155-04	A	VOC_8260B_AP9	11/19/2012	5	5				1	2	
1211156-01	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-01	A	VOC_8260B_REG	11/19/2012	5	5				1	2	See version
1211157-02	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-03	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-04	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-05	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version 5XF
1211157-06	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-07	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-08	A	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-10	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
2K19025-BLK1		QC	11/19/2012	5	5				1	NA	
2K19025-BS1		QC	11/19/2012	5	5	12K0349		2.5	1	NA	
2K19025-MS1		QC	11/20/2012	5	5	12K0349	1211099-09	2.5	1	NA	
2K19025-MS2		QC	11/20/2012	5	5	12K0349	1211101-04	2.5	1	NA	

PREPARATION BENCH SHEET

2K19025

Empirical Laboratories, LLC

Printed: 11/26/2012 11:34:22AM

Instrument: VOA5

Matrix: Water **Prepared using: MS - 5030B** **Surrogate used: 12F0423**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
2K19025-MSD1		QC	11/20/2012	5	5	12K0349	1211099-09	2.5	1	NA	
2K19025-MSD2		QC	11/20/2012	5	5	12K0349	1211101-04	2.5	1	NA	

Reagents Used:

Standard	Description
12A0500	Anti-foam-GE_AF72

PREPARATION BENCH SHEET

2K20013

Empirical Laboratories, LLC

Printed: 12/10/2012 11:15:39AM

Instrument: VOA5

Matrix: Water **Prepared using: MS - 5030B** **Surrogate used: 12F0423**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211133-01RE1	B	VOC_8260B_REG	11/20/2012	5	5				1	2	naphthalene must be reported rr lower 10x
1211157-09	B	VOC_8260B_REG	11/20/2012	5	5				1	2	MS/MSD See Version
1211157-11	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-12	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211157-13	B	VOC_8260B_REG	11/20/2012	5	5				1	2	See version
1211160-04	B	VOC_8260B_REG	11/20/2012	5	5				1	2	LOD verification 2.5ug/kg
1211160-06	B	VOC_8260B_REG	11/20/2012	5	5				1	2	LOD verification 2.5ug/kg
1211160-08	B	VOC_8260B_REG	11/20/2012	5	5				1	2	LOD verification 2.5ug/kg
2K20013-BLK1		QC	11/20/2012	5	5				1	NA	
2K20013-BS1		QC	11/20/2012	5	5	12K0665		2.5	1	NA	
2K20013-MS1		QC	11/20/2012	5	5	12K0665	1211157-09	2.5	1	NA	
2K20013-MSD1		QC	11/20/2012	5	5	12K0665	1211157-09	2.5	1	NA	

Reagents Used:

Standard	Description
12A0500	Anti-foam-GE_AF72

Data for SW8270D Forms

Sample Extraction Data

Prep Method: EXT_3510-SW8270D

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01 [GW0756]	2K14020	1,000.00/1.00	1020	1.00	100.00			11/14/12

Sample Extraction Data

Prep Method: EXT_3510-SW8270D

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-01 [GW0860]	2K16020	1,000.00/1.00	1000	1.00	1.00			11/16/12

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01	File ID:	1113301D.D
Sampled:	11/12/12 10:57	Prepared:	11/14/12 14:18	Analyzed:	11/15/12 15:08
Solids:		Preparation:	EXT_3510	Dilution:	100

Batch: 2K14020 Sequence: 2K32113 Calibration: 2261001 Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
83-32-9	Acenaphthene		123	245	490	U
208-96-8	Acenaphthylene		123	245	490	U
98-86-2	Acetophenone	**173**	123	245	490	JD
120-12-7	Anthracene		123	245	490	U
1912-24-9	Atrazine		123	245	490	U
100-52-7	Benzaldehyde		123	245	490	U
92-87-5	Benzidine		1230	4900	9800	UX
56-55-3	Benzo(a)anthracene		123	245	490	U
50-32-8	Benzo(a)pyrene		123	245	490	U
205-99-2	Benzo(b)fluoranthene		123	245	490	UX
191-24-2	Benzo(g,h,i)perylene		123	245	490	U
65-85-0	Benzoic acid		1230	4900	9800	U
207-08-9	Benzo(k)fluoranthene		123	245	490	U
92-52-4	1,1-Biphenyl		123	245	490	U
101-55-3	4-Bromophenyl-phenylether		123	245	490	U
85-68-7	Butylbenzylphthalate		123	245	490	U
105-60-2	Caprolactam		123	245	490	UX
86-74-8	Carbazole		123	245	490	U
59-50-7	4-Chloro-3-methylphenol		123	245	490	U
106-47-8	4-Chloroaniline		123	245	490	U
111-91-1	Bis(2-chloroethoxy)methane		123	245	490	U
111-44-4	Bis(2-chloroethyl)ether		123	245	490	U
108-60-1	2,2'-Oxybis-1-chloropropane		123	245	490	U
91-58-7	2-Chloronaphthalene		123	245	490	U
95-57-8	2-Chlorophenol		123	245	490	U
7005-72-3	4-Chlorophenyl phenyl ether		123	245	490	U
218-01-9	Chrysene		123	245	490	U
53-70-3	Dibenz(a,h)anthracene		123	245	490	U
132-64-9	Dibenzofuran		123	245	490	U
84-74-2	Di-n-butylphthalate		123	245	490	U
91-94-1	3,3'-Dichlorobenzidine		123	245	490	UX
120-83-2	2,4-Dichlorophenol		123	245	490	U
84-66-2	Diethylphthalate		123	245	490	U
105-67-9	2,4-Dimethylphenol		490	980	1960	U
131-11-3	Dimethyl phthalate		123	245	490	U
534-52-1	4,6-Dinitro-2-methylphenol		490	980	1960	U
51-28-5	2,4-Dinitrophenol		817	2450	4900	U
121-14-2	2,4-Dinitrotoluene		123	245	490	U
606-20-2	2,6-Dinitrotoluene		123	245	490	U
117-84-0	Di-n-octylphthalate		123	245	490	U

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01	File ID:	1113301D.D
Sampled:	11/12/12 10:57	Prepared:	11/14/12 14:18	Analyzed:	11/15/12 15:08
Solids:		Preparation:	EXT_3510	Dilution:	100

Batch: 2K14020 Sequence: 2K32113 Calibration: 2261001 Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
122-66-7	1,2-Diphenylhydrazine		123	245	490	U
117-81-7	Bis(2-ethylhexyl)phthalate		123	245	490	U
206-44-0	Fluoranthene		123	245	490	U
86-73-7	Fluorene		123	245	490	U
118-74-1	Hexachlorobenzene		123	245	490	U
87-68-3	Hexachlorobutadiene		123	245	490	U
77-47-4	Hexachlorocyclopentadiene		123	490	980	U
67-72-1	Hexachloroethane		123	245	490	U
193-39-5	Indeno(1,2,3-cd)pyrene		123	245	490	U
78-59-1	Isophorone		123	245	490	U
90-12-0	1-Methylnaphthalene		123	245	490	U
91-57-6	2-Methylnaphthalene		123	245	490	U
95-48-7	2-Methylphenol		123	245	490	U
108-39-4/106	3-Methylphenol/4-Methylphenol		123	245	490	U
91-20-3	Naphthalene		123	245	490	U
100-01-6	4-Nitroaniline		490	980	1960	U
99-09-2	3-Nitroaniline		490	980	1960	U
88-74-4	2-Nitroaniline		490	980	1960	U
98-95-3	Nitrobenzene		123	245	490	U
100-02-7	4-Nitrophenol		490	980	1960	U
88-75-5	2-Nitrophenol		123	245	490	U
86-30-6	N-Nitrosodiphenylamine		123	245	490	U
621-64-7	N-Nitroso-di-n-propylamine		123	245	490	U
87-86-5	Pentachlorophenol		490	980	1960	U
85-01-8	Phenanthrene		123	245	490	U
108-95-2	Phenol		123	245	490	U
129-00-0	Pyrene		123	245	490	U
88-06-2	2,4,6-Trichlorophenol		123	245	490	U
95-95-4	2,4,5-Trichlorophenol		123	245	490	U

Total Target Analytes Reported: 69

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	49.02	ND		50 - 110	DU
2-Fluorophenol	98.04	ND		20 - 110	DU
Nitrobenzene-d5	49.02	ND		40 - 110	DU
Phenol-d6	98.04	ND		0 - 110	DU
Terphenyl-d14	49.02	ND		50 - 135	DX, U
2,4,6-Tribromophenol	98.04	ND		40 - 125	DU

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01	File ID:	1114701.D
Sampled:	11/14/12 16:06	Prepared:	11/16/12 13:18	Analyzed:	11/20/12 00:37
Solids:		Preparation:	EXT_3510	Dilution:	1

Batch: 2K16020 Sequence: 2K32508 Calibration: 2261001 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	50.0	100	UX
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	U
205-99-2	Benzo(b)fluoranthene		1.25	2.50	5.00	U
191-24-2	Benzo(g,h,i)perylene		1.25	2.50	5.00	U
65-85-0	Benzoic acid		12.5	50.0	100	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	U
85-68-7	Butylbenzylphthalate		1.25	2.50	5.00	U
105-60-2	Caprolactam		1.25	2.50	5.00	UX
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	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	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	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
91-94-1	3,3'-Dichlorobenzidine		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		8.33	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	U

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01	File ID:	1114701.D
Sampled:	11/14/12 16:06	Prepared:	11/16/12 13:18	Analyzed:	11/20/12 00:37
Solids:		Preparation:	EXT_3510	Dilution:	1

Batch: 2K16020 Sequence: 2K32508 Calibration: 2261001 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	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	U
77-47-4	Hexachlorocyclopentadiene		1.25	5.00	10.0	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
108-39-4/106	3-Methylphenol/4-Methylphenol		1.25	2.50	5.00	U
91-20-3	Naphthalene		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	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

Total Target Analytes Reported: 69

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	50.00	35.65	71.3	50 - 110	
2-Fluorophenol	100.0	38.72	38.7	20 - 110	
Nitrobenzene-d5	50.00	35.76	71.5	40 - 110	
Phenol-d6	100.0	22.44	22.4	0 - 110	
Terphenyl-d14	50.00	44.98	90.0	50 - 135	
2,4,6-Tribromophenol	100.0	82.57	82.6	40 - 125	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32113	Instrument:	MS-BNA3
		Calibration:	2261001

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32113-CCV1) ug/mL				Lab File ID: SEQ-CCV1.D		Analyzed: 11/15/12 11:24		
2-Fluorobiphenyl	50.00	99.9	80 - 120	8.614	8.614	0.0000	+/-0.500	
2-Fluorophenol	100.0	110	80 - 120	3.987	3.987	0.0000	+/-0.500	
Nitrobenzene-d5	50.00	101	80 - 120	6.295	6.295	0.0000	+/-0.500	
Phenol-d6	100.0	108	80 - 120	5.136	5.136	0.0000	+/-0.500	
Terphenyl-d14	50.00	121	80 - 120	13.209	13.209	0.0000	+/-0.500	*
2,4,6-Tribromophenol	100.0	104	80 - 120	10.425	10.425	0.0000	+/-0.500	
Blank (2K14020-BLK1) ug/L				Lab File ID: K14020B1.D		Analyzed: 11/15/12 12:20		
2-Fluorobiphenyl	50.00	82.3	50 - 110	8.612	8.614	-0.0020	+/-0.500	
2-Fluorophenol	100.0	38.2	20 - 110	3.985	3.987	-0.0020	+/-0.500	
Nitrobenzene-d5	50.00	80.8	40 - 110	6.294	6.295	-0.0010	+/-0.500	
Phenol-d6	100.0	21.6	0 - 110	5.124	5.136	-0.0120	+/-0.500	
Terphenyl-d14	50.00	97.2	50 - 135	13.207	13.209	-0.0020	+/-0.500	
2,4,6-Tribromophenol	100.0	87.4	40 - 125	10.423	10.425	-0.0020	+/-0.500	
LCS (2K14020-BS1) ug/L				Lab File ID: K14020L1.D		Analyzed: 11/15/12 12:48		
2-Fluorobiphenyl	50.00	80.6	50 - 110	8.61	8.614	-0.0040	+/-0.500	
2-Fluorophenol	100.0	43.3	20 - 110	3.984	3.987	-0.0030	+/-0.500	
Nitrobenzene-d5	50.00	80.4	40 - 110	6.292	6.295	-0.0030	+/-0.500	
Phenol-d6	100.0	25.2	0 - 110	5.133	5.136	-0.0030	+/-0.500	
Terphenyl-d14	50.00	91.6	50 - 135	13.206	13.209	-0.0030	+/-0.500	
2,4,6-Tribromophenol	100.0	88.2	40 - 125	10.432	10.425	0.0070	+/-0.500	
LCS Dup (2K14020-BSD1) ug/L				Lab File ID: K14020L2.D		Analyzed: 11/15/12 13:16		
2-Fluorobiphenyl	50.00	84.3	50 - 110	8.614	8.614	0.0000	+/-0.500	
2-Fluorophenol	100.0	45.4	20 - 110	3.988	3.987	0.0010	+/-0.500	
Nitrobenzene-d5	50.00	84.2	40 - 110	6.296	6.295	0.0010	+/-0.500	
Phenol-d6	100.0	25.9	0 - 110	5.126	5.136	-0.0100	+/-0.500	
Terphenyl-d14	50.00	94.4	50 - 135	13.199	13.209	-0.0100	+/-0.500	
2,4,6-Tribromophenol	100.0	93.3	40 - 125	10.426	10.425	0.0010	+/-0.500	
GW0756 (1211133-01) ug/L				Lab File ID: 1113301D.D		Analyzed: 11/15/12 15:08		
2-Fluorobiphenyl	49.02		50 - 110		8.614	-8.6140	+/-0.500	*
2-Fluorophenol	98.04		20 - 110		3.987	-3.9870	+/-0.500	*
Nitrobenzene-d5	49.02		40 - 110		6.295	-6.2950	+/-0.500	*
Phenol-d6	98.04		0 - 110		5.136	-5.1360	+/-0.500	*
Terphenyl-d14	49.02		50 - 135		13.209	-13.2090	+/-0.500	*
2,4,6-Tribromophenol	98.04		40 - 125		10.425	-10.4250	+/-0.500	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32508	Instrument:	MS-BNA3
		Calibration:	2261001

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32508-CCV1) ug/mL				Lab File ID: SEQ-CCV1.D		Analyzed: 11/19/12 15:54		
2-Fluorobiphenyl	50.00	98.7	80 - 120	8.612	8.612	0.0000	+/-0.500	
2-Fluorophenol	100.0	109	80 - 120	3.986	3.986	0.0000	+/-0.500	
Nitrobenzene-d5	50.00	105	80 - 120	6.294	6.294	0.0000	+/-0.500	
Phenol-d6	100.0	105	80 - 120	5.134	5.134	0.0000	+/-0.500	
Terphenyl-d14	50.00	119	80 - 120	13.208	13.208	0.0000	+/-0.500	
2,4,6-Tribromophenol	100.0	107	80 - 120	10.423	10.423	0.0000	+/-0.500	
Blank (2K16020-BLK1) ug/L				Lab File ID: K16020B1.D		Analyzed: 11/19/12 22:20		
2-Fluorobiphenyl	50.00	74.7	50 - 110	8.604	8.612	-0.0080	+/-0.500	
2-Fluorophenol	100.0	38.9	20 - 110	3.988	3.986	0.0020	+/-0.500	
Nitrobenzene-d5	50.00	75.1	40 - 110	6.296	6.294	0.0020	+/-0.500	
Phenol-d6	100.0	22.4	0 - 110	5.126	5.134	-0.0080	+/-0.500	
Terphenyl-d14	50.00	102	50 - 135	13.199	13.208	-0.0090	+/-0.500	
2,4,6-Tribromophenol	100.0	96.2	40 - 125	10.425	10.423	0.0020	+/-0.500	
LCS (2K16020-BS1) ug/L				Lab File ID: K16020L1.D		Analyzed: 11/19/12 22:48		
2-Fluorobiphenyl	50.00	63.5	50 - 110	8.611	8.612	-0.0010	+/-0.500	
2-Fluorophenol	100.0	35.4	20 - 110	3.984	3.986	-0.0020	+/-0.500	
Nitrobenzene-d5	50.00	62.8	40 - 110	6.292	6.294	-0.0020	+/-0.500	
Phenol-d6	100.0	21.0	0 - 110	5.133	5.134	-0.0010	+/-0.500	
Terphenyl-d14	50.00	81.8	50 - 135	13.206	13.208	-0.0020	+/-0.500	
2,4,6-Tribromophenol	100.0	74.6	40 - 125	10.422	10.423	-0.0010	+/-0.500	
LCS Dup (2K16020-BSD1) ug/L				Lab File ID: K16020L2.D		Analyzed: 11/19/12 23:15		
2-Fluorobiphenyl	50.00	77.5	50 - 110	8.604	8.612	-0.0080	+/-0.500	
2-Fluorophenol	100.0	41.4	20 - 110	3.988	3.986	0.0020	+/-0.500	
Nitrobenzene-d5	50.00	77.7	40 - 110	6.296	6.294	0.0020	+/-0.500	
Phenol-d6	100.0	24.2	0 - 110	5.126	5.134	-0.0080	+/-0.500	
Terphenyl-d14	50.00	96.0	50 - 135	13.199	13.208	-0.0090	+/-0.500	
2,4,6-Tribromophenol	100.0	93.6	40 - 125	10.425	10.423	0.0020	+/-0.500	
GW0860 (1211147-01) ug/L				Lab File ID: 1114701.D		Analyzed: 11/20/12 00:37		
2-Fluorobiphenyl	50.00	71.3	50 - 110	8.602	8.612	-0.0100	+/-0.500	
2-Fluorophenol	100.0	38.7	20 - 110	3.986	3.986	0.0000	+/-0.500	
Nitrobenzene-d5	50.00	71.5	40 - 110	6.294	6.294	0.0000	+/-0.500	
Phenol-d6	100.0	22.4	0 - 110	5.124	5.134	-0.0100	+/-0.500	
Terphenyl-d14	50.00	90.0	50 - 135	13.198	13.208	-0.0100	+/-0.500	
2,4,6-Tribromophenol	100.0	82.6	40 - 125	10.424	10.423	0.0010	+/-0.500	

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K14020	Laboratory ID:	2K14020-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	34.28	26.29	76.7	45 - 110
Acenaphthylene	34.28	28.33	82.6	50 - 105
Acetophenone	35.72	30.28	84.8	45 - 130
Anthracene	34.28	29.72	86.7	55 - 110
Atrazine	35.72	30.94	86.6	40 - 150
Benzaldehyde	35.72	32.44	90.8	40 - 125
Benzidine	35.72	15.44	43.2	0 - 110
Benzo(a)anthracene	34.28	30.13	87.9	55 - 110
Benzo(a)pyrene	34.28	28.89	84.3	55 - 110
Benzo(b)fluoranthene	34.28	35.45	103	45 - 120
Benzo(g,h,i)perylene	34.28	30.32	88.4	40 - 125
Benzoic acid	70.70	100 U	0	0 - 125
Benzo(k)fluoranthene	34.28	25.80	75.2	45 - 125
1,1-Biphenyl	35.72	30.04	84.1	45 - 135
4-Bromophenyl-phenylether	34.28	30.98	90.3	50 - 115
Butylbenzylphthalate	34.28	34.53	101	45 - 115
Caprolactam	35.72	5.700	16.0	5 - 110
Carbazole	35.72	35.55	99.5	50 - 115
4-Chloro-3-methylphenol	70.70	54.01	76.4	45 - 110
4-Chloroaniline	35.72	31.30	87.6	15 - 110
Bis(2-chloroethoxy)methane	34.28	30.39	88.6	45 - 105
Bis(2-chloroethyl)ether	34.28	29.44	85.9	35 - 110
2,2'-Oxybis-1-chloropropane	34.28	28.57	83.3	25 - 130
2-Chloronaphthalene	34.28	26.31	76.7	50 - 105
2-Chlorophenol	70.70	52.73	74.6	35 - 105
4-Chlorophenyl phenyl ether	34.28	28.10	82.0	50 - 110
Chrysene	34.28	29.67	86.5	55 - 110
Dibenz(a,h)anthracene	34.28	31.11	90.7	40 - 125
Dibenzofuran	34.28	28.14	82.1	55 - 105
Di-n-butylphthalate	34.28	33.57	97.9	55 - 115

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K14020	Laboratory ID:	2K14020-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	35.72	34.62	96.9	20 - 110
2,4-Dichlorophenol	70.70	55.91	79.1	50 - 105
Diethylphthalate	34.28	28.08	81.9	40 - 120
2,4-Dimethylphenol	70.70	52.99	75.0	30 - 110
Dimethyl phthalate	34.28	29.41	85.8	25 - 125
4,6-Dinitro-2-methylphenol	70.70	67.26	95.1	40 - 130
2,4-Dinitrophenol	70.70	57.31	81.1	15 - 140
2,4-Dinitrotoluene	34.28	29.44	85.9	50 - 120
2,6-Dinitrotoluene	34.28	28.62	83.5	50 - 115
Di-n-octylphthalate	34.28	35.62	104	35 - 135
1,2-Diphenylhydrazine	35.72	32.21	90.2	55 - 115
Bis(2-ethylhexyl)phthalate	34.28	34.61	101	40 - 125
Fluoranthene	34.28	30.81	89.9	55 - 115
Fluorene	34.28	28.24	82.4	50 - 110
Hexachlorobenzene	34.28	29.38	85.7	50 - 110
Hexachlorobutadiene	34.28	23.56	68.7	25 - 105
Hexachlorocyclopentadiene	34.28	22.90	66.8	0 - 120
Hexachloroethane	34.28	20.63	60.2	30 - 100
Indeno(1,2,3-cd)pyrene	34.28	28.85	84.1	45 - 125
Isophorone	34.28	27.21	79.4	50 - 110
1-Methylnaphthalene	35.72	27.44	76.8	35 - 115
2-Methylnaphthalene	34.28	25.05	73.1	45 - 105
2-Methylphenol	70.70	44.49	62.9	40 - 110
3-Methylphenol/4-Methylphenol	70.70	40.01	56.6	30 - 110
Naphthalene	34.28	25.94	75.7	40 - 100
4-Nitroaniline	35.72	34.76	97.3	35 - 120
3-Nitroaniline	35.72	32.83	91.9	20 - 125
2-Nitroaniline	35.72	33.47	93.7	50 - 115
Nitrobenzene	34.28	25.52	74.4	45 - 110
4-Nitrophenol	70.70	17.46	24.7	0 - 125

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K14020	Laboratory ID:	2K14020-BS1
Preparation:	EXT_3510	Initial/Final:	1000 mL / 1 mL

ANALYTE	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC.	QC LIMITS REC.
2-Nitrophenol	70.70	63.41	89.7	40 - 115
N-Nitrosodiphenylamine	34.28	27.22	79.4	50 - 110
N-Nitroso-di-n-propylamine	34.28	28.68	83.6	35 - 130
Pentachlorophenol	70.70	60.65	85.8	40 - 115
Phenanthrene	34.28	30.47	88.9	50 - 115
Phenol	70.70	18.71	26.5	0 - 115
Pyrene	34.28	31.20	91.0	50 - 130
2,4,6-Trichlorophenol	70.70	56.01	79.2	50 - 115
2,4,5-Trichlorophenol	70.70	60.70	85.9	50 - 110

ANALYTE	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	34.28	27.97	81.6	6.17	30	45 - 110
Acenaphthylene	34.28	30.04	87.6	5.84	30	50 - 105
Acetophenone	35.72	31.22	87.4	3.06	30	45 - 130
Anthracene	34.28	30.84	90.0	3.70	30	55 - 110
Atrazine	35.72	31.87	89.2	2.97	30	40 - 150
Benzaldehyde	35.72	35.39	99.1	8.68	30	40 - 125
Benzidine	35.72	13.49	37.8	13.5	30	0 - 110
Benzo(a)anthracene	34.28	30.90	90.1	2.55	30	55 - 110
Benzo(a)pyrene	34.28	30.82	89.9	6.44	30	55 - 110
Benzo(b)fluoranthene	34.28	32.29	94.2	9.33	30	45 - 120
Benzo(g,h,i)perylene	34.28	31.98	93.3	5.31	30	40 - 125
Benzoic acid	70.70	100 U	0		30	0 - 125
Benzo(k)fluoranthene	34.28	30.30	88.4	16.1	30	45 - 125
1,1-Biphenyl	35.72	32.36	90.6	7.44	30	45 - 135
4-Bromophenyl-phenylether	34.28	32.57	95.0	5.03	30	50 - 115
Butylbenzylphthalate	34.28	35.03	102	1.46	30	45 - 115
Caprolactam	35.72	6.332	17.7	10.5	30	5 - 110
Carbazole	35.72	35.78	100	0.647	30	50 - 115

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K14020	Laboratory ID:	2K14020-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	70.70	56.90	80.5	5.20	30	45 - 110
4-Chloroaniline	35.72	32.77	91.8	4.61	30	15 - 110
Bis(2-chloroethoxy)methane	34.28	31.75	92.6	4.36	30	45 - 105
Bis(2-chloroethyl)ether	34.28	31.12	90.8	5.56	30	35 - 110
2,2'-Oxybis-1-chloropropane	34.28	30.51	89.0	6.58	30	25 - 130
2-Chloronaphthalene	34.28	27.73	80.9	5.25	30	50 - 105
2-Chlorophenol	70.70	55.48	78.5	5.08	30	35 - 105
4-Chlorophenyl phenyl ether	34.28	29.56	86.2	5.08	30	50 - 110
Chrysene	34.28	31.10	90.7	4.72	30	55 - 110
Dibenz(a,h)anthracene	34.28	32.38	94.4	3.99	30	40 - 125
Dibenzofuran	34.28	29.52	86.1	4.81	30	55 - 105
Di-n-butylphthalate	34.28	34.55	101	2.87	30	55 - 115
3,3'-Dichlorobenzidine	35.72	36.52	102	5.35	30	20 - 110
2,4-Dichlorophenol	70.70	60.16	85.1	7.32	30	50 - 105
Diethylphthalate	34.28	29.08	84.8	3.50	30	40 - 120
2,4-Dimethylphenol	70.70	56.52	79.9	6.45	30	30 - 110
Dimethyl phthalate	34.28	30.98	90.4	5.19	30	25 - 125
4,6-Dinitro-2-methylphenol	70.70	71.98	102	6.77	30	40 - 130
2,4-Dinitrophenol	70.70	67.77	95.9	16.7	30	15 - 140
2,4-Dinitrotoluene	34.28	30.98	90.4	5.09	30	50 - 120
2,6-Dinitrotoluene	34.28	30.94	90.2	7.78	30	50 - 115
Di-n-octylphthalate	34.28	37.50	109	5.14	30	35 - 135
1,2-Diphenylhydrazine	35.72	33.73	94.4	4.62	30	55 - 115
Bis(2-ethylhexyl)phthalate	34.28	34.94	102	0.966	30	40 - 125
Fluoranthene	34.28	32.00	93.3	3.79	30	55 - 115
Fluorene	34.28	29.22	85.2	3.43	30	50 - 110
Hexachlorobenzene	34.28	30.89	90.1	5.00	30	50 - 110
Hexachlorobutadiene	34.28	26.27	76.6	10.9	30	25 - 105
Hexachlorocyclopentadiene	34.28	24.88	72.6	8.30	30	0 - 120
Hexachloroethane	34.28	22.96	67.0	10.7	30	30 - 100

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K14020	Laboratory ID:	2K14020-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.
Indeno(1,2,3-cd)pyrene	34.28	30.29	88.3	4.86	30	45 - 125
Isophorone	34.28	28.23	82.3	3.66	30	50 - 110
1-Methylnaphthalene	35.72	29.62	82.9	7.65	30	35 - 115
2-Methylnaphthalene	34.28	26.64	77.7	6.15	30	45 - 105
2-Methylphenol	70.70	46.51	65.8	4.44	30	40 - 110
3-Methylphenol/4-Methylphenol	70.70	41.30	58.4	3.17	30	30 - 110
Naphthalene	34.28	27.94	81.5	7.43	30	40 - 100
4-Nitroaniline	35.72	38.50	108	10.2	30	35 - 120
3-Nitroaniline	35.72	34.08	95.4	3.75	30	20 - 125
2-Nitroaniline	35.72	34.79	97.4	3.88	30	50 - 115
Nitrobenzene	34.28	27.28	79.6	6.65	30	45 - 110
4-Nitrophenol	70.70	18.89	26.7	7.83	30	0 - 125
2-Nitrophenol	70.70	69.81	98.7	9.60	30	40 - 115
N-Nitrosodiphenylamine	34.28	27.93	81.5	2.59	30	50 - 110
N-Nitroso-di-n-propylamine	34.28	29.25	85.3	1.98	30	35 - 130
Pentachlorophenol	70.70	65.12	92.1	7.11	30	40 - 115
Phenanthrene	34.28	31.58	92.1	3.57	30	50 - 115
Phenol	70.70	19.25	27.2	2.83	30	0 - 115
Pyrene	34.28	31.48	91.8	0.875	30	50 - 130
2,4,6-Trichlorophenol	70.70	59.78	84.6	6.52	30	50 - 115
2,4,5-Trichlorophenol	70.70	63.26	89.5	4.12	30	50 - 110

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K16020	Laboratory ID:	2K16020-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	34.28	20.77	60.6	45 - 110
Acenaphthylene	34.28	22.48	65.6	50 - 105
Acetophenone	35.72	24.48	68.5	45 - 130
Anthracene	34.28	24.94	72.7	55 - 110
Atrazine	35.72	26.95	75.5	40 - 150
Benzaldehyde	35.72	27.10	75.9	40 - 125
Benzidine	35.72	100 U	0	0 - 110
Benzo(a)anthracene	34.28	25.52	74.4	55 - 110
Benzo(a)pyrene	34.28	23.97	69.9	55 - 110
Benzo(b)fluoranthene	34.28	24.44	71.3	45 - 120
Benzo(g,h,i)perylene	34.28	25.32	73.8	40 - 125
Benzoic acid	70.70	100 U	0	0 - 125
Benzo(k)fluoranthene	34.28	24.64	71.9	45 - 125
1,1-Biphenyl	35.72	24.27	67.9	45 - 135
4-Bromophenyl-phenylether	34.28	25.12	73.3	50 - 115
Butylbenzylphthalate	34.28	29.64	86.4	45 - 115
Caprolactam	35.72	4.623	12.9	5 - 110
Carbazole	35.72	30.30	84.8	50 - 115
4-Chloro-3-methylphenol	70.70	43.96	62.2	45 - 110
4-Chloroaniline	35.72	22.93	64.2	15 - 110
Bis(2-chloroethoxy)methane	34.28	23.76	69.3	45 - 105
Bis(2-chloroethyl)ether	34.28	23.91	69.7	35 - 110
2,2'-Oxybis-1-chloropropane	34.28	23.51	68.6	25 - 130
2-Chloronaphthalene	34.28	20.43	59.6	50 - 105
2-Chlorophenol	70.70	42.90	60.7	35 - 105
4-Chlorophenyl phenyl ether	34.28	22.05	64.3	50 - 110
Chrysene	34.28	26.09	76.1	55 - 110
Dibenz(a,h)anthracene	34.28	25.40	74.1	40 - 125
Dibenzofuran	34.28	22.32	65.1	55 - 105
Di-n-butylphthalate	34.28	27.81	81.1	55 - 115

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K16020	Laboratory ID:	2K16020-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	35.72	29.71	83.2	20 - 110
2,4-Dichlorophenol	70.70	45.61	64.5	50 - 105
Diethylphthalate	34.28	23.20	67.7	40 - 120
2,4-Dimethylphenol	70.70	41.72	59.0	30 - 110
Dimethyl phthalate	34.28	23.86	69.6	25 - 125
4,6-Dinitro-2-methylphenol	70.70	55.80	78.9	40 - 130
2,4-Dinitrophenol	70.70	48.63	68.8	15 - 140
2,4-Dinitrotoluene	34.28	23.85	69.6	50 - 120
2,6-Dinitrotoluene	34.28	23.20	67.7	50 - 115
Di-n-octylphthalate	34.28	29.88	87.2	35 - 135
1,2-Diphenylhydrazine	35.72	27.63	77.4	55 - 115
Bis(2-ethylhexyl)phthalate	34.28	29.82	87.0	40 - 125
Fluoranthene	34.28	26.00	75.8	55 - 115
Fluorene	34.28	22.38	65.3	50 - 110
Hexachlorobenzene	34.28	24.13	70.4	50 - 110
Hexachlorobutadiene	34.28	18.08	52.7	25 - 105
Hexachlorocyclopentadiene	34.28	15.86	46.3	0 - 120
Hexachloroethane	34.28	16.86	49.2	30 - 100
Indeno(1,2,3-cd)pyrene	34.28	23.97	69.9	45 - 125
Isophorone	34.28	21.35	62.3	50 - 110
1-Methylnaphthalene	35.72	22.01	61.6	35 - 115
2-Methylnaphthalene	34.28	19.84	57.9	45 - 105
2-Methylphenol	70.70	36.43	51.5	40 - 110
3-Methylphenol/4-Methylphenol	70.70	32.84	46.5	30 - 110
Naphthalene	34.28	21.06	61.4	40 - 100
4-Nitroaniline	35.72	28.64	80.2	35 - 120
3-Nitroaniline	35.72	25.06	70.2	20 - 125
2-Nitroaniline	35.72	26.61	74.5	50 - 115
Nitrobenzene	34.28	20.80	60.7	45 - 110
4-Nitrophenol	70.70	14.78	20.9	0 - 125

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K16020	Laboratory ID:	2K16020-BS1
Preparation:	EXT_3510	Initial/Final:	1000 mL / 1 mL

ANALYTE	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC.	QC LIMITS REC.
2-Nitrophenol	70.70	52.23	73.9	40 - 115
N-Nitrosodiphenylamine	34.28	22.30	65.0	50 - 110
N-Nitroso-di-n-propylamine	34.28	22.08	64.4	35 - 130
Pentachlorophenol	70.70	50.91	72.0	40 - 115
Phenanthrene	34.28	25.28	73.7	50 - 115
Phenol	70.70	14.55	20.6	0 - 115
Pyrene	34.28	26.27	76.6	50 - 130
2,4,6-Trichlorophenol	70.70	45.39	64.2	50 - 115
2,4,5-Trichlorophenol	70.70	49.51	70.0	50 - 110

ANALYTE	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Acenaphthene	34.28	26.11	76.1	22.8	30	45 - 110
Acenaphthylene	34.28	27.82	81.1	21.2	30	50 - 105
Acetophenone	35.72	29.13	81.6	17.3	30	45 - 130
Anthracene	34.28	30.34	88.5	19.5	30	55 - 110
Atrazine	35.72	31.92	89.4	16.9	30	40 - 150
Benzaldehyde	35.72	32.98	92.3	19.6	30	40 - 125
Benzidine	35.72	100 U	0		30	0 - 110
Benzo(a)anthracene	34.28	31.75	92.6	21.7	30	55 - 110
Benzo(a)pyrene	34.28	30.35	88.5	23.5	30	55 - 110
Benzo(b)fluoranthene	34.28	32.57	95.0	28.5	30	45 - 120
Benzo(g,h,i)perylene	34.28	32.36	94.4	24.4	30	40 - 125
Benzoic acid	70.70	100 U	0		30	0 - 125
Benzo(k)fluoranthene	34.28	28.72	83.8	15.3	30	45 - 125
1,1-Biphenyl	35.72	29.90	83.7	20.8	30	45 - 135
4-Bromophenyl-phenylether	34.28	30.68	89.5	19.9	30	50 - 115
Butylbenzylphthalate	34.28	37.29	109	22.9	30	45 - 115
Caprolactam	35.72	5.191	14.5	11.6	30	5 - 110
Carbazole	35.72	36.82	103	19.4	30	50 - 115

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K16020	Laboratory ID:	2K16020-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	70.70	54.74	77.4	21.8	30	45 - 110
4-Chloroaniline	35.72	25.19	70.5	9.42	30	15 - 110
Bis(2-chloroethoxy)methane	34.28	29.06	84.8	20.1	30	45 - 105
Bis(2-chloroethyl)ether	34.28	28.67	83.6	18.1	30	35 - 110
2,2'-Oxybis-1-chloropropane	34.28	28.13	82.0	17.9	30	25 - 130
2-Chloronaphthalene	34.28	25.21	73.5	20.9	30	50 - 105
2-Chlorophenol	70.70	50.68	71.7	16.6	30	35 - 105
4-Chlorophenyl phenyl ether	34.28	27.91	81.4	23.4	30	50 - 110
Chrysene	34.28	31.49	91.9	18.8	30	55 - 110
Dibenz(a,h)anthracene	34.28	32.40	94.5	24.2	30	40 - 125
Dibenzofuran	34.28	27.77	81.0	21.8	30	55 - 105
Di-n-butylphthalate	34.28	34.38	100	21.1	30	55 - 115
3,3'-Dichlorobenzidine	35.72	35.51	99.4	17.8	30	20 - 110
2,4-Dichlorophenol	70.70	55.83	79.0	20.1	30	50 - 105
Diethylphthalate	34.28	28.51	83.2	20.5	30	40 - 120
2,4-Dimethylphenol	70.70	50.78	71.8	19.6	30	30 - 110
Dimethyl phthalate	34.28	29.50	86.0	21.2	30	25 - 125
4,6-Dinitro-2-methylphenol	70.70	71.06	101	24.1	30	40 - 130
2,4-Dinitrophenol	70.70	65.35	92.4	29.3	30	15 - 140
2,4-Dinitrotoluene	34.28	29.70	86.6	21.9	30	50 - 120
2,6-Dinitrotoluene	34.28	30.45	88.8	27.0	30	50 - 115
Di-n-octylphthalate	34.28	37.60	110	22.9	30	35 - 135
1,2-Diphenylhydrazine	35.72	33.01	92.4	17.7	30	55 - 115
Bis(2-ethylhexyl)phthalate	34.28	36.62	107	20.4	30	40 - 125
Fluoranthene	34.28	31.85	92.9	20.2	30	55 - 115
Fluorene	34.28	27.66	80.7	21.1	30	50 - 110
Hexachlorobenzene	34.28	29.50	86.0	20.0	30	50 - 110
Hexachlorobutadiene	34.28	22.94	66.9	23.7	30	25 - 105
Hexachlorocyclopentadiene	34.28	21.33	62.2	29.4	30	0 - 120
Hexachloroethane	34.28	20.66	60.3	20.3	30	30 - 100

LCS / LCS DUPLICATE RECOVERY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K16020	Laboratory ID:	2K16020-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.
Indeno(1,2,3-cd)pyrene	34.28	30.43	88.7	23.7	30	45 - 125
Isophorone	34.28	26.92	78.5	23.1	30	50 - 110
1-Methylnaphthalene	35.72	27.65	77.4	22.7	30	35 - 115
2-Methylnaphthalene	34.28	24.91	72.7	22.7	30	45 - 105
2-Methylphenol	70.70	42.54	60.2	15.5	30	40 - 110
3-Methylphenol/4-Methylphenol	70.70	38.09	53.9	14.8	30	30 - 110
Naphthalene	34.28	25.84	75.4	20.4	30	40 - 100
4-Nitroaniline	35.72	36.17	101	23.3	30	35 - 120
3-Nitroaniline	35.72	29.53	82.7	16.4	30	20 - 125
2-Nitroaniline	35.72	33.58	94.0	23.2	30	50 - 115
Nitrobenzene	34.28	25.27	73.7	19.4	30	45 - 110
4-Nitrophenol	70.70	19.14	27.1	25.7	30	0 - 125
2-Nitrophenol	70.70	63.93	90.4	20.1	30	40 - 115
N-Nitrosodiphenylamine	34.28	28.03	81.8	22.8	30	50 - 110
N-Nitroso-di-n-propylamine	34.28	26.83	78.3	19.4	30	35 - 130
Pentachlorophenol	70.70	64.91	91.8	24.2	30	40 - 115
Phenanthrene	34.28	31.37	91.5	21.5	30	50 - 115
Phenol	70.70	17.13	24.2	16.3	30	0 - 115
Pyrene	34.28	33.07	96.4	22.9	30	50 - 130
2,4,6-Trichlorophenol	70.70	57.12	80.8	22.9	30	50 - 115
2,4,5-Trichlorophenol	70.70	59.85	84.7	18.9	30	50 - 110

PREPARATION BATCH SUMMARY

SW8270D

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K14020 Batch Matrix: Water Preparation: EXT_3510

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01	11/14/12 14:18	1,020.00	1.00
Blank	2K14020-BLK1	11/14/12 14:18	1,000.00	1.00
LCS	2K14020-BS1	11/14/12 14:18	1,000.00	1.00
LCS Dup	2K14020-BSD1	11/14/12 14:18	1,000.00	1.00

PREPARATION BATCH SUMMARY

SW8270D

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K16020 Batch Matrix: Water Preparation: EXT_3510

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0860	1211147-01	11/16/12 13:18	1,000.00	1.00
Blank	2K16020-BLK1	11/16/12 13:18	1,000.00	1.00
LCS	2K16020-BS1	11/16/12 13:18	1,000.00	1.00
LCS Dup	2K16020-BSD1	11/16/12 13:18	1,000.00	1.00

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K14020-BLK1 File ID: K14020B1.D

Sampled: Prepared: Analyzed: 11/15/12 12:20

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K14020 Sequence: 2K32113 Calibration: 2261001 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	50.0	100	UX
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	U
205-99-2	Benzo(b)fluoranthene		1.25	2.50	5.00	UX
191-24-2	Benzo(g,h,i)perylene		1.25	2.50	5.00	U
65-85-0	Benzoic acid		12.5	50.0	100	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	U
85-68-7	Butylbenzylphthalate		1.25	2.50	5.00	U
105-60-2	Caprolactam		1.25	2.50	5.00	UX
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	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	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	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
91-94-1	3,3'-Dichlorobenzidine		1.25	2.50	5.00	UX
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		8.33	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	U

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K14020-BLK1 File ID: K14020B1.D

Sampled: Prepared: Analyzed: 11/15/12 12:20

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K14020 Sequence: 2K32113 Calibration: 2261001 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	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	U
77-47-4	Hexachlorocyclopentadiene		1.25	5.00	10.0	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
108-39-4/106	3-Methylphenol/4-Methylphenol		1.25	2.50	5.00	U
91-20-3	Naphthalene		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	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	41.13	82.3	50 - 110	
2-Fluorophenol	100.0	38.17	38.2	20 - 110	
Nitrobenzene-d5	50.00	40.40	80.8	40 - 110	
Phenol-d6	100.0	21.57	21.6	0 - 110	
Terphenyl-d14	50.00	48.58	97.2	50 - 135	X
2,4,6-Tribromophenol	100.0	87.43	87.4	40 - 125	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K14020-BS1 File ID: K14020L1.D

Sampled: Prepared: Analyzed: 11/15/12 12:48

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K14020 Sequence: 2K32113 Calibration: 2261001 Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
83-32-9	Acenaphthene	**26.29**	1.25	2.50	5.00	
208-96-8	Acenaphthylene	**28.33**	1.25	2.50	5.00	
98-86-2	Acetophenone	**30.28**	1.25	2.50	5.00	
120-12-7	Anthracene	**29.72**	1.25	2.50	5.00	
1912-24-9	Atrazine	**30.94**	1.25	2.50	5.00	
100-52-7	Benzaldehyde	**32.44**	1.25	2.50	5.00	
92-87-5	Benzidine	**15.44**	12.5	50.0	100	XJ
56-55-3	Benzo(a)anthracene	**30.13**	1.25	2.50	5.00	
50-32-8	Benzo(a)pyrene	**28.89**	1.25	2.50	5.00	
205-99-2	Benzo(b)fluoranthene	**35.45**	1.25	2.50	5.00	X
191-24-2	Benzo(g,h,i)perylene	**30.32**	1.25	2.50	5.00	
65-85-0	Benzoic acid		12.5	50.0	100	U
207-08-9	Benzo(k)fluoranthene	**25.80**	1.25	2.50	5.00	
92-52-4	1,1-Biphenyl	**30.04**	1.25	2.50	5.00	
101-55-3	4-Bromophenyl-phenylether	**30.98**	1.25	2.50	5.00	
85-68-7	Butylbenzylphthalate	**34.53**	1.25	2.50	5.00	
105-60-2	Caprolactam	**5.700**	1.25	2.50	5.00	X
86-74-8	Carbazole	**35.55**	1.25	2.50	5.00	
59-50-7	4-Chloro-3-methylphenol	**54.01**	1.25	2.50	5.00	
106-47-8	4-Chloroaniline	**31.30**	1.25	2.50	5.00	
111-91-1	Bis(2-chloroethoxy)methane	**30.39**	1.25	2.50	5.00	
111-44-4	Bis(2-chloroethyl)ether	**29.44**	1.25	2.50	5.00	
108-60-1	2,2'-Oxybis-1-chloropropane	**28.57**	1.25	2.50	5.00	
91-58-7	2-Chloronaphthalene	**26.31**	1.25	2.50	5.00	
95-57-8	2-Chlorophenol	**52.73**	1.25	2.50	5.00	
7005-72-3	4-Chlorophenyl phenyl ether	**28.10**	1.25	2.50	5.00	
218-01-9	Chrysene	**29.67**	1.25	2.50	5.00	
53-70-3	Dibenz(a,h)anthracene	**31.11**	1.25	2.50	5.00	
132-64-9	Dibenzofuran	**28.14**	1.25	2.50	5.00	
84-74-2	Di-n-butylphthalate	**33.57**	1.25	2.50	5.00	
91-94-1	3,3'-Dichlorobenzidine	**34.62**	1.25	2.50	5.00	X
120-83-2	2,4-Dichlorophenol	**55.91**	1.25	2.50	5.00	
84-66-2	Diethylphthalate	**28.08**	1.25	2.50	5.00	
105-67-9	2,4-Dimethylphenol	**52.99**	5.00	10.0	20.0	
131-11-3	Dimethyl phthalate	**29.41**	1.25	2.50	5.00	
534-52-1	4,6-Dinitro-2-methylphenol	**67.26**	5.00	10.0	20.0	
51-28-5	2,4-Dinitrophenol	**57.31**	8.33	25.0	50.0	
121-14-2	2,4-Dinitrotoluene	**29.44**	1.25	2.50	5.00	
606-20-2	2,6-Dinitrotoluene	**28.62**	1.25	2.50	5.00	
117-84-0	Di-n-octylphthalate	**35.62**	1.25	2.50	5.00	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC | SDG: kirtland_072

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

Matrix: | Laboratory ID: 2K14020-BS1 | File ID: K14020L1.D

Sampled: | Prepared: | Analyzed: 11/15/12 12:48

Solids: | Preparation: EXT_3510 | Dilution:

Batch: 2K14020 | Sequence: 2K32113 | Calibration: 2261001 | Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
122-66-7	1,2-Diphenylhydrazine	**32.21**	1.25	2.50	5.00	
117-81-7	Bis(2-ethylhexyl)phthalate	**34.61**	1.25	2.50	5.00	
206-44-0	Fluoranthene	**30.81**	1.25	2.50	5.00	
86-73-7	Fluorene	**28.24**	1.25	2.50	5.00	
118-74-1	Hexachlorobenzene	**29.38**	1.25	2.50	5.00	
87-68-3	Hexachlorobutadiene	**23.56**	1.25	2.50	5.00	
77-47-4	Hexachlorocyclopentadiene	**22.90**	1.25	5.00	10.0	
67-72-1	Hexachloroethane	**20.63**	1.25	2.50	5.00	
193-39-5	Indeno(1,2,3-cd)pyrene	**28.85**	1.25	2.50	5.00	
78-59-1	Isophorone	**27.21**	1.25	2.50	5.00	
90-12-0	1-Methylnaphthalene	**27.44**	1.25	2.50	5.00	
91-57-6	2-Methylnaphthalene	**25.05**	1.25	2.50	5.00	
95-48-7	2-Methylphenol	**44.49**	1.25	2.50	5.00	
108-39-4/106	3-Methylphenol/4-Methylphenol	**40.01**	1.25	2.50	5.00	
91-20-3	Naphthalene	**25.94**	1.25	2.50	5.00	
100-01-6	4-Nitroaniline	**34.76**	5.00	10.0	20.0	
99-09-2	3-Nitroaniline	**32.83**	5.00	10.0	20.0	
88-74-4	2-Nitroaniline	**33.47**	5.00	10.0	20.0	
98-95-3	Nitrobenzene	**25.52**	1.25	2.50	5.00	
100-02-7	4-Nitrophenol	**17.46**	5.00	10.0	20.0	J
88-75-5	2-Nitrophenol	**63.41**	1.25	2.50	5.00	
86-30-6	N-Nitrosodiphenylamine	**27.22**	1.25	2.50	5.00	
621-64-7	N-Nitroso-di-n-propylamine	**28.68**	1.25	2.50	5.00	
87-86-5	Pentachlorophenol	**60.65**	5.00	10.0	20.0	
85-01-8	Phenanthrene	**30.47**	1.25	2.50	5.00	
108-95-2	Phenol	**18.71**	1.25	2.50	5.00	
129-00-0	Pyrene	**31.20**	1.25	2.50	5.00	
88-06-2	2,4,6-Trichlorophenol	**56.01**	1.25	2.50	5.00	
95-95-4	2,4,5-Trichlorophenol	**60.70**	1.25	2.50	5.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	50.00	40.32	80.6	50 - 110	
2-Fluorophenol	100.0	43.27	43.3	20 - 110	
Nitrobenzene-d5	50.00	40.22	80.4	40 - 110	
Phenol-d6	100.0	25.17	25.2	0 - 110	
Terphenyl-d14	50.00	45.80	91.6	50 - 135	X
2,4,6-Tribromophenol	100.0	88.23	88.2	40 - 125	

ANALYSIS DATA SHEET

LCS Dup

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K14020-BSD1 File ID: K14020L2.D

Sampled: Prepared: Analyzed: 11/15/12 13:16

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K14020 Sequence: 2K32113 Calibration: 2261001 Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
83-32-9	Acenaphthene	**27.97**	1.25	2.50	5.00	
208-96-8	Acenaphthylene	**30.04**	1.25	2.50	5.00	
98-86-2	Acetophenone	**31.22**	1.25	2.50	5.00	
120-12-7	Anthracene	**30.84**	1.25	2.50	5.00	
1912-24-9	Atrazine	**31.87**	1.25	2.50	5.00	
100-52-7	Benzaldehyde	**35.39**	1.25	2.50	5.00	
92-87-5	Benzidine	**13.49**	12.5	50.0	100	XJ
56-55-3	Benzo(a)anthracene	**30.90**	1.25	2.50	5.00	
50-32-8	Benzo(a)pyrene	**30.82**	1.25	2.50	5.00	
205-99-2	Benzo(b)fluoranthene	**32.29**	1.25	2.50	5.00	X
191-24-2	Benzo(g,h,i)perylene	**31.98**	1.25	2.50	5.00	
65-85-0	Benzoic acid		12.5	50.0	100	U
207-08-9	Benzo(k)fluoranthene	**30.30**	1.25	2.50	5.00	
92-52-4	1,1-Biphenyl	**32.36**	1.25	2.50	5.00	
101-55-3	4-Bromophenyl-phenylether	**32.57**	1.25	2.50	5.00	
85-68-7	Butylbenzylphthalate	**35.03**	1.25	2.50	5.00	
105-60-2	Caprolactam	**6.332**	1.25	2.50	5.00	X
86-74-8	Carbazole	**35.78**	1.25	2.50	5.00	
59-50-7	4-Chloro-3-methylphenol	**56.90**	1.25	2.50	5.00	
106-47-8	4-Chloroaniline	**32.77**	1.25	2.50	5.00	
111-91-1	Bis(2-chloroethoxy)methane	**31.75**	1.25	2.50	5.00	
111-44-4	Bis(2-chloroethyl)ether	**31.12**	1.25	2.50	5.00	
108-60-1	2,2'-Oxybis-1-chloropropane	**30.51**	1.25	2.50	5.00	
91-58-7	2-Chloronaphthalene	**27.73**	1.25	2.50	5.00	
95-57-8	2-Chlorophenol	**55.48**	1.25	2.50	5.00	
7005-72-3	4-Chlorophenyl phenyl ether	**29.56**	1.25	2.50	5.00	
218-01-9	Chrysene	**31.10**	1.25	2.50	5.00	
53-70-3	Dibenz(a,h)anthracene	**32.38**	1.25	2.50	5.00	
132-64-9	Dibenzofuran	**29.52**	1.25	2.50	5.00	
84-74-2	Di-n-butylphthalate	**34.55**	1.25	2.50	5.00	
91-94-1	3,3'-Dichlorobenzidine	**36.52**	1.25	2.50	5.00	X
120-83-2	2,4-Dichlorophenol	**60.16**	1.25	2.50	5.00	
84-66-2	Diethylphthalate	**29.08**	1.25	2.50	5.00	
105-67-9	2,4-Dimethylphenol	**56.52**	5.00	10.0	20.0	
131-11-3	Dimethyl phthalate	**30.98**	1.25	2.50	5.00	
534-52-1	4,6-Dinitro-2-methylphenol	**71.98**	5.00	10.0	20.0	
51-28-5	2,4-Dinitrophenol	**67.77**	8.33	25.0	50.0	
121-14-2	2,4-Dinitrotoluene	**30.98**	1.25	2.50	5.00	
606-20-2	2,6-Dinitrotoluene	**30.94**	1.25	2.50	5.00	
117-84-0	Di-n-octylphthalate	**37.50**	1.25	2.50	5.00	

ANALYSIS DATA SHEET

LCS Dup

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K14020-BSD1 File ID: K14020L2.D

Sampled: Prepared: Analyzed: 11/15/12 13:16

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K14020 Sequence: 2K32113 Calibration: 2261001 Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
122-66-7	1,2-Diphenylhydrazine	**33.73**	1.25	2.50	5.00	
117-81-7	Bis(2-ethylhexyl)phthalate	**34.94**	1.25	2.50	5.00	
206-44-0	Fluoranthene	**32.00**	1.25	2.50	5.00	
86-73-7	Fluorene	**29.22**	1.25	2.50	5.00	
118-74-1	Hexachlorobenzene	**30.89**	1.25	2.50	5.00	
87-68-3	Hexachlorobutadiene	**26.27**	1.25	2.50	5.00	
77-47-4	Hexachlorocyclopentadiene	**24.88**	1.25	5.00	10.0	
67-72-1	Hexachloroethane	**22.96**	1.25	2.50	5.00	
193-39-5	Indeno(1,2,3-cd)pyrene	**30.29**	1.25	2.50	5.00	
78-59-1	Isophorone	**28.23**	1.25	2.50	5.00	
90-12-0	1-Methylnaphthalene	**29.62**	1.25	2.50	5.00	
91-57-6	2-Methylnaphthalene	**26.64**	1.25	2.50	5.00	
95-48-7	2-Methylphenol	**46.51**	1.25	2.50	5.00	
108-39-4/106	3-Methylphenol/4-Methylphenol	**41.30**	1.25	2.50	5.00	
91-20-3	Naphthalene	**27.94**	1.25	2.50	5.00	
100-01-6	4-Nitroaniline	**38.50**	5.00	10.0	20.0	
99-09-2	3-Nitroaniline	**34.08**	5.00	10.0	20.0	
88-74-4	2-Nitroaniline	**34.79**	5.00	10.0	20.0	
98-95-3	Nitrobenzene	**27.28**	1.25	2.50	5.00	
100-02-7	4-Nitrophenol	**18.89**	5.00	10.0	20.0	J
88-75-5	2-Nitrophenol	**69.81**	1.25	2.50	5.00	
86-30-6	N-Nitrosodiphenylamine	**27.93**	1.25	2.50	5.00	
621-64-7	N-Nitroso-di-n-propylamine	**29.25**	1.25	2.50	5.00	
87-86-5	Pentachlorophenol	**65.12**	5.00	10.0	20.0	
85-01-8	Phenanthrene	**31.58**	1.25	2.50	5.00	
108-95-2	Phenol	**19.25**	1.25	2.50	5.00	
129-00-0	Pyrene	**31.48**	1.25	2.50	5.00	
88-06-2	2,4,6-Trichlorophenol	**59.78**	1.25	2.50	5.00	
95-95-4	2,4,5-Trichlorophenol	**63.26**	1.25	2.50	5.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	50.00	42.16	84.3	50 - 110	
2-Fluorophenol	100.0	45.40	45.4	20 - 110	
Nitrobenzene-d5	50.00	42.12	84.2	40 - 110	
Phenol-d6	100.0	25.90	25.9	0 - 110	
Terphenyl-d14	50.00	47.20	94.4	50 - 135	X
2,4,6-Tribromophenol	100.0	93.34	93.3	40 - 125	

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K16020-BLK1 File ID: K16020B1.D

Sampled: Prepared: Analyzed: 11/19/12 22:20

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K16020 Sequence: 2K32508 Calibration: 2261001 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	50.0	100	UX
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	U
205-99-2	Benzo(b)fluoranthene		1.25	2.50	5.00	U
191-24-2	Benzo(g,h,i)perylene		1.25	2.50	5.00	U
65-85-0	Benzoic acid		12.5	50.0	100	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	U
85-68-7	Butylbenzylphthalate		1.25	2.50	5.00	U
105-60-2	Caprolactam		1.25	2.50	5.00	UX
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	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	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	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
91-94-1	3,3'-Dichlorobenzidine		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		8.33	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	U

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K16020-BLK1 File ID: K16020B1.D

Sampled: Prepared: Analyzed: 11/19/12 22:20

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K16020 Sequence: 2K32508 Calibration: 2261001 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	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	U
77-47-4	Hexachlorocyclopentadiene		1.25	5.00	10.0	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
108-39-4/106	3-Methylphenol/4-Methylphenol		1.25	2.50	5.00	U
91-20-3	Naphthalene		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	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	37.37	74.7	50 - 110	
2-Fluorophenol	100.0	38.87	38.9	20 - 110	
Nitrobenzene-d5	50.00	37.57	75.1	40 - 110	
Phenol-d6	100.0	22.36	22.4	0 - 110	
Terphenyl-d14	50.00	51.15	102	50 - 135	
2,4,6-Tribromophenol	100.0	96.20	96.2	40 - 125	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC | SDG: kirtland_072

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

Matrix: | Laboratory ID: 2K16020-BS1 | File ID: K16020L1.D

Sampled: | Prepared: | Analyzed: 11/19/12 22:48

Solids: | Preparation: EXT_3510 | Dilution:

Batch: 2K16020 | Sequence: 2K32508 | Calibration: 2261001 | Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
83-32-9	Acenaphthene	**20.77**	1.25	2.50	5.00	
208-96-8	Acenaphthylene	**22.48**	1.25	2.50	5.00	
98-86-2	Acetophenone	**24.48**	1.25	2.50	5.00	
120-12-7	Anthracene	**24.94**	1.25	2.50	5.00	
1912-24-9	Atrazine	**26.95**	1.25	2.50	5.00	
100-52-7	Benzaldehyde	**27.10**	1.25	2.50	5.00	
92-87-5	Benzidine		12.5	50.0	100	UX
56-55-3	Benzo(a)anthracene	**25.52**	1.25	2.50	5.00	
50-32-8	Benzo(a)pyrene	**23.97**	1.25	2.50	5.00	
205-99-2	Benzo(b)fluoranthene	**24.44**	1.25	2.50	5.00	
191-24-2	Benzo(g,h,i)perylene	**25.32**	1.25	2.50	5.00	
65-85-0	Benzoic acid		12.5	50.0	100	U
207-08-9	Benzo(k)fluoranthene	**24.64**	1.25	2.50	5.00	
92-52-4	1,1-Biphenyl	**24.27**	1.25	2.50	5.00	
101-55-3	4-Bromophenyl-phenylether	**25.12**	1.25	2.50	5.00	
85-68-7	Butylbenzylphthalate	**29.64**	1.25	2.50	5.00	
105-60-2	Caprolactam	**4.623**	1.25	2.50	5.00	XJ
86-74-8	Carbazole	**30.30**	1.25	2.50	5.00	
59-50-7	4-Chloro-3-methylphenol	**43.96**	1.25	2.50	5.00	
106-47-8	4-Chloroaniline	**22.93**	1.25	2.50	5.00	
111-91-1	Bis(2-chloroethoxy)methane	**23.76**	1.25	2.50	5.00	
111-44-4	Bis(2-chloroethyl)ether	**23.91**	1.25	2.50	5.00	
108-60-1	2,2'-Oxybis-1-chloropropane	**23.51**	1.25	2.50	5.00	
91-58-7	2-Chloronaphthalene	**20.43**	1.25	2.50	5.00	
95-57-8	2-Chlorophenol	**42.90**	1.25	2.50	5.00	
7005-72-3	4-Chlorophenyl phenyl ether	**22.05**	1.25	2.50	5.00	
218-01-9	Chrysene	**26.09**	1.25	2.50	5.00	
53-70-3	Dibenz(a,h)anthracene	**25.40**	1.25	2.50	5.00	
132-64-9	Dibenzofuran	**22.32**	1.25	2.50	5.00	
84-74-2	Di-n-butylphthalate	**27.81**	1.25	2.50	5.00	
91-94-1	3,3'-Dichlorobenzidine	**29.71**	1.25	2.50	5.00	
120-83-2	2,4-Dichlorophenol	**45.61**	1.25	2.50	5.00	
84-66-2	Diethylphthalate	**23.20**	1.25	2.50	5.00	
105-67-9	2,4-Dimethylphenol	**41.72**	5.00	10.0	20.0	
131-11-3	Dimethyl phthalate	**23.86**	1.25	2.50	5.00	
534-52-1	4,6-Dinitro-2-methylphenol	**55.80**	5.00	10.0	20.0	
51-28-5	2,4-Dinitrophenol	**48.63**	8.33	25.0	50.0	J
121-14-2	2,4-Dinitrotoluene	**23.85**	1.25	2.50	5.00	
606-20-2	2,6-Dinitrotoluene	**23.20**	1.25	2.50	5.00	
117-84-0	Di-n-octylphthalate	**29.88**	1.25	2.50	5.00	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K16020-BS1 File ID: K16020L1.D

Sampled: Prepared: Analyzed: 11/19/12 22:48

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K16020 Sequence: 2K32508 Calibration: 2261001 Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
122-66-7	1,2-Diphenylhydrazine	**27.63**	1.25	2.50	5.00	
117-81-7	Bis(2-ethylhexyl)phthalate	**29.82**	1.25	2.50	5.00	
206-44-0	Fluoranthene	**26.00**	1.25	2.50	5.00	
86-73-7	Fluorene	**22.38**	1.25	2.50	5.00	
118-74-1	Hexachlorobenzene	**24.13**	1.25	2.50	5.00	
87-68-3	Hexachlorobutadiene	**18.08**	1.25	2.50	5.00	
77-47-4	Hexachlorocyclopentadiene	**15.86**	1.25	5.00	10.0	
67-72-1	Hexachloroethane	**16.86**	1.25	2.50	5.00	
193-39-5	Indeno(1,2,3-cd)pyrene	**23.97**	1.25	2.50	5.00	
78-59-1	Isophorone	**21.35**	1.25	2.50	5.00	
90-12-0	1-Methylnaphthalene	**22.01**	1.25	2.50	5.00	
91-57-6	2-Methylnaphthalene	**19.84**	1.25	2.50	5.00	
95-48-7	2-Methylphenol	**36.43**	1.25	2.50	5.00	
108-39-4/106	3-Methylphenol/4-Methylphenol	**32.84**	1.25	2.50	5.00	
91-20-3	Naphthalene	**21.06**	1.25	2.50	5.00	
100-01-6	4-Nitroaniline	**28.64**	5.00	10.0	20.0	
99-09-2	3-Nitroaniline	**25.06**	5.00	10.0	20.0	
88-74-4	2-Nitroaniline	**26.61**	5.00	10.0	20.0	
98-95-3	Nitrobenzene	**20.80**	1.25	2.50	5.00	
100-02-7	4-Nitrophenol	**14.78**	5.00	10.0	20.0	J
88-75-5	2-Nitrophenol	**52.23**	1.25	2.50	5.00	
86-30-6	N-Nitrosodiphenylamine	**22.30**	1.25	2.50	5.00	
621-64-7	N-Nitroso-di-n-propylamine	**22.08**	1.25	2.50	5.00	
87-86-5	Pentachlorophenol	**50.91**	5.00	10.0	20.0	
85-01-8	Phenanthrene	**25.28**	1.25	2.50	5.00	
108-95-2	Phenol	**14.55**	1.25	2.50	5.00	
129-00-0	Pyrene	**26.27**	1.25	2.50	5.00	
88-06-2	2,4,6-Trichlorophenol	**45.39**	1.25	2.50	5.00	
95-95-4	2,4,5-Trichlorophenol	**49.51**	1.25	2.50	5.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	50.00	31.75	63.5	50 - 110	
2-Fluorophenol	100.0	35.41	35.4	20 - 110	
Nitrobenzene-d5	50.00	31.40	62.8	40 - 110	
Phenol-d6	100.0	20.99	21.0	0 - 110	
Terphenyl-d14	50.00	40.89	81.8	50 - 135	
2,4,6-Tribromophenol	100.0	74.62	74.6	40 - 125	

ANALYSIS DATA SHEET

LCS Dup

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K16020-BSD1 File ID: K16020L2.D

Sampled: Prepared: Analyzed: 11/19/12 23:15

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K16020 Sequence: 2K32508 Calibration: 2261001 Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
83-32-9	Acenaphthene	**26.11**	1.25	2.50	5.00	
208-96-8	Acenaphthylene	**27.82**	1.25	2.50	5.00	
98-86-2	Acetophenone	**29.13**	1.25	2.50	5.00	
120-12-7	Anthracene	**30.34**	1.25	2.50	5.00	
1912-24-9	Atrazine	**31.92**	1.25	2.50	5.00	
100-52-7	Benzaldehyde	**32.98**	1.25	2.50	5.00	
92-87-5	Benzidine		12.5	50.0	100	UX
56-55-3	Benzo(a)anthracene	**31.75**	1.25	2.50	5.00	
50-32-8	Benzo(a)pyrene	**30.35**	1.25	2.50	5.00	
205-99-2	Benzo(b)fluoranthene	**32.57**	1.25	2.50	5.00	
191-24-2	Benzo(g,h,i)perylene	**32.36**	1.25	2.50	5.00	
65-85-0	Benzoic acid		12.5	50.0	100	U
207-08-9	Benzo(k)fluoranthene	**28.72**	1.25	2.50	5.00	
92-52-4	1,1-Biphenyl	**29.90**	1.25	2.50	5.00	
101-55-3	4-Bromophenyl-phenylether	**30.68**	1.25	2.50	5.00	
85-68-7	Butylbenzylphthalate	**37.29**	1.25	2.50	5.00	
105-60-2	Caprolactam	**5.191**	1.25	2.50	5.00	X
86-74-8	Carbazole	**36.82**	1.25	2.50	5.00	
59-50-7	4-Chloro-3-methylphenol	**54.74**	1.25	2.50	5.00	
106-47-8	4-Chloroaniline	**25.19**	1.25	2.50	5.00	
111-91-1	Bis(2-chloroethoxy)methane	**29.06**	1.25	2.50	5.00	
111-44-4	Bis(2-chloroethyl)ether	**28.67**	1.25	2.50	5.00	
108-60-1	2,2'-Oxybis-1-chloropropane	**28.13**	1.25	2.50	5.00	
91-58-7	2-Chloronaphthalene	**25.21**	1.25	2.50	5.00	
95-57-8	2-Chlorophenol	**50.68**	1.25	2.50	5.00	
7005-72-3	4-Chlorophenyl phenyl ether	**27.91**	1.25	2.50	5.00	
218-01-9	Chrysene	**31.49**	1.25	2.50	5.00	
53-70-3	Dibenz(a,h)anthracene	**32.40**	1.25	2.50	5.00	
132-64-9	Dibenzofuran	**27.77**	1.25	2.50	5.00	
84-74-2	Di-n-butylphthalate	**34.38**	1.25	2.50	5.00	
91-94-1	3,3'-Dichlorobenzidine	**35.51**	1.25	2.50	5.00	
120-83-2	2,4-Dichlorophenol	**55.83**	1.25	2.50	5.00	
84-66-2	Diethylphthalate	**28.51**	1.25	2.50	5.00	
105-67-9	2,4-Dimethylphenol	**50.78**	5.00	10.0	20.0	
131-11-3	Dimethyl phthalate	**29.50**	1.25	2.50	5.00	
534-52-1	4,6-Dinitro-2-methylphenol	**71.06**	5.00	10.0	20.0	
51-28-5	2,4-Dinitrophenol	**65.35**	8.33	25.0	50.0	
121-14-2	2,4-Dinitrotoluene	**29.70**	1.25	2.50	5.00	
606-20-2	2,6-Dinitrotoluene	**30.45**	1.25	2.50	5.00	
117-84-0	Di-n-octylphthalate	**37.60**	1.25	2.50	5.00	

ANALYSIS DATA SHEET

LCS Dup

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Matrix: Laboratory ID: 2K16020-BSD1 File ID: K16020L2.D

Sampled: Prepared: Analyzed: 11/19/12 23:15

Solids: Preparation: EXT_3510 Dilution:

Batch: 2K16020 Sequence: 2K32508 Calibration: 2261001 Instrument: MS-BNA3

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
122-66-7	1,2-Diphenylhydrazine	**33.01**	1.25	2.50	5.00	
117-81-7	Bis(2-ethylhexyl)phthalate	**36.62**	1.25	2.50	5.00	
206-44-0	Fluoranthene	**31.85**	1.25	2.50	5.00	
86-73-7	Fluorene	**27.66**	1.25	2.50	5.00	
118-74-1	Hexachlorobenzene	**29.50**	1.25	2.50	5.00	
87-68-3	Hexachlorobutadiene	**22.94**	1.25	2.50	5.00	
77-47-4	Hexachlorocyclopentadiene	**21.33**	1.25	5.00	10.0	
67-72-1	Hexachloroethane	**20.66**	1.25	2.50	5.00	
193-39-5	Indeno(1,2,3-cd)pyrene	**30.43**	1.25	2.50	5.00	
78-59-1	Isophorone	**26.92**	1.25	2.50	5.00	
90-12-0	1-Methylnaphthalene	**27.65**	1.25	2.50	5.00	
91-57-6	2-Methylnaphthalene	**24.91**	1.25	2.50	5.00	
95-48-7	2-Methylphenol	**42.54**	1.25	2.50	5.00	
108-39-4/106	3-Methylphenol/4-Methylphenol	**38.09**	1.25	2.50	5.00	
91-20-3	Naphthalene	**25.84**	1.25	2.50	5.00	
100-01-6	4-Nitroaniline	**36.17**	5.00	10.0	20.0	
99-09-2	3-Nitroaniline	**29.53**	5.00	10.0	20.0	
88-74-4	2-Nitroaniline	**33.58**	5.00	10.0	20.0	
98-95-3	Nitrobenzene	**25.27**	1.25	2.50	5.00	
100-02-7	4-Nitrophenol	**19.14**	5.00	10.0	20.0	J
88-75-5	2-Nitrophenol	**63.93**	1.25	2.50	5.00	
86-30-6	N-Nitrosodiphenylamine	**28.03**	1.25	2.50	5.00	
621-64-7	N-Nitroso-di-n-propylamine	**26.83**	1.25	2.50	5.00	
87-86-5	Pentachlorophenol	**64.91**	5.00	10.0	20.0	
85-01-8	Phenanthrene	**31.37**	1.25	2.50	5.00	
108-95-2	Phenol	**17.13**	1.25	2.50	5.00	
129-00-0	Pyrene	**33.07**	1.25	2.50	5.00	
88-06-2	2,4,6-Trichlorophenol	**57.12**	1.25	2.50	5.00	
95-95-4	2,4,5-Trichlorophenol	**59.85**	1.25	2.50	5.00	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	50.00	38.74	77.5	50 - 110	
2-Fluorophenol	100.0	41.44	41.4	20 - 110	
Nitrobenzene-d5	50.00	38.85	77.7	40 - 110	
Phenol-d6	100.0	24.19	24.2	0 - 110	
Terphenyl-d14	50.00	47.99	96.0	50 - 135	
2,4,6-Tribromophenol	100.0	93.56	93.6	40 - 125	

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	SEQ-TUN1.D	Injection Date:	09/11/12
Instrument ID:	MS-BNA3	Injection Time:	10:14
Sequence:	2I25803	Lab Sample ID:	2I25803-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30 - 60% of 198	39.9	PASS
68	Less than 2% of 69	0.427	PASS
69	Less than 200% of 198	45	PASS
70	Less than 2% of 69	0.427	PASS
127	40 - 60% of 198	48.7	PASS
197	Less than 1% of 198	0.112	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.32	PASS
275	10 - 30% of 198	23.4	PASS
365	1 - 200% of 198	2.18	PASS
441	0.001 - 100% of 443	80	PASS
442	40 - 200% of 198	79.1	PASS
443	17 - 23% of 442	18.8	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	SEQ-TUN2.D	Injection Date:	09/12/12
Instrument ID:	MS-BNA3	Injection Time:	15:25
Sequence:	2I25803	Lab Sample ID:	2I25803-TUN2

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30 - 60% of 198	38.9	PASS
68	Less than 2% of 69	1.04	PASS
69	Less than 200% of 198	42.9	PASS
70	Less than 2% of 69	0.427	PASS
127	40 - 60% of 198	48.8	PASS
197	Less than 1% of 198	0.0543	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.99	PASS
275	10 - 30% of 198	22.3	PASS
365	1 - 200% of 198	2.57	PASS
441	0.001 - 100% of 443	68.9	PASS
442	40 - 200% of 198	78.2	PASS
443	17 - 23% of 442	20.5	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	SEQ-TUN1.D	Injection Date:	11/15/12
Instrument ID:	MS-BNA3	Injection Time:	11:01
Sequence:	2K32113	Lab Sample ID:	2K32113-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30 - 60% of 198	35.1	PASS
68	Less than 2% of 69	1.27	PASS
69	Less than 200% of 198	39.7	PASS
70	Less than 2% of 69	0.829	PASS
127	40 - 60% of 198	47.3	PASS
197	Less than 1% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.93	PASS
275	10 - 30% of 198	25.2	PASS
365	1 - 200% of 198	2.68	PASS
441	0.001 - 100% of 443	63.8	PASS
442	40 - 200% of 198	83.2	PASS
443	17 - 23% of 442	21.3	PASS

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Lab File ID:	SEQ-TUN1.D	Injection Date:	11/19/12
Instrument ID:	MS-BNA3	Injection Time:	15:31
Sequence:	2K32508	Lab Sample ID:	2K32508-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30 - 60% of 198	37.4	PASS
68	Less than 2% of 69	1.31	PASS
69	Less than 200% of 198	42.6	PASS
70	Less than 2% of 69	0.485	PASS
127	40 - 60% of 198	48.6	PASS
197	Less than 1% of 198	0.384	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.91	PASS
275	10 - 30% of 198	25.5	PASS
365	1 - 200% of 198	2.68	PASS
441	0.001 - 100% of 443	65.3	PASS
442	40 - 200% of 198	86.7	PASS
443	17 - 23% of 442	20.9	PASS

ANALYSIS SEQUENCE SUMMARY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2I25803	Instrument:	MS-BNA3
Calibration:	2261001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	2I25803-TUN1	SEQ-TUN1.D	09/11/12 10:14
Cal Standard	2I25803-CAL1	SEQ-CAL1.D	09/11/12 10:38
Cal Standard	2I25803-CAL2	SEQ-CAL2.D	09/11/12 11:06
Cal Standard	2I25803-CAL3	SEQ-CAL3.D	09/11/12 11:34
Cal Standard	2I25803-CAL4	SEQ-CAL4.D	09/11/12 12:03
Cal Standard	2I25803-CAL5	SEQ-CAL5.D	09/11/12 12:31
Cal Standard	2I25803-CAL6	SEQ-CAL6.D	09/11/12 12:59
Cal Standard	2I25803-CAL7	SEQ-CAL7.D	09/11/12 13:27
Cal Standard	2I25803-CAL8	SEQ-CAL8.D	09/11/12 13:55
Cal Standard	2I25803-CAL9	SEQ-CAL9.D	09/11/12 14:23
Cal Standard	2I25803-CALA	SEQ-CALA.D	09/11/12 14:51
Cal Standard	2I25803-CALB	SEQ-CALB.D	09/11/12 15:20
Cal Standard	2I25803-CALC	SEQ-CALC.D	09/11/12 15:48
Cal Standard	2I25803-CALD	SEQ-CALD.D	09/11/12 16:16
Cal Standard	2I25803-CALE	SEQ-CALE.D	09/11/12 16:44
Cal Standard	2I25803-CALF	SEQ-CALF.D	09/11/12 17:11
Cal Standard	2I25803-CALG	SEQ-CALG.D	09/11/12 17:40
Initial Cal Check	2I25803-ICV1	SEQ-ICV1.D	09/11/12 18:08
Initial Cal Check	2I25803-ICV2	SEQ-ICV2.D	09/11/12 18:36
MS Tune	2I25803-TUN2	SEQ-TUN2.D	09/12/12 15:25
Initial Cal Check	2I25803-ICV3	SEQ-ICV3.D	09/12/12 15:49

ANALYSIS SEQUENCE SUMMARY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32113	Instrument:	MS-BNA3
Calibration:	2261001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	2K32113-TUN1	SEQ-TUN1.D	11/15/12 11:01
Calibration Check	2K32113-CCV1	SEQ-CCV1.D	11/15/12 11:24
Calibration Check	2K32113-CCV2	SEQ-CCV2.D	11/15/12 11:52
Blank	2K14020-BLK1	K14020B1.D	11/15/12 12:20
LCS	2K14020-BS1	K14020L1.D	11/15/12 12:48
LCS Dup	2K14020-BSD1	K14020L2.D	11/15/12 13:16
GW0756	1211133-01	1113301D.D	11/15/12 15:08

ANALYSIS SEQUENCE SUMMARY

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32508	Instrument:	MS-BNA3
Calibration:	2261001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
MS Tune	2K32508-TUN1	SEQ-TUN1.D	11/19/12 15:31
Calibration Check	2K32508-CCV1	SEQ-CCV1.D	11/19/12 15:54
Calibration Check	2K32508-CCV2	SEQ-CCV2.D	11/19/12 16:22
Blank	2K16020-BLK1	K16020B1.D	11/19/12 22:20
LCS	2K16020-BS1	K16020L1.D	11/19/12 22:48
LCS Dup	2K16020-BSD1	K16020L2.D	11/19/12 23:15
GW0860	1211147-01	1114701.D	11/20/12 00:37

INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32113	Instrument:	MS-BNA3
		Calibration:	2261001

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (2K32113-CCV1)			Lab File ID: SEQ-CCV1.D			Analyzed: 11/15/12 11:24			
1,4-Dichlorobenzene-d4	591492	5.529	692783	5.592	85	50 - 200	-0.0630	+/-0.50	
Naphthalene-d8	2145160	7.206	2409624	7.268	89	50 - 200	-0.0620	+/-0.50	
Acenaphthene-d10	1316903	9.442	1479598	9.504	89	50 - 200	-0.0620	+/-0.50	
Phenanthrene-d10	2111007	11.243	2454205	11.305	86	50 - 200	-0.0620	+/-0.50	
Chrysene-d12	2068627	14.544	2419622	14.71	85	50 - 200	-0.1660	+/-0.50	
Perylene-d12	2056522	16.645	2394332	16.987	86	50 - 200	-0.3420	+/-0.50	
Calibration Check (2K32113-CCV2)			Lab File ID: SEQ-CCV2.D			Analyzed: 11/15/12 11:52			
1,4-Dichlorobenzene-d4	631434	5.529	591492	5.529	107	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	2165447	7.196	2145160	7.206	101	50 - 200	-0.0100	+/-0.50	
Acenaphthene-d10	1352967	9.442	1316903	9.442	103	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	2114420	11.243	2111007	11.243	100	50 - 200	0.0000	+/-0.50	
Chrysene-d12	2128778	14.534	2068627	14.544	103	50 - 200	-0.0100	+/-0.50	
Perylene-d12	2073621	16.645	2056522	16.645	101	50 - 200	0.0000	+/-0.50	
Blank (2K14020-BLK1)			Lab File ID: K14020B1.D			Analyzed: 11/15/12 12:20			
1,4-Dichlorobenzene-d4	563793	5.528	591492	5.529	95	50 - 200	-0.0010	+/-0.50	
Naphthalene-d8	2036091	7.194	2145160	7.206	95	50 - 200	-0.0120	+/-0.50	
Acenaphthene-d10	1260073	9.44	1316903	9.442	96	50 - 200	-0.0020	+/-0.50	
Phenanthrene-d10	1955055	11.241	2111007	11.243	93	50 - 200	-0.0020	+/-0.50	
Chrysene-d12	1988609	14.543	2068627	14.544	96	50 - 200	-0.0010	+/-0.50	
Perylene-d12	1949044	16.644	2056522	16.645	95	50 - 200	-0.0010	+/-0.50	
LCS (2K14020-BS1)			Lab File ID: K14020L1.D			Analyzed: 11/15/12 12:48			
1,4-Dichlorobenzene-d4	578878	5.526	591492	5.529	98	50 - 200	-0.0030	+/-0.50	
Naphthalene-d8	2064099	7.203	2145160	7.206	96	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	1276565	9.439	1316903	9.442	97	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	1972436	11.239	2111007	11.243	93	50 - 200	-0.0040	+/-0.50	
Chrysene-d12	1992843	14.541	2068627	14.544	96	50 - 200	-0.0030	+/-0.50	
Perylene-d12	1995234	16.642	2056522	16.645	97	50 - 200	-0.0030	+/-0.50	
LCS Dup (2K14020-BSD1)			Lab File ID: K14020L2.D			Analyzed: 11/15/12 13:16			
1,4-Dichlorobenzene-d4	605624	5.53	591492	5.529	102	50 - 200	0.0010	+/-0.50	
Naphthalene-d8	2132782	7.196	2145160	7.206	99	50 - 200	-0.0100	+/-0.50	
Acenaphthene-d10	1324844	9.442	1316903	9.442	101	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	2091763	11.243	2111007	11.243	99	50 - 200	0.0000	+/-0.50	
Chrysene-d12	2140117	14.545	2068627	14.544	103	50 - 200	0.0010	+/-0.50	
Perylene-d12	2113597	16.646	2056522	16.645	103	50 - 200	0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32113	Instrument:	MS-BNA3
		Calibration:	2261001

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
GW0756 (1211133-01)			Lab File ID: 1113301D.D			Analyzed: 11/15/12 15:08			
1,4-Dichlorobenzene-d4	592417	5.526	591492	5.529	100	50 - 200	-0.0030	+/-0.50	
Naphthalene-d8	2092879	7.203	2145160	7.206	98	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	1327900	9.439	1316903	9.442	101	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	2047296	11.239	2111007	11.243	97	50 - 200	-0.0040	+/-0.50	
Chrysene-d12	2058652	14.541	2068627	14.544	100	50 - 200	-0.0030	+/-0.50	
Perylene-d12	2037081	16.642	2056522	16.645	99	50 - 200	-0.0030	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32508	Instrument:	MS-BNA3
		Calibration:	2261001

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (2K32508-CCV1)			Lab File ID: SEQ-CCV1.D			Analyzed: 11/19/12 15:54			
1,4-Dichlorobenzene-d4	647980	5.528	692783	5.592	94	50 - 200	-0.0640	+/-0.50	
Naphthalene-d8	2253606	7.204	2409624	7.268	94	50 - 200	-0.0640	+/-0.50	
Acenaphthene-d10	1401986	9.44	1479598	9.504	95	50 - 200	-0.0640	+/-0.50	
Phenanthrene-d10	2229403	11.241	2454205	11.305	91	50 - 200	-0.0640	+/-0.50	
Chrysene-d12	2205873	14.543	2419622	14.71	91	50 - 200	-0.1670	+/-0.50	
Perylene-d12	2182741	16.644	2394332	16.987	91	50 - 200	-0.3430	+/-0.50	
Calibration Check (2K32508-CCV2)			Lab File ID: SEQ-CCV2.D			Analyzed: 11/19/12 16:22			
1,4-Dichlorobenzene-d4	629902	5.529	647980	5.528	97	50 - 200	0.0010	+/-0.50	
Naphthalene-d8	2167842	7.196	2253606	7.204	96	50 - 200	-0.0080	+/-0.50	
Acenaphthene-d10	1369240	9.442	1401986	9.44	98	50 - 200	0.0020	+/-0.50	
Phenanthrene-d10	2152341	11.243	2229403	11.241	97	50 - 200	0.0020	+/-0.50	
Chrysene-d12	2108244	14.534	2205873	14.543	96	50 - 200	-0.0090	+/-0.50	
Perylene-d12	2099883	16.645	2182741	16.644	96	50 - 200	0.0010	+/-0.50	
Blank (2K16020-BLK1)			Lab File ID: K16020B1.D			Analyzed: 11/19/12 22:20			
1,4-Dichlorobenzene-d4	614392	5.519	647980	5.528	95	50 - 200	-0.0090	+/-0.50	
Naphthalene-d8	2192929	7.196	2253606	7.204	97	50 - 200	-0.0080	+/-0.50	
Acenaphthene-d10	1385263	9.442	1401986	9.44	99	50 - 200	0.0020	+/-0.50	
Phenanthrene-d10	2119261	11.243	2229403	11.241	95	50 - 200	0.0020	+/-0.50	
Chrysene-d12	2089722	14.534	2205873	14.543	95	50 - 200	-0.0090	+/-0.50	
Perylene-d12	2149012	16.635	2182741	16.644	98	50 - 200	-0.0090	+/-0.50	
LCS (2K16020-BS1)			Lab File ID: K16020L1.D			Analyzed: 11/19/12 22:48			
1,4-Dichlorobenzene-d4	627652	5.526	647980	5.528	97	50 - 200	-0.0020	+/-0.50	
Naphthalene-d8	2237875	7.193	2253606	7.204	99	50 - 200	-0.0110	+/-0.50	
Acenaphthene-d10	1397417	9.439	1401986	9.44	100	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10	2135661	11.24	2229403	11.241	96	50 - 200	-0.0010	+/-0.50	
Chrysene-d12	2121035	14.541	2205873	14.543	96	50 - 200	-0.0020	+/-0.50	
Perylene-d12	2183053	16.642	2182741	16.644	100	50 - 200	-0.0020	+/-0.50	
LCS Dup (2K16020-BSD1)			Lab File ID: K16020L2.D			Analyzed: 11/19/12 23:15			
1,4-Dichlorobenzene-d4	654695	5.53	647980	5.528	101	50 - 200	0.0020	+/-0.50	
Naphthalene-d8	2273005	7.196	2253606	7.204	101	50 - 200	-0.0080	+/-0.50	
Acenaphthene-d10	1434653	9.442	1401986	9.44	102	50 - 200	0.0020	+/-0.50	
Phenanthrene-d10	2208046	11.243	2229403	11.241	99	50 - 200	0.0020	+/-0.50	
Chrysene-d12	2166725	14.545	2205873	14.543	98	50 - 200	0.0020	+/-0.50	
Perylene-d12	2203389	16.635	2182741	16.644	101	50 - 200	-0.0090	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32508	Instrument:	MS-BNA3
		Calibration:	2261001

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
GW0860 (1211147-01)			Lab File ID: 1114701.D			Analyzed: 11/20/12 00:37			
1,4-Dichlorobenzene-d4	639735	5.528	647980	5.528	99	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	2224638	7.194	2253606	7.204	99	50 - 200	-0.0100	+/-0.50	
Acenaphthene-d10	1411551	9.44	1401986	9.44	101	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	2146586	11.241	2229403	11.241	96	50 - 200	0.0000	+/-0.50	
Chrysene-d12	2141768	14.533	2205873	14.543	97	50 - 200	-0.0100	+/-0.50	
Perylene-d12	2123661	16.634	2182741	16.644	97	50 - 200	-0.0100	+/-0.50	

INITIAL CALIBRATION DATA

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

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	1.226402	10	1.172004	20	1.216724	40	1.106133	50	1.105635	60	1.066451
Acenaphthylene	5	1.882626	10	1.825223	20	1.853268	40	1.686654	50	1.630586	60	1.58258
Acetophenone												
Aniline	5	2.075085	10	2.083071	20	2.115921	40	2.012055	50	1.981178	60	1.922491
Anthracene	5	1.190117	10	1.216677	20	1.210592	40	1.133693	50	1.074923	60	1.027613
Atrazine												
Benzaldehyde												
Benzidine												
Benzo(a)anthracene	5	1.07808	10	1.158464	20	1.187972	40	1.125607	50	1.111216	60	1.080801
Benzo(a)pyrene	5	0.8969984	10	0.988024	20	1.053969	40	1.082485	50	1.050188	60	1.047536
Benzo(b)fluoranthene	5	0.9192774	10	0.9995984	20	1.027394	40	1.163507	50	1.151156	60	1.102624
Benzo(g,h,i)perylene	5	0.8810196	10	0.9354534	20	1.023945	40	1.041762	50	1.031788	60	1.025219
Benzoic acid	5	0.1800138	10	0.1971305	20	0.2320922	40	0.2667048	50	0.3038777	60	0.2934733
Benzo(k)fluoranthene	5	1.385345	10	1.389508	20	1.50509	40	1.294027	50	1.247302	60	1.255501
Benzyl alcohol	5	0.7723651	10	0.8400763	20	0.84085	40	0.8585047	50	0.855408	60	0.8444593
1,1-Biphenyl												
4-Bromophenyl-phenylether	5	0.2285879	10	0.242289	20	0.2441512	40	0.2392219	50	0.2372267	60	0.2395644
Butylbenzylphthalate	5	0.4630096	10	0.4944857	20	0.5607301	40	0.557858	50	0.5631426	60	0.5528675
Caprolactam												
Carbazole	5	1.067151	10	1.166965	20	1.142299	40	1.080385	50	1.01809	60	0.9924129
4-Chloro-3-methylphenol	5	0.2949249	10	0.3240161	20	0.3402999	40	0.3358677	50	0.3333448	60	0.3279835
4-Chloroaniline	5	0.437418	10	0.4487067	20	0.4701531	40	0.4455991	50	0.4474384	60	0.4368809
Bis(2-chloroethoxy)methane	5	0.4529439	10	0.460763	20	0.4579347	40	0.437325	50	0.43609	60	0.4299759
Bis(2-chloroethyl)ether	5	1.311057	10	1.320356	20	1.353769	40	1.299644	50	1.303123	60	1.255375
2,2'-Oxybis-1-chloropropane	5	1.751597	10	1.7475	20	1.739639	40	1.678201	50	1.686332	60	1.618641
2-Chloronaphthalene	5	1.195427	10	1.175982	20	1.194056	40	1.110827	50	1.115289	60	1.070192
2-Chlorophenol	5	1.202517	10	1.275122	20	1.326919	40	1.300237	50	1.289146	60	1.268001
4-Chlorophenyl phenyl ether	5	0.6742086	10	0.6954678	20	0.6890185	40	0.6402671	50	0.6432798	60	0.6252312
Chrysene	5	1.169698	10	1.134234	20	1.187301	40	1.098305	50	1.054946	60	1.023574
Dibenz(a,h)anthracene	5	0.7929059	10	0.9127398	20	0.9778044	40	1.040796	50	1.012641	60	1.013459
Dibenzofuran	5	1.703833	10	1.693413	20	1.704482	40	1.540782	50	1.529322	60	1.472516

INITIAL CALIBRATION DATA

SW8270D

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Calibration: 2261001
Instrument: MS-BNA3
Matrix: Water
Calibration Dates: 9/11/12 10:38 9/11/12 17:40

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	1.16861	10	1.255953	20	1.283272	40	1.181135	50	1.106647	60	1.06418
1,4-Dichlorobenzene	5	1.531421	10	1.56121	20	1.527423	40	1.451014	50	1.445896	60	1.432695
1,3-Dichlorobenzene	5	1.475221	10	1.490131	20	1.527514	40	1.450766	50	1.468528	60	1.394971
1,2-Dichlorobenzene	5	1.455679	10	1.443407	20	1.456504	40	1.4098	50	1.385694	60	1.338072
3,3'-Dichlorobenzidine												
2,6-Dichlorophenol												
2,4-Dichlorophenol	5	0.2847428	10	0.3263219	20	0.3328921	40	0.3242484	50	0.3321999	60	0.3215921
Diethylphthalate	5	1.323041	10	1.286795	20	1.368087	40	1.251514	50	1.243205	60	1.211569
2,4-Dimethylphenol	5	0.3723077	10	0.3922829	20	0.4013375	40	0.390409	50	0.388078	60	0.3762622
Dimethyl phthalate	5	1.373422	10	1.353026	20	1.386701	40	1.27275	50	1.233596	60	1.187798
4,6-Dinitro-2-methylphenol	5	7.614394E-02	10	0.1096655	20	0.130206	40	0.1508675	50	0.1529725	60	0.1565992
2,4-Dinitrophenol	5	7.088052E-02	10	0.1093294	20	0.1395075	40	0.1679181	50	0.1812304	60	0.190222
2,4-Dinitrotoluene	5	0.3531728	10	0.3912608	20	0.43451	40	0.4257123	50	0.4261383	60	0.426781
2,6-Dinitrotoluene	5	0.2714151	10	0.2923165	20	0.3163528	40	0.3062322	50	0.3212079	60	0.3121858
Di-n-octylphthalate	5	0.8771769	10	1.020225	20	1.123468	40	1.220057	50	1.208407	60	1.209285
1,4-Dioxane												
1,2-Diphenylhydrazine	5	0.8301083	10	0.867185	20	0.861467	40	0.8127303	50	0.7719215	60	0.7712792
Bis(2-ethylhexyl)phthalate	5	0.5881362	10	0.6483224	20	0.7324606	40	0.7333481	50	0.7419646	60	0.7344114
Fluoranthene	5	1.23635	10	1.317053	20	1.322223	40	1.210618	50	1.137281	60	1.112443
Fluorene	5	1.465575	10	1.402744	20	1.471988	40	1.327424	50	1.326116	60	1.285392
2-Fluorobiphenyl	5	1.406801	10	1.339106	20	1.373728	40	1.274645	50	1.266637	60	1.228683
2-Fluorophenol	10	1.159714	20	1.147427	40	1.17776	80	1.150615	100	1.131493	120	1.125717
Hexachlorobenzene	5	0.2463841	10	0.2654048	20	0.2691727	40	0.260909	50	0.2592312	60	0.2550784
Hexachlorobutadiene	5	0.2055813	10	0.2041694	20	0.2054767	40	0.2018028	50	0.2080746	60	0.2058022
Hexachlorocyclopentadiene	5	0.2916181	10	0.3162971	20	0.3534771	40	0.3570826	50	0.3593493	60	0.3660123
Hexachloroethane	5	0.6211759	10	0.6184263	20	0.6267446	40	0.6115714	50	0.6020682	60	0.6042834
Indeno(1,2,3-cd)pyrene	5	0.9842869	10	1.100186	20	1.231231	40	1.249436	50	1.252622	60	1.241693
Isophorone	5	0.7053235	10	0.7342949	20	0.7372863	40	0.7150188	50	0.700254	60	0.6863517
1-Methylnaphthalene	5	0.6263254	10	0.6219691	20	0.6167648	40	0.6025289	50	0.5932049	60	0.5754876
2-Methylnaphthalene	5	0.6487649	10	0.6439735	20	0.6616897	40	0.619805	50	0.6168634	60	0.5906787
2-Methylphenol	5	1.13215	10	1.166193	20	1.214549	40	1.183468	50	1.190711	60	1.14973

INITIAL CALIBRATION DATA

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

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-Methylphenol	5	1.213749	10	1.204609	20	1.246534	40	1.24349	50	1.260916	60	1.207785
4-Methylphenol	5	1.213749	10	1.204609	20	1.246534	40	1.24349	50	1.260916	60	1.207785
3-Methylphenol/4-Methylphenol	5	1.213749	10	1.204609	20	1.246534	40	1.24349	50	1.260916	60	1.207785
Naphthalene	5	1.131168	10	1.115217	20	1.097102	40	1.018	50	0.9838111	60	0.9336806
4-Nitroaniline	5	0.310375	10	0.2880078	20	0.3319512	40	0.3278091	50	0.3394978	60	0.3319657
3-Nitroaniline	5	0.3061045	10	0.3165566	20	0.3311253	40	0.3337432	50	0.3324556	60	0.333826
2-Nitroaniline	5	0.3122476	10	0.31289	20	0.3414956	40	0.3500366	50	0.3516678	60	0.3465091
Nitrobenzene	5	0.4067955	10	0.405922	20	0.4226794	40	0.4097124	50	0.4155971	60	0.4022004
Nitrobenzene-d5	5	0.3901635	10	0.4008388	20	0.4181021	40	0.4098124	50	0.4068753	60	0.4013554
4-Nitrophenol	5	0.2205213	10	0.2238418	20	0.2704735	40	0.2810258	50	0.2788603	60	0.2746765
2-Nitrophenol	5	0.1572246	10	0.170622	20	0.1900949	40	0.1941729	50	0.1979488	60	0.1972528
N-Nitrosodimethylamine	5	0.6561451	10	0.6489775	20	0.6975004	40	0.6585053	50	0.6588495	60	0.6399517
N-Nitrosodiphenylamine	5	0.7117719	10	0.7279842	20	0.7319408	40	0.6857475	50	0.6689627	60	0.6710496
N-Nitroso-di-n-propylamine	5	1.013651	10	1.014837	20	1.036074	40	0.9774363	50	0.9701911	60	0.9510779
Pentachlorophenol	5	0.1242903	10	0.1472987	20	0.1675192	40	0.1807789	50	0.1772911	60	0.1753101
Phenanthrene	5	1.243048	10	1.256443	20	1.204927	40	1.111894	50	1.046238	60	1.020124
Phenol	5	1.788617	10	1.724966	20	1.754811	40	1.756593	50	1.70602	60	1.681391
Phenol-d6	10	1.56702	20	1.578964	40	1.575631	80	1.495776	100	1.472042	120	1.433011
Pyrene	5	1.269569	10	1.335888	20	1.347438	40	1.215283	50	1.176284	60	1.135994
Pyridine	5	1.450894	10	1.508679	20	1.500758	40	1.402303	50	1.421701	60	1.439583
Terphenyl-d14	5	0.759045	10	0.7914832	20	0.8267835	40	0.7856392	50	0.7550846	60	0.7440656
1,2,4,5-Tetrachlorobenzene												
2,3,4,6-Tetrachlorophenol	5	0.3129583	10	0.3205266	20	0.3493419	40	0.3448924	50	0.3561204	60	0.3409846
2,4,6-Tribromophenol	10	9.746889E-02	20	0.1098797	40	0.1147914	80	0.1197327	100	0.11624	120	0.116617
1,2,4-Trichlorobenzene	5	0.3494616	10	0.3476154	20	0.3551252	40	0.3384588	50	0.3410857	60	0.3336289
2,4,6-Trichlorophenol	5	0.3633886	10	0.3835832	20	0.4015645	40	0.3975579	50	0.3943937	60	0.396121
2,4,5-Trichlorophenol	5	0.3479752	10	0.3593403	20	0.4048246	40	0.4025023	50	0.4053154	60	0.4080477

INITIAL CALIBRATION DATA (Continued)

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

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	1.007038	100	0.9448967								
Acenaphthylene	80	1.463699	100	1.354083								
Acetophenone					5	1.854627	10	1.791064	20	1.814119	40	1.786505
Aniline	80	1.836509	100	1.778359								
Anthracene	80	0.9395351	100	0.8619493								
Atrazine					5	0.2149468	10	0.2213603	20	0.225859	40	0.2406622
Benzaldehyde					5	1.101007	10	1.076328	20	1.07395	40	0.9905509
Benzidine					5	0.5982221	10	0.6233508	20	0.6721449	40	0.6816705
Benzo(a)anthracene	80	1.039064	100	0.988222								
Benzo(a)pyrene	80	1.057477	100	0.9849124								
Benzo(b)fluoranthene	80	1.000322	100	1.137211								
Benzo(g,h,i)perylene	80	1.010113	100	1.00717								
Benzoic acid	80	0.288002	100	0.3073683								
Benzo(k)fluoranthene	80	1.288017	100	1.039958								
Benzyl alcohol	80	0.8399113	100	0.8291029								
1,1-Biphenyl					5	1.444924	10	1.462762	20	1.465034	40	1.400757
4-Bromophenyl-phenylether	80	0.2322959	100	0.2267755								
Butylbenzylphthalate	80	0.5450172	100	0.5332066								
Caprolactam					5	9.508992E-02	10	0.0970182	20	0.1014958	40	0.1071126
Carbazole	80	0.9117642	100	0.8603283								
4-Chloro-3-methylphenol	80	0.3239361	100	0.3128581								
4-Chloroaniline	80	0.4181819	100	0.4057045								
Bis(2-chloroethoxy)methane	80	0.412871	100	0.401461								
Bis(2-chloroethyl)ether	80	1.234201	100	1.196301								
2,2'-Oxybis-1-chloropropane	80	1.559356	100	1.522435								
2-Chloronaphthalene	80	1.037875	100	0.9697123								
2-Chlorophenol	80	1.250053	100	1.221566								
4-Chlorophenyl phenyl ether	80	0.6050546	100	0.582263								
Chrysene	80	0.9773309	100	0.9316359								
Dibenz(a,h)anthracene	80	1.013161	100	0.9812686								
Dibenzofuran	80	1.350958	100	1.254226								

INITIAL CALIBRATION DATA (Continued)

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

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	0.9816543	100	0.8971291								
1,4-Dichlorobenzene	80	1.376729	100	1.309893								
1,3-Dichlorobenzene	80	1.370178	100	1.332432								
1,2-Dichlorobenzene	80	1.299695	100	1.272024								
3,3'-Dichlorobenzidine					5	0.3543587	10	0.3740634	20	0.3969158	40	0.4162336
2,6-Dichlorophenol					5	0.3029182	10	0.3037802	20	0.3026235	40	0.3162123
2,4-Dichlorophenol	80	0.3128693	100	0.3030876								
Diethylphthalate	80	1.176199	100	1.110356								
2,4-Dimethylphenol	80	0.3615218	100	0.3601468								
Dimethyl phthalate	80	1.147566	100	1.101382								
4,6-Dinitro-2-methylphenol	80	0.1611426	100	0.1632566								
2,4-Dinitrophenol	80	0.2034171	100	0.2067659								
2,4-Dinitrotoluene	80	0.4250739	100	0.4213723								
2,6-Dinitrotoluene	80	0.3060406	100	0.3029055								
Di-n-octylphthalate	80	1.19253	100	1.130569								
1,4-Dioxane					5	0.5681997	10	0.5720167	20	0.5405075	40	0.5215231
1,2-Diphenylhydrazine	80	0.711338	100	0.6708871								
Bis(2-ethylhexyl)phthalate	80	0.7201792	100	0.6965867								
Fluoranthene	80	1.023074	100	0.9552043								
Fluorene	80	1.192825	100	1.10791								
2-Fluorobiphenyl	80	1.168444	100	1.100862								
2-Fluorophenol	160	1.054541	200	1.011147								
Hexachlorobenzene	80	0.2494867	100	0.2407232								
Hexachlorobutadiene	80	0.1926689	100	0.1935308								
Hexachlorocyclopentadiene	80	0.3720966	100	0.360964								
Hexachloroethane	80	0.587194	100	0.5769922								
Indeno(1,2,3-cd)pyrene	80	1.219234	100	1.186028								
Isophorone	80	0.6458218	100	0.6339611								
1-Methylnaphthalene	80	0.5292253	100	0.5167777								
2-Methylnaphthalene	80	0.5632596	100	0.5391497								
2-Methylphenol	80	1.122389	100	1.116647								

INITIAL CALIBRATION DATA (Continued)

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

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-Methylphenol	80	1.197636	100	1.178114								
4-Methylphenol	80	1.197636	100	1.178114								
3-Methylphenol/4-Methylphenol	80	1.197636	100	1.178114								
Naphthalene	80	0.8568929	100	0.8020783								
4-Nitroaniline	80	0.3344389	100	0.3257398								
3-Nitroaniline	80	0.3329237	100	0.3339491								
2-Nitroaniline	80	0.3445397	100	0.3353103								
Nitrobenzene	80	0.3882844	100	0.3827503								
Nitrobenzene-d5	80	0.3854518	100	0.3790163								
4-Nitrophenol	80	0.2853949	100	0.2769577								
2-Nitrophenol	80	0.1988147	100	0.1958569								
N-Nitrosodimethylamine	80	0.6300438	100	0.6199096								
N-Nitrosodiphenylamine	80	0.6354454	100	0.5938058								
N-Nitroso-di-n-propylamine	80	0.9339268	100	0.919134								
Pentachlorophenol	80	0.1795239	100	0.1780552								
Phenanthrene	80	0.9246607	100	0.8510275								
Phenol	80	1.621348	100	1.575871								
Phenol-d6	160	1.363933	200	1.326291								
Pyrene	80	1.029161	100	0.9464214								
Pyridine	80	1.417841	100	1.409563								
Terphenyl-d14	80	0.7003809	100	0.6796219								
1,2,4,5-Tetrachlorobenzene					5	0.3642537	10	0.3739162	20	0.3587545	40	0.3586331
2,3,4,6-Tetrachlorophenol	80	0.3514703	100	0.348575								
2,4,6-Tribromophenol	160	0.114871	200	0.1137257								
1,2,4-Trichlorobenzene	80	0.3197429	100	0.3182462								
2,4,6-Trichlorophenol	80	0.3928045	100	0.3853417								
2,4,5-Trichlorophenol	80	0.3978263	100	0.3895499								

INITIAL CALIBRATION DATA (Continued)

SW8270D

Laboratory:	Empirical Laboratories, LLC		SDG:	kirtland_072	
Client:	Shaw E & I (I700)		Project:	Kirtland AFB 2011	
Calibration:	2261001		Instrument:	MS-BNA3	
Matrix:	Water		Calibration Dates:	9/11/12 10:38	9/11/12 17:40

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	1.76145	60	1.801983	80	1.673292	100	1.611182				
Aniline												
Anthracene												
Atrazine	50	0.2359451	60	0.2357328	80	0.2298759	100	0.2247727				
Benzaldehyde	50	0.9748365	60	0.9989734	80	0.8898613	100	0.8739512				
Benzidine	50	0.6776385	60	0.680287	80	0.6439769	100	0.6296377				
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	1.364835	60	1.327666	80	1.236441	100	1.162958				
4-Bromophenyl-phenylether												
Butylbenzylphthalate												
Caprolactam	50	0.1109058	60	0.1124372	80	0.1099913	100	0.1099271				
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)

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

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	0.416014	60	0.4278231	80	0.412885	100	0.3940041				
2,6-Dichlorophenol	50	0.3200868	60	0.3120857	80	0.3076012	100	0.2959819				
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	0.5110823	60	0.5407586	80	0.5060359	100	0.5102403				
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)

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072	
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011	
Calibration:	2261001	Instrument:	MS-BNA3	
Matrix:	Water	Calibration Dates:	9/11/12 10:38	9/11/12 17:40

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-Methylphenol												
4-Methylphenol												
3-Methylphenol/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	0.354329	60	0.3540016	80	0.3422855	100	0.3257612				
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)

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Acenaphthene	1.10566	8.941982	9.541375	5.759679E-02			CCC (20)	
Acenaphthylene	1.65984	11.47408	9.309875	5.149462E-02			CCC (20)	
Acetophenone	1.761778	4.548734	6.15075	0.029436			CCC (20)	
Aniline	1.975584	6.156998	5.21875	8.840861E-03			CCC (20)	
Anthracene	1.081887	12.14042	11.38375	4.965419E-02			CCC (20)	
Atrazine	0.2286444	3.743847	11.014	2.800227E-02			CCC (20)	
Benzaldehyde	0.9974323	8.489099	5.032875	0.0350803			CCC (20)	
Benzidine	0.650866	4.862256	12.96125	7.03444E-03			CCC (20)	
Benzo(a)anthracene	1.096178	5.859442	14.68275	0.0361667			CCC (20)	
Benzo(a)pyrene	1.020199	5.91785	16.89375	4.367248E-02			CCC (20)	
Benzo(b)fluoranthene	1.062636	8.32804	16.3765	4.687998E-02			CCC (20)	
Benzo(g,h,i)perylene	0.9945587	5.662765	19.13462	6.322926E-02			CCC (20)	
Benzoic acid	0.2585828	19.18735	7.002875	0.5416775	0.9968332		CCC (20)	
Benzo(k)fluoranthene	1.300594	10.47456	16.41512	4.428847E-02			CCC (20)	
Benzyl alcohol	0.8350847	3.232369	5.801	8.006347E-02			CCC (20)	
1,1-Biphenyl	1.358172	8.14203	8.777	3.752441E-02			CCC (20)	
4-Bromophenyl-phenylether	0.2362641	2.694889	10.759	4.506461E-02			CCC (20)	
Butylbenzylphthalate	0.5337897	6.795952	13.95313	1.982893E-02			CCC (20)	
Caprolactam	0.1054972	6.369373	7.769375	0.1428007			CCC (20)	
Carbazole	1.029924	10.35465	11.592	4.012654E-02			CCC (20)	
4-Chloro-3-methylphenol	0.3241539	4.484259	8.02375	2.422232E-02			CCC (20)	
4-Chloroaniline	0.4387603	4.499309	7.395	6.407021E-02			CCC (20)	
Bis(2-chloroethoxy)methane	0.4361706	4.861304	6.99	5.257221E-02			CCC (20)	
Bis(2-chloroethyl)ether	1.284228	4.005468	5.29525	0.1014556			CCC (20)	
2,2'-Oxybis-1-chloropropane	1.662963	5.286827	6.008	7.846643E-02			CCC (20)	
2-Chloronaphthalene	1.10867	7.247886	8.782	5.276285E-02			CCC (20)	
2-Chlorophenol	1.266695	3.235977	5.356	8.851782E-02			CCC (20)	
4-Chlorophenyl phenyl ether	0.6443488	6.230529	10.16638	5.729773E-03			CCC (20)	
Chrysene	1.072128	8.541599	14.74763	3.641467E-02			CCC (20)	
Dibenz(a,h)anthracene	0.968097	8.317117	18.71425	4.210554E-02			CCC (20)	
Dibenzofuran	1.531191	11.0083	9.734	4.736714E-02			CCC (20)	
Di-n-butylphthalate	1.117323	11.87776	12.081	2.243919E-02			CCC (20)	

INITIAL CALIBRATION DATA (Continued)

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,4-Dichlorobenzene	1.454535	5.818776	5.61225	0.013037			CCC (20)	
1,3-Dichlorobenzene	1.438718	4.610703	5.53975	1.248566E-02			CCC (20)	
1,2-Dichlorobenzene	1.382609	5.210718	5.860625	0.0201332			CCC (20)	
3,3'-Dichlorobenzidine	0.3990372	6.177841	14.68175	2.892872E-02			CCC (20)	
2,6-Dichlorophenol	0.3076612	2.595722	7.40325	2.436204E-02			15	
2,4-Dichlorophenol	0.3172443	5.18606	7.101375	4.761375E-02			CCC (20)	
Diethylphthalate	1.246346	6.574405	10.103	6.670748E-02			CCC (20)	
2,4-Dimethylphenol	0.3802932	3.960326	6.8645	1.752451E-02			CCC (20)	
Dimethyl phthalate	1.25703	8.5773	9.232125	5.107294E-02			CCC (20)	
4,6-Dinitro-2-methylphenol	0.1376067	22.31038	10.28925	8.292123E-02	0.9995831		CCC (20)	*
2,4-Dinitrophenol	0.1586589	30.52087	9.602375	5.674957E-02	0.9965146		CCC (20)	*
2,4-Dinitrotoluene	0.4130027	6.633871	9.796125	4.871438E-02			CCC (20)	
2,6-Dinitrotoluene	0.3035821	5.167856	9.315	4.886391E-02			CCC (20)	
Di-n-octylphthalate	1.122715	10.64814	15.776	1.209158E-02			CCC (20)	
1,4-Dioxane	0.5337955	4.869741	2.414375	7.061711E-02			15	
1,2-Diphenylhydrazine	0.7871146	8.877235	10.355	4.530772E-02			CCC (20)	
Bis(2-ethylhexyl)phthalate	0.6994262	7.777001	14.8135	7.521677E-03			CCC (20)	
Fluoranthene	1.164281	11.37119	12.78475	7.212182E-03			CCC (20)	
Fluorene	1.322497	9.629889	10.15838	0.047539			CCC (20)	
2-Fluorobiphenyl	1.269863	8.146411	8.668	5.397084E-02			CCC (20)	
2-Fluorophenol	1.119802	5.107841	4.039	1.607769E-02			CCC (20)	
Hexachlorobenzene	0.2557988	3.811211	10.93875	0.0483882			CCC (20)	
Hexachlorobutadiene	0.2021383	2.894676	7.537375	1.656083E-02			CCC (20)	
Hexachlorocyclopentadiene	0.3471121	8.069592	8.46875	1.743379E-02			CCC (20)	
Hexachloroethane	0.606057	2.830271	6.25375	5.98945E-03			CCC (20)	
Indeno(1,2,3-cd)pyrene	1.18309	7.999515	18.68575	3.410259E-02			CCC (20)	
Isophorone	0.694789	5.463283	6.678375	9.487201E-03			CCC (20)	
1-Methylnaphthalene	0.5852855	7.165809	8.311	5.573635E-02			CCC (20)	
2-Methylnaphthalene	0.6105231	7.071532	8.168625	0.0152489			CCC (20)	
2-Methylphenol	1.15948	3.037164	5.977	7.574059E-02			CCC (20)	
3-Methylphenol	1.219104	2.320772	6.17375	7.362797E-02			CCC (20)	
4-Methylphenol	1.219104	2.320772	6.17375	7.362797E-02			CCC (20)	

INITIAL CALIBRATION DATA (Continued)

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2261001	Instrument:	MS-BNA3
Matrix:	Water	Calibration Dates:	9/11/12 10:38 9/11/12 17:40

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
3-Methylphenol/4-Methylphenol	1.219104	2.320772	6.17375	7.362797E-02			15	
Naphthalene	0.9922437	12.28808	7.288875	1.449498E-02			CCC (20)	
4-Nitroaniline	0.3237232	5.187175	10.24375	9.360202E-02			CCC (20)	
3-Nitroaniline	0.3275855	3.191586	9.4845	6.968371E-02			CCC (20)	
2-Nitroaniline	0.3368371	4.692985	8.965625	2.313171E-02			CCC (20)	
Nitrobenzene	0.4042427	3.277603	6.37825	1.726574E-02			CCC (20)	
Nitrobenzene-d5	0.3989519	3.300556	6.357375	2.012303E-02			CCC (20)	
4-Nitrophenol	0.263969	9.91531	9.692875	0.0512375			CCC (20)	
2-Nitrophenol	0.1877485	8.18829	6.8025	0.0109992			CCC (20)	
N-Nitrosodimethylamine	0.6512354	3.595621	2.705	0.1357375			CCC (20)	
N-Nitrosodiphenylamine	0.6783385	6.967624	10.324	4.608146E-02			CCC (20)	
N-Nitroso-di-n-propylamine	0.977041	4.270567	6.194375	7.506511E-02			CCC (20)	
Pentachlorophenol	0.1662584	12.1407	11.15975	0.0122687			CCC (20)	
Phenanthrene	1.082295	13.7748	11.32925	4.510804E-02			CCC (20)	
Phenol	1.701202	4.253285	5.197	0.128711			CCC (20)	
Phenol-d6	1.476584	6.577862	5.18125	0.1022497			CCC (20)	
Pyrene	1.182005	12.0001	13.058	3.821264E-02			CCC (20)	
Pyridine	1.443915	2.816602	2.7155	0.1280989			CCC (20)	
Terphenyl-d14	0.755263	6.374122	13.26762	4.197651E-02			CCC (20)	
1,2,4,5-Tetrachlorobenzene	0.3539919	4.108493	8.43825	1.427966E-02			CCC (20)	
2,3,4,6-Tetrachlorophenol	0.3406087	4.554587	9.94875	1.854361E-02			CCC (20)	
2,4,6-Tribromophenol	0.1129158	6.053375	10.48725	7.380264E-03			CCC (20)	
1,2,4-Trichlorobenzene	0.3379206	3.985092	7.2165	8.724103E-03			CCC (20)	
2,4,6-Trichlorophenol	0.3893444	3.105104	8.572375	2.137935E-02			CCC (20)	
2,4,5-Trichlorophenol	0.3894227	5.904797	8.613625	1.934255E-02			CCC (20)	

INITIAL CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-ICV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2I25803	Injection Date:	09/11/12
Lab Sample ID:	2I25803-ICV1	Injection Time:	18:08

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Acenaphthene	A	50.00	58.60	1.10566	1.295903	0.9	17.2	20
Acenaphthylene	A	50.00	54.94	1.65984	1.823847	0.9	9.9	20
Anthracene	A	50.00	53.20	1.081887	1.151058	0.7	6.4	20
Benzo(a)anthracene	A	50.00	55.59	1.096178	1.218701	0.8	11.2	20
Benzo(a)pyrene	A	50.00	53.88	1.020199	1.099446	0.7	7.8	20
Benzo(b)fluoranthene	A	50.00	53.05	1.062636	1.127461	0.7	6.1	20
Benzo(g,h,i)perylene	A	50.00	54.39	0.9945587	1.081915	0.5	8.8	20
Benzoic acid	L	50.00	48.69	0.2585828	0.2811545	0.01	-2.6	20
Benzo(k)fluoranthene	A	50.00	53.54	1.300594	1.392682	0.7	7.1	20
4-Bromophenyl-phenylether	A	50.00	53.33	0.2362641	0.2519767	0.1	6.7	20
Butylbenzylphthalate	A	50.00	55.26	0.5337897	0.5899795	0.01	10.5	20
Carbazole	A	50.00	53.21	1.029924	1.095962	0.01	6.4	20
4-Chloro-3-methylphenol	A	50.00	54.72	0.3241539	0.3547434	0.2	9.4	20
4-Chloroaniline	A	50.00	52.81	0.4387603	0.4634271	0.01	5.6	20
Bis(2-chloroethoxy)methane	A	50.00	53.38	0.4361706	0.4656965	0.3	6.8	20
Bis(2-chloroethyl)ether	A	50.00	56.03	1.284228	1.439207	0.7	12.1	20
2,2'-Oxybis-1-chloropropane	A	50.00	55.74	1.662963	1.853836	0.01	11.5	20
2-Chloronaphthalene	A	50.00	51.24	1.10867	1.136069	0.8	2.5	20
2-Chlorophenol	A	50.00	58.06	1.266695	1.470975	0.8	16.1	20
4-Chlorophenyl phenyl ether	A	50.00	51.29	0.6443488	0.6609697	0.4	2.6	20
Chrysene	A	50.00	56.09	1.072128	1.202645	0.7	12.2	20
Dibenz(a,h)anthracene	A	50.00	55.01	0.968097	1.065122	0.4	10.0	20
Dibenzofuran	A	50.00	53.47	1.531191	1.637537	0.8	6.9	20
Di-n-butylphthalate	A	50.00	51.42	1.117323	1.148948	0.01	2.8	20
2,4-Dichlorophenol	A	50.00	54.14	0.3172443	0.3435181	0.2	8.3	20
Diethylphthalate	A	50.00	50.34	1.246346	1.254886	0.01	0.7	20
2,4-Dimethylphenol	A	50.00	56.41	0.3802932	0.4290272	0.2	12.8	20
Dimethyl phthalate	A	50.00	49.52	1.25703	1.244959	0.01	-1.0	20
4,6-Dinitro-2-methylphenol	L	50.00	53.68	0.1376067	0.1681106	0.01	7.4	20

INITIAL CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-ICV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2I25803	Injection Date:	09/11/12
Lab Sample ID:	2I25803-ICV1	Injection Time:	18:08

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
2,4-Dinitrophenol	L	50.00	49.63	0.1586589	0.1883481	0.05	-0.7	20
2,4-Dinitrotoluene	A	50.00	52.00	0.4130027	0.4295454	0.2	4.0	20
2,6-Dinitrotoluene	A	50.00	53.10	0.3035821	0.3224102	0.2	6.2	20
Di-n-octylphthalate	A	50.00	55.98	1.122715	1.25702	0.01	12.0	20
1,2-Diphenylhydrazine	A	50.00	54.43	0.7871146	0.856912	0.01	8.9	20
Bis(2-ethylhexyl)phthalate	A	50.00	56.88	0.6994262	0.7957128	0.01	13.8	20
Fluoranthene	A	50.00	53.36	1.164281	1.242525	0.6	6.7	20
Fluorene	A	50.00	51.97	1.322497	1.3745	0.9	3.9	20
Hexachlorobenzene	A	50.00	53.88	0.2557988	0.2756724	0.1	7.8	20
Hexachlorobutadiene	A	50.00	59.84	0.2021383	0.2419049	0.01	19.7	20
Hexachlorocyclopentadiene	A	50.00	55.42	0.3471121	0.3847598	0.05	10.8	20
Hexachloroethane	A	50.00	54.49	0.606057	0.6604722	0.3	9.0	20
Indeno(1,2,3-cd)pyrene	A	50.00	54.73	1.18309	1.295127	0.5	9.5	20
Isophorone	A	50.00	52.71	0.694789	0.7324747	0.4	5.4	20
1-Methylnaphthalene	A	50.00	53.43	0.5852855	0.6253864	0.01	6.9	20
2-Methylnaphthalene	A	50.00	52.57	0.6105231	0.6419021	0.4	5.1	20
2-Methylphenol	A	50.00	58.16	1.15948	1.348604	0.7	16.3	20
3-Methylphenol/4-Methylphenol	A	50.00	58.18	1.219104	1.418582		16.4	20
Naphthalene	A	50.00	57.00	0.9922437	1.131112	0.7	14.0	20
4-Nitroaniline	A	50.00	53.79	0.3237232	0.348242	0.01	7.6	20
3-Nitroaniline	A	50.00	53.70	0.3275855	0.3518224	0.01	7.4	20
2-Nitroaniline	A	50.00	58.40	0.3368371	0.3934389	0.01	16.8	20
Nitrobenzene	A	50.00	52.69	0.4042427	0.4260277	0.2	5.4	20
4-Nitrophenol	A	50.00	54.75	0.263969	0.2890525	0.05	9.5	20
2-Nitrophenol	A	50.00	54.00	0.1877485	0.2027527	0.1	8.0	20
N-Nitrosodiphenylamine	A	50.00	53.61	0.6783385	0.7272844	0.01	7.2	20
N-Nitroso-di-n-propylamine	A	50.00	55.58	0.977041	1.086017	0.5	11.2	20
Phenanthrene	A	50.00	53.75	1.082295	1.163421	0.7	7.5	20
Phenol	A	50.00	56.31	1.701202	1.915796	0.8	12.6	20

INITIAL CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-ICV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2I25803	Injection Date:	09/11/12
Lab Sample ID:	2I25803-ICV1	Injection Time:	18:08

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)	
Pyrene	A	50.00	54.56	1.182005	1.289905	0.6	9.1	20	
2,4,6-Trichlorophenol	A	50.00	53.74	0.3893444	0.4184625	0.2	7.5	20	
2,4,5-Trichlorophenol	A	50.00	58.16	0.3894227	0.4529662	0.2	16.3	20	
2-Fluorobiphenyl	A	50.00	53.53	1.269863	1.359507	0.01	7.1	20	
2-Fluorophenol	A	100.0	122.0	1.119802	1.365786	0.01	22.0	20	*
Nitrobenzene-d5	A	50.00	55.18	0.3989519	0.4402934	0.01	10.4	20	
Phenol-d6	A	100.0	113.3	1.476584	1.673269	0.01	13.3	20	
Terphenyl-d14	A	50.00	59.66	0.755263	0.9012434	0.01	19.3	20	
2,4,6-Tribromophenol	A	100.0	109.1	0.1129158	0.1231592	0.01	9.1	20	

INITIAL CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-ICV2.D	Calibration Date:	09/11/12 10:38
Sequence:	2I25803	Injection Date:	09/11/12
Lab Sample ID:	2I25803-ICV2	Injection Time:	18:36

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Acetophenone	A	50.00	52.13	1.761778	1.836985	0.01	4.3	20
Atrazine	A	50.00	47.98	0.2286444	0.2194247	0.01	-4.0	20
Benzaldehyde	A	50.00	52.76	0.9974323	1.052489	0.01	5.5	20
Benzidine	A	50.00	56.11	0.650866	0.7304139	0.01	12.2	20
1,1-Biphenyl	A	50.00	51.62	1.358172	1.402158	0.01	3.2	20
Caprolactam	A	50.00	55.44	0.1054972	0.1169682	0.01	10.9	20
3,3'-Dichlorobenzidine	A	50.00	54.50	0.3990372	0.4349478	0.01	9.0	20

INITIAL CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-ICV3.D	Calibration Date:	09/11/12 10:38
Sequence:	2I25803	Injection Date:	09/12/12
Lab Sample ID:	2I25803-ICV3	Injection Time:	15:49

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Pentachlorophenol	A	50.00	46.01	0.1662584	0.1529758	0.05	-8.0	20

CONTINUING CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-CCV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2K32113	Injection Date:	11/15/12
Lab Sample ID:	2K32113-CCV1	Injection Time:	11:24

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acenaphthene	A	50.00	47.10	1.10566	1.041595	0.9	-5.8	20
Acenaphthylene	A	50.00	48.78	1.65984	1.619317	0.9	-2.4	20
Anthracene	A	50.00	50.18	1.081887	1.085802	0.7	0.4	20
Benzo(a)anthracene	A	50.00	52.40	1.096178	1.148926	0.8	4.8	20
Benzo(a)pyrene	A	50.00	53.46	1.020199	1.090743	0.7	6.9	20
Benzo(b)fluoranthene	A	50.00	60.94	1.062636	1.295147	0.7	21.9	20 *
Benzo(g,h,i)perylene	A	50.00	53.43	0.9945587	1.062842	0.5	6.9	20
Benzoic acid	L	50.00	49.92	0.2585828	0.2888672	0.01	-0.2	20
Benzo(k)fluoranthene	A	50.00	44.04	1.300594	1.145523	0.7	-11.9	20
4-Bromophenyl-phenylether	A	50.00	50.39	0.2362641	0.238107	0.1	0.8	20
Butylbenzylphthalate	A	50.00	54.20	0.5337897	0.5786288	0.01	8.4	20
Carbazole	A	50.00	51.74	1.029924	1.065695	0.01	3.5	20
4-Chloro-3-methylphenol	A	50.00	50.67	0.3241539	0.328479	0.2	1.3	20
4-Chloroaniline	A	50.00	53.12	0.4387603	0.4661075	0.01	6.2	20
Bis(2-chloroethoxy)methane	A	50.00	49.93	0.4361706	0.4355401	0.3	-0.1	20
Bis(2-chloroethyl)ether	A	50.00	55.08	1.284228	1.414663	0.7	10.2	20
2,2'-Oxybis-1-chloropropane	A	50.00	52.45	1.662963	1.744446	0.01	4.9	20
2-Chloronaphthalene	A	50.00	49.20	1.10867	1.090981	0.8	-1.6	20
2-Chlorophenol	A	50.00	56.50	1.266695	1.43133	0.8	13.0	20
4-Chlorophenyl phenyl ether	A	50.00	48.70	0.6443488	0.6275821	0.4	-2.6	20
Chrysene	A	50.00	48.73	1.072128	1.044819	0.7	-2.5	20
Dibenz(a,h)anthracene	A	50.00	54.73	0.968097	1.059735	0.4	9.5	20
Dibenzofuran	A	50.00	48.83	1.531191	1.495354	0.8	-2.3	20
Di-n-butylphthalate	A	50.00	51.60	1.117323	1.153036	0.01	3.2	20
2,4-Dichlorophenol	A	50.00	51.54	0.3172443	0.3270156	0.2	3.1	20
Diethylphthalate	A	50.00	46.53	1.246346	1.15989	0.01	-6.9	20
2,4-Dimethylphenol	A	50.00	49.55	0.3802932	0.3769058	0.2	-0.9	20
Dimethyl phthalate	A	50.00	47.91	1.25703	1.204567	0.01	-4.2	20
4,6-Dinitro-2-methylphenol	L	50.00	57.56	0.1376067	0.1812087	0.01	15.1	20

CONTINUING CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-CCV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2K32113	Injection Date:	11/15/12
Lab Sample ID:	2K32113-CCV1	Injection Time:	11:24

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2,4-Dinitrophenol	L	50.00	57.83	0.1586589	0.2239643	0.05	15.7	20
2,4-Dinitrotoluene	A	50.00	52.77	0.4130027	0.4358845	0.2	5.5	20
2,6-Dinitrotoluene	A	50.00	53.10	0.3035821	0.3224365	0.2	6.2	20
Di-n-octylphthalate	A	50.00	57.14	1.122715	1.283147	0.01	14.3	20
1,2-Diphenylhydrazine	A	50.00	47.14	0.7871146	0.7420815	0.01	-5.7	20
Bis(2-ethylhexyl)phthalate	A	50.00	54.65	0.6994262	0.764439	0.01	9.3	20
Fluoranthene	A	50.00	50.60	1.164281	1.178302	0.6	1.2	20
Fluorene	A	50.00	48.20	1.322497	1.274853	0.9	-3.6	20
Hexachlorobenzene	A	50.00	50.58	0.2557988	0.2587705	0.1	1.2	20
Hexachlorobutadiene	A	50.00	47.00	0.2021383	0.1900084	0.01	-6.0	20
Hexachlorocyclopentadiene	A	50.00	49.51	0.3471121	0.3437131	0.05	-1.0	20
Hexachloroethane	A	50.00	50.10	0.606057	0.607309	0.3	0.2	20
Indeno(1,2,3-cd)pyrene	A	50.00	52.03	1.18309	1.231215	0.5	4.1	20
Isophorone	A	50.00	47.96	0.694789	0.6664044	0.4	-4.1	20
1-Methylnaphthalene	A	50.00	49.13	0.5852855	0.5750844	0.01	-1.7	20
2-Methylnaphthalene	A	50.00	49.14	0.6105231	0.5999683	0.4	-1.7	20
2-Methylphenol	A	50.00	56.59	1.15948	1.312372	0.7	13.2	20
3-Methylphenol/4-Methylphenol	A	50.00	56.81	1.219104	1.38526		13.6	20
Naphthalene	A	50.00	48.93	0.9922437	0.9710295	0.7	-2.1	20
4-Nitroaniline	A	50.00	53.00	0.3237232	0.3431414	0.01	6.0	20
3-Nitroaniline	A	50.00	55.16	0.3275855	0.3613739	0.01	10.3	20
2-Nitroaniline	A	50.00	51.65	0.3368371	0.3479849	0.01	3.3	20
Nitrobenzene	A	50.00	47.98	0.4042427	0.3878849	0.2	-4.0	20
4-Nitrophenol	A	50.00	50.97	0.263969	0.2691035	0.05	1.9	20
2-Nitrophenol	A	50.00	59.98	0.1877485	0.2252106	0.1	20.0	20
N-Nitrosodiphenylamine	A	50.00	51.43	0.6783385	0.6976924	0.01	2.9	20
N-Nitroso-di-n-propylamine	A	50.00	49.70	0.977041	0.9711144	0.5	-0.6	20
Pentachlorophenol	A	50.00	53.27	0.1662584	0.1771428	0.05	6.5	20
Phenanthrene	A	50.00	48.65	1.082295	1.053011	0.7	-2.7	20

CONTINUING CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-CCV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2K32113	Injection Date:	11/15/12
Lab Sample ID:	2K32113-CCV1	Injection Time:	11:24

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Phenol	A	50.00	53.81	1.701202	1.831004	0.8	7.6	20
Pyrene	A	50.00	50.67	1.182005	1.197891	0.6	1.3	20
2,4,6-Trichlorophenol	A	50.00	51.68	0.3893444	0.4023956	0.2	3.4	20
2,4,5-Trichlorophenol	A	50.00	52.69	0.3894227	0.4103774	0.2	5.4	20
2-Fluorobiphenyl	A	50.00	49.97	1.269863	1.269055	0.01	-0.06	20
2-Fluorophenol	A	100.0	110.0	1.119802	1.23222	0.01	10.0	20
Nitrobenzene-d5	A	50.00	50.36	0.3989519	0.4018024	0.01	0.7	20
Phenol-d6	A	100.0	108.4	1.476584	1.600298	0.01	8.4	20
Terphenyl-d14	A	50.00	60.69	0.755263	0.9167166	0.01	21.4	20 *
2,4,6-Tribromophenol	A	100.0	104.3	0.1129158	0.1177991	0.01	4.3	20

CONTINUING CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-CCV2.D	Calibration Date:	09/11/12 10:38
Sequence:	2K32113	Injection Date:	11/15/12
Lab Sample ID:	2K32113-CCV2	Injection Time:	11:52

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetophenone	A	50.00	48.93	1.761778	1.723965	0.01	-2.1	20
Atrazine	A	50.00	53.68	0.2286444	0.2454642	0.01	7.4	20
Benzaldehyde	A	50.00	59.05	0.9974323	1.177968	0.01	18.1	20
Benzidine	A	50.00	65.58	0.650866	0.8537063	0.01	31.2	20 *
1,1-Biphenyl	A	50.00	48.65	1.358172	1.321519	0.01	-2.7	20
Caprolactam	A	50.00	60.97	0.1054972	0.1286356	0.01	21.9	20 *
3,3'-Dichlorobenzidine	A	50.00	60.49	0.3990372	0.4827303	0.01	21.0	20 *

CONTINUING CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-CCV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2K32508	Injection Date:	11/19/12
Lab Sample ID:	2K32508-CCV1	Injection Time:	15:54

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acenaphthene	A	50.00	47.04	1.10566	1.040198	0.9	-5.9	20
Acenaphthylene	A	50.00	48.69	1.65984	1.616321	0.9	-2.6	20
Anthracene	A	50.00	50.42	1.081887	1.090917	0.7	0.8	20
Benzo(a)anthracene	A	50.00	51.13	1.096178	1.120977	0.8	2.3	20
Benzo(a)pyrene	A	50.00	52.23	1.020199	1.0657	0.7	4.5	20
Benzo(b)fluoranthene	A	50.00	56.33	1.062636	1.197189	0.7	12.7	20
Benzo(g,h,i)perylene	A	50.00	54.22	0.9945587	1.078401	0.5	8.4	20
Benzoic acid	L	50.00	50.02	0.2585828	0.289526	0.01	0.04	20
Benzo(k)fluoranthene	A	50.00	45.77	1.300594	1.190678	0.7	-8.5	20
4-Bromophenyl-phenylether	A	50.00	49.74	0.2362641	0.2350416	0.1	-0.5	20
Butylbenzylphthalate	A	50.00	53.08	0.5337897	0.5666992	0.01	6.2	20
Carbazole	A	50.00	51.74	1.029924	1.065722	0.01	3.5	20
4-Chloro-3-methylphenol	A	50.00	52.12	0.3241539	0.3378724	0.2	4.2	20
4-Chloroaniline	A	50.00	52.90	0.4387603	0.4642363	0.01	5.8	20
Bis(2-chloroethoxy)methane	A	50.00	50.56	0.4361706	0.4410769	0.3	1.1	20
Bis(2-chloroethyl)ether	A	50.00	52.81	1.284228	1.356439	0.7	5.6	20
2,2'-Oxybis-1-chloropropane	A	50.00	51.99	1.662963	1.729078	0.01	4.0	20
2-Chloronaphthalene	A	50.00	48.27	1.10867	1.070236	0.8	-3.5	20
2-Chlorophenol	A	50.00	54.13	1.266695	1.371362	0.8	8.3	20
4-Chlorophenyl phenyl ether	A	50.00	47.62	0.6443488	0.6136347	0.4	-4.8	20
Chrysene	A	50.00	46.63	1.072128	0.999947	0.7	-6.7	20
Dibenz(a,h)anthracene	A	50.00	54.80	0.968097	1.061141	0.4	9.6	20
Dibenzofuran	A	50.00	48.61	1.531191	1.488682	0.8	-2.8	20
Di-n-butylphthalate	A	50.00	51.27	1.117323	1.145759	0.01	2.5	20
2,4-Dichlorophenol	A	50.00	51.44	0.3172443	0.3264091	0.2	2.9	20
Diethylphthalate	A	50.00	46.45	1.246346	1.157937	0.01	-7.1	20
2,4-Dimethylphenol	A	50.00	49.42	0.3802932	0.3759074	0.2	-1.2	20
Dimethyl phthalate	A	50.00	47.63	1.25703	1.197541	0.01	-4.7	20
4,6-Dinitro-2-methylphenol	L	50.00	55.92	0.1376067	0.1756822	0.01	11.8	20

CONTINUING CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-CCV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2K32508	Injection Date:	11/19/12
Lab Sample ID:	2K32508-CCV1	Injection Time:	15:54

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2,4-Dinitrophenol	L	50.00	55.61	0.1586589	0.2143114	0.05	11.2	20
2,4-Dinitrotoluene	A	50.00	52.50	0.4130027	0.4336306	0.2	5.0	20
2,6-Dinitrotoluene	A	50.00	52.28	0.3035821	0.3174263	0.2	4.6	20
Di-n-octylphthalate	A	50.00	57.06	1.122715	1.281374	0.01	14.1	20
1,2-Diphenylhydrazine	A	50.00	48.18	0.7871146	0.7584194	0.01	-3.6	20
Bis(2-ethylhexyl)phthalate	A	50.00	55.14	0.6994262	0.7712977	0.01	10.3	20
Fluoranthene	A	50.00	49.97	1.164281	1.163595	0.6	-0.06	20
Fluorene	A	50.00	47.13	1.322497	1.246596	0.9	-5.7	20
Hexachlorobenzene	A	50.00	51.02	0.2557988	0.2610209	0.1	2.0	20
Hexachlorobutadiene	A	50.00	47.41	0.2021383	0.1916825	0.01	-5.2	20
Hexachlorocyclopentadiene	A	50.00	47.74	0.3471121	0.331455	0.05	-4.5	20
Hexachloroethane	A	50.00	48.08	0.606057	0.5827489	0.3	-3.8	20
Indeno(1,2,3-cd)pyrene	A	50.00	52.43	1.18309	1.240535	0.5	4.9	20
Isophorone	A	50.00	49.13	0.694789	0.682765	0.4	-1.7	20
1-Methylnaphthalene	A	50.00	48.48	0.5852855	0.5674838	0.01	-3.0	20
2-Methylnaphthalene	A	50.00	49.33	0.6105231	0.6023051	0.4	-1.3	20
2-Methylphenol	A	50.00	55.56	1.15948	1.288371	0.7	11.1	20
3-Methylphenol/4-Methylphenol	A	50.00	55.27	1.219104	1.347633		10.5	20
Naphthalene	A	50.00	49.52	0.9922437	0.982658	0.7	-1.0	20
4-Nitroaniline	A	50.00	51.95	0.3237232	0.3363514	0.01	3.9	20
3-Nitroaniline	A	50.00	56.02	0.3275855	0.3670245	0.01	12.0	20
2-Nitroaniline	A	50.00	52.69	0.3368371	0.3549799	0.01	5.4	20
Nitrobenzene	A	50.00	49.62	0.4042427	0.4011835	0.2	-0.8	20
4-Nitrophenol	A	50.00	51.20	0.263969	0.2702931	0.05	2.4	20
2-Nitrophenol	A	50.00	59.57	0.1877485	0.2236899	0.1	19.1	20
N-Nitrosodiphenylamine	A	50.00	51.75	0.6783385	0.7020911	0.01	3.5	20
N-Nitroso-di-n-propylamine	A	50.00	48.38	0.977041	0.9454502	0.5	-3.2	20
Pentachlorophenol	A	50.00	53.39	0.1662584	0.177518	0.05	6.8	20
Phenanthrene	A	50.00	48.71	1.082295	1.054325	0.7	-2.6	20

CONTINUING CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-CCV1.D	Calibration Date:	09/11/12 10:38
Sequence:	2K32508	Injection Date:	11/19/12
Lab Sample ID:	2K32508-CCV1	Injection Time:	15:54

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Phenol	A	50.00	53.28	1.701202	1.812925	0.8	6.6	20
Pyrene	A	50.00	50.74	1.182005	1.199632	0.6	1.5	20
2,4,6-Trichlorophenol	A	50.00	51.15	0.3893444	0.3983121	0.2	2.3	20
2,4,5-Trichlorophenol	A	50.00	51.50	0.3894227	0.4010922	0.2	3.0	20
2-Fluorobiphenyl	A	50.00	49.33	1.269863	1.252887	0.01	-1.3	20
2-Fluorophenol	A	100.0	108.7	1.119802	1.216838	0.01	8.7	20
Nitrobenzene-d5	A	50.00	52.31	0.3989519	0.4173812	0.01	4.6	20
Phenol-d6	A	100.0	104.7	1.476584	1.546125	0.01	4.7	20
Terphenyl-d14	A	50.00	59.27	0.755263	0.8953411	0.01	18.5	20
2,4,6-Tribromophenol	A	100.0	107.1	0.1129158	0.1209064	0.01	7.1	20

CONTINUING CALIBRATION CHECK

SW8270D

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	MS-BNA3	Calibration:	2261001
Lab File ID:	SEQ-CCV2.D	Calibration Date:	09/11/12 10:38
Sequence:	2K32508	Injection Date:	11/19/12
Lab Sample ID:	2K32508-CCV2	Injection Time:	16:22

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetophenone	A	50.00	49.65	1.761778	1.749599	0.01	-0.7	20
Atrazine	A	50.00	52.58	0.2286444	0.2404329	0.01	5.2	20
Benzaldehyde	A	50.00	58.19	0.9974323	1.160771	0.01	16.4	20
Benzidine	A	50.00	62.32	0.650866	0.8113061	0.01	24.7	20 *
1,1-Biphenyl	A	50.00	48.07	1.358172	1.305688	0.01	-3.9	20
Caprolactam	A	50.00	62.93	0.1054972	0.1327728	0.01	25.9	20 *
3,3'-Dichlorobenzidine	A	50.00	59.10	0.3990372	0.4717002	0.01	18.2	20

HOLDING TIME SUMMARY

SW8270D

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

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
GW0756	11/12/12 10:57	11/14/12 08:30	11/14/12 14:18	2.18	7.00	11/15/12 15:08	1.03	40.00	
GW0860	11/14/12 16:06	11/16/12 08:30	11/16/12 13:18	1.84	7.00	11/20/12 00:37	3.47	40.00	

PREPARATION BENCH SHEET

2K14020

Empirical Laboratories, LLC

Printed: 11/28/2012 8:28:08AM

Instrument:

Matrix: Water **Prepared using: EXT - EXT_3510** **Surrogate used: 12K0006**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211132-01	N	SMS_BNA_8270D_3510_REG	11/14/2012	1000	1				500	NA	requires 3-Methlphenol/4-Methylphenol/Naphthalene
1211132-03	O	SMS_BNA_8270D_3510_REG	11/14/2012	1020	1				500	NA	requires 3-Methlphenol/4-Methylphenol/Naphthalene
1211132-05	N	SMS_BNA_8270D_3510_REG	11/14/2012	1000	1				500	NA	requires 3-Methlphenol/4-Methylphenol/Naphthalene
1211133-01	O	SMS_BNA_8270D_3510_REG	11/14/2012	1020	1				500	NA	requires 3-Methlphenol/4-Methylphenol/Naphthalene
2K14020-BLK1		QC	11/14/2012	1000	1				500	NA	
2K14020-BS1		QC	11/14/2012	1000	1	12K0174		500	500	NA	
2K14020-BSD1		QC	11/14/2012	1000	1	12K0174		500	500	NA	

Reagents Used:

Standard	Description
12J0552	1:1 H2SO4/DIH2O
12J0575	Sodium Sulfate Anhydrous
12J0658	Methylene Chloride
12K0040	10N NaOH for Extractions

PREPARATION BENCH SHEET

2K16020

Empirical Laboratories, LLC

Printed: 11/28/2012 8:33:13AM

Instrument:

Matrix: Water **Prepared using: EXT - EXT_3510** **Surrogate used: 12K0006**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211138-01	A	SMS_BNA_8270D_3510_REG	11/16/2012	1000	1				500	NA	
1211146-01	O	SMS_BNA_8270D_3510_REG	11/16/2012	1020	1				500	NA	requires 3-Methlphenol/4-Methylphenol/Naphthalene
1211147-01	P	SMS_BNA_8270D_3510_REG	11/16/2012	1000	1				500	NA	requires 3-Methlphenol/4-Methylphenol/Naphthalene
2K16020-BLK1		QC	11/16/2012	1000	1				500	NA	
2K16020-BS1		QC	11/16/2012	1000	1	12K0174		500	500	NA	
2K16020-BSD1		QC	11/16/2012	1000	1	12K0174		500	500	NA	

Reagents Used:

Standard	Description
12J0552	1:1 H2SO4/DIH2O
12J0575	Sodium Sulfate Anhydrous
12K0040	10N NaOH for Extractions
12K0427	Acetonitrile

Data for SW8011 Forms

Sample Extraction Data

Prep Method: EDB-SW8011

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01RE1 [GW0756]	2K14021	35.00/35.00	37.4	35.0	10.00			11/14/12

Sample Extraction Data

Prep Method: EDB-SW8011

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-01 [GW0860]	2K20015	35.00/35.00	37.2	35.0	1.00			11/20/12

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01RE1	File ID:	009R0101.D
Sampled:	11/12/12 10:57	Prepared:	11/14/12 11:46	Analyzed:	11/20/12 14:43
Solids:		Preparation:	EDB	Dilution:	10

Batch: 2K14021 Sequence: 2K32804 Calibration: 2292002 Instrument: GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane [2C]	4.93	0.0936	0.187	0.281	D

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01	File ID:	007R0101.D
Sampled:	11/14/12 16:06	Prepared:	11/20/12 09:33	Analyzed:	11/20/12 14:00
Solids:		Preparation:	EDB	Dilution:	1

Batch: 2K20015 Sequence: 2K32804 Calibration: 2292002 Instrument: GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane		0.00941	0.0188	0.0282	U

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane	1.872	1.784	95.3	30 - 130	
1,3-Dibromopropane [2C]	1.872	1.554	83.0	30 - 130	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32303	Instrument:	GL-ECD2
		Calibration:	2292002

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32303-CCV1) ug/L				Lab File ID: 002F0101.D		Analyzed: 11/14/12 16:57		
1,3-Dibromopropane	1.989	96.9	80 - 120	6.013	6.013	0.0000	+/-0.030	
1,3-Dibromopropane [2C]	1.989	94.5	80 - 120	6.066	6.066	0.0000	+/-0.030	
Blank (2K14021-BLK1) ug/L				Lab File ID: 003F0101.D		Analyzed: 11/14/12 17:18		
1,3-Dibromopropane	1.989	96.2	30 - 130	6.013	6.013	0.0000	+/-0.030	
1,3-Dibromopropane [2C]	1.989	93.6	30 - 130	6.066	6.066	0.0000	+/-0.030	
LCS (2K14021-BS1) ug/L				Lab File ID: 004F0101.D		Analyzed: 11/14/12 17:39		
1,3-Dibromopropane	1.989	88.6	30 - 130	6.013	6.013	0.0000	+/-0.030	
1,3-Dibromopropane [2C]	1.989	85.2	30 - 130	6.066	6.066	0.0000	+/-0.030	
LCS Dup (2K14021-BSD1) ug/L				Lab File ID: 005F0101.D		Analyzed: 11/14/12 18:01		
1,3-Dibromopropane	1.989	91.9	30 - 130	6.013	6.013	0.0000	+/-0.030	
1,3-Dibromopropane [2C]	1.989	88.2	30 - 130	6.066	6.066	0.0000	+/-0.030	
Calibration Check (2K32303-CCV2) ug/L				Lab File ID: 013F0101.D		Analyzed: 11/14/12 20:52		
1,3-Dibromopropane	1.989	84.7	80 - 120	6.01	6.013	-0.0030	+/-0.030	
1,3-Dibromopropane [2C]	1.989	69.3	80 - 120	6.063	6.066	-0.0030	+/-0.030	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32804	Instrument:	GL-ECD2
		Calibration:	2292002

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32804-CCV1) ug/L				Lab File ID: 002F0101.D		Analyzed: 11/20/12 12:14		
1,3-Dibromopropane	1.989	97.1	80 - 120	6.01	6.01	0.0000	+/-0.030	
1,3-Dibromopropane [2C]	1.989	81.5	80 - 120	6.063	6.063	0.0000	+/-0.030	
Blank (2K20015-BLK1) ug/L				Lab File ID: 003F0101.D		Analyzed: 11/20/12 12:34		
1,3-Dibromopropane	1.989	90.3	30 - 130	6.006	6.01	-0.0040	+/-0.030	
1,3-Dibromopropane [2C]	1.989	77.2	30 - 130	6.063	6.063	0.0000	+/-0.030	
LCS (2K20015-BS1) ug/L				Lab File ID: 004F0101.D		Analyzed: 11/20/12 12:56		
1,3-Dibromopropane	1.989	96.2	30 - 130	6.003	6.01	-0.0070	+/-0.030	
1,3-Dibromopropane [2C]	1.989	83.3	30 - 130	6.06	6.063	-0.0030	+/-0.030	
LCS Dup (2K20015-BSD1) ug/L				Lab File ID: 005F0101.D		Analyzed: 11/20/12 13:17		
1,3-Dibromopropane	1.989	95.9	30 - 130	6.003	6.01	-0.0070	+/-0.030	
1,3-Dibromopropane [2C]	1.989	82.9	30 - 130	6.056	6.063	-0.0070	+/-0.030	
GW0860 (1211147-01) ug/L				Lab File ID: 007F0101.D		Analyzed: 11/20/12 14:00		
1,3-Dibromopropane	1.872	95.3	30 - 130	6.003	6.01	-0.0070	+/-0.030	
1,3-Dibromopropane [2C]	1.872	83.0	30 - 130	6.056	6.063	-0.0070	+/-0.030	
Calibration Check (2K32804-CCV2) ug/L				Lab File ID: 011F0101.D		Analyzed: 11/20/12 15:25		
1,3-Dibromopropane	1.989	93.7	80 - 120	6.006	6.01	-0.0040	+/-0.030	
1,3-Dibromopropane [2C]	1.989	81.4	80 - 120	6.06	6.063	-0.0030	+/-0.030	

LCS / LCS DUPLICATE RECOVERY

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K14021	Laboratory ID:	2K14021-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	0.4992	99.8	70 - 130
1,2-Dibromoethane [2C]	0.5000	0.4927	98.5	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	0.5046	101	1.07	20	70 - 130
1,2-Dibromoethane [2C]	0.5000	0.4988	99.8	1.23	20	70 - 130

LCS / LCS DUPLICATE RECOVERY

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K20015	Laboratory ID:	2K20015-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	0.5380	108	70 - 130
1,2-Dibromoethane [2C]	0.5000	0.4826	96.5	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	0.5346	107	0.640	20	70 - 130
1,2-Dibromoethane [2C]	0.5000	0.4820	96.4	0.135	20	70 - 130

PREPARATION BATCH SUMMARY

SW8011

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K14021 Batch Matrix: Water Preparation: EDB

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01RE1	11/14/12 11:46	37.39	35.00
Blank	2K14021-BLK1	11/14/12 11:46	35.00	35.00
LCS	2K14021-BS1	11/14/12 11:46	35.00	35.00
LCS Dup	2K14021-BSD1	11/14/12 11:46	35.00	35.00

PREPARATION BATCH SUMMARY

SW8011

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K20015 Batch Matrix: Water Preparation: EDB

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0860	1211147-01	11/20/12 09:33	37.19	35.00
Blank	2K20015-BLK1	11/20/12 09:33	35.00	35.00
LCS	2K20015-BS1	11/20/12 09:33	35.00	35.00
LCS Dup	2K20015-BSD1	11/20/12 09:33	35.00	35.00

ANALYSIS DATA SHEET

Blank

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:		Laboratory ID:	2K14021-BLK1	File ID:	003R0101.D
Sampled:		Prepared:	11/14/12 11:46	Analyzed:	11/14/12 17:18
Solids:		Preparation:	EDB	Dilution:	

Batch: 2K14021 Sequence: 2K32303 Calibration: 2292002 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

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane	1.989	1.912	96.2	30 - 130	
1,3-Dibromopropane [2C]	1.989	1.862	93.6	30 - 130	Y

ANALYSIS DATA SHEET

Blank

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:		Laboratory ID:	2K20015-BLK1	File ID:	003F0101.D
Sampled:		Prepared:	11/20/12 09:33	Analyzed:	11/20/12 12:34
Solids:		Preparation:	EDB	Dilution:	

Batch: 2K20015 Sequence: 2K32804 Calibration: 2292002 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

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane	1.989	1.796	90.3	30 - 130	
1,3-Dibromopropane [2C]	1.989	1.535	77.2	30 - 130	

ANALYSIS DATA SHEET

LCS

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K14021-BS1	File ID:	004F0101.D
Sampled:		Prepared:		Analyzed:	11/14/12 17:39
Solids:		Preparation:	EDB	Dilution:	

Batch:	2K14021	Sequence:	2K32303	Calibration:	2292002	Instrument:	GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane	**0.4992**	0.0100	0.0200	0.0300	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane	1.989	1.763	88.6	30 - 130	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Matrix:
Laboratory ID: 2K14021-BS1
File ID: 004R0101.D
Sampled:
Prepared:
Analyzed: 11/14/12 17:39
Solids:
Preparation: EDB
Dilution:
Batch: 2K14021
Sequence: 2K32303
Calibration: 2292002
Instrument: GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane [2C]	**0.4927**	0.0100	0.0200	0.0300	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane [2C]	1.989	1.694	85.2	30 - 130	Y

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K14021-BSD1	File ID:	005F0101.D
Sampled:		Prepared:		Analyzed:	11/14/12 18:01
Solids:		Preparation:	EDB	Dilution:	

Batch:	2K14021	Sequence:	2K32303	Calibration:	2292002	Instrument:	GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane	**0.5046**	0.0100	0.0200	0.0300	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane	1.989	1.827	91.9	30 - 130	

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K14021-BSD1	File ID:	005R0101.D
Sampled:		Prepared:		Analyzed:	11/14/12 18:01
Solids:		Preparation:	EDB	Dilution:	

Batch:	2K14021	Sequence:	2K32303	Calibration:	2292002	Instrument:	GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane [2C]	**0.4988**	0.0100	0.0200	0.0300	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane [2C]	1.989	1.755	88.2	30 - 130	Y

ANALYSIS DATA SHEET

LCS

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K20015-BS1	File ID:	004F0101.D
Sampled:		Prepared:		Analyzed:	11/20/12 12:56
Solids:		Preparation:	EDB	Dilution:	

Batch:	2K20015	Sequence:	2K32804	Calibration:	2292002	Instrument:	GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane	**0.5380**	0.0100	0.0200	0.0300	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane	1.989	1.914	96.2	30 - 130	

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Matrix:
Laboratory ID: 2K20015-BS1
File ID: 004R0101.D
Sampled:
Prepared:
Analyzed: 11/20/12 12:56
Solids:
Preparation: EDB
Dilution:
Batch: 2K20015
Sequence: 2K32804
Calibration: 2292002
Instrument: GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane [2C]	**0.4826**	0.0100	0.0200	0.0300	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane [2C]	1.989	1.656	83.3	30 - 130	

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K20015-BSD1	File ID:	005F0101.D
Sampled:		Prepared:		Analyzed:	11/20/12 13:17
Solids:		Preparation:	EDB	Dilution:	

Batch:	2K20015	Sequence:	2K32804	Calibration:	2292002	Instrument:	GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane	**0.5346**	0.0100	0.0200	0.0300	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane	1.989	1.908	95.9	30 - 130	

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K20015-BSD1	File ID:	005R0101.D
Sampled:		Prepared:		Analyzed:	11/20/12 13:17
Solids:		Preparation:	EDB	Dilution:	

Batch:	2K20015	Sequence:	2K32804	Calibration:	2292002	Instrument:	GL-ECD2

CAS NO.	COMPOUND	CONC. (ug/L)	DL	LOD	LOQ	Q
106-93-4	1,2-Dibromoethane [2C]	**0.4820**	0.0100	0.0200	0.0300	

SYSTEM MONITORING COMPOUND	ADDED (ug/L)	CONC (ug/L)	% REC	QC LIMITS	Q
1,3-Dibromopropane [2C]	1.989	1.650	82.9	30 - 130	

INITIAL CALIBRATION STANDARDS

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2J29206	Instrument:	GL-ECD2
Calibration:	2292002		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
12J0351	EDB ICAL 1 (0.02ppb)	2J29206-CAL1	004R0101.D	10/11/12 16:10
12J0351	EDB ICAL 1 (0.02ppb)	2J29206-CAL1	004F0101.D	10/11/12 16:10
12J0352	EDB ICAL 2 (0.05ppb)	2J29206-CAL2	005R0101.D	10/11/12 16:31
12J0352	EDB ICAL 2 (0.05ppb)	2J29206-CAL2	005F0101.D	10/11/12 16:31
12J0353	EDB ICAL 3 (0.10ppb)	2J29206-CAL3	006R0101.D	10/11/12 16:53
12J0353	EDB ICAL 3 (0.10ppb)	2J29206-CAL3	006F0101.D	10/11/12 16:53
12J0354	EDB ICAL 4 (0.20ppb)	2J29206-CAL4	007R0101.D	10/11/12 17:14
12J0354	EDB ICAL 4 (0.20ppb)	2J29206-CAL4	007F0101.D	10/11/12 17:14
12J0355	EDB ICAL 5 (0.5ppb)	2J29206-CAL5	008R0101.D	10/11/12 17:35
12J0355	EDB ICAL 5 (0.5ppb)	2J29206-CAL5	008F0101.D	10/11/12 17:35
12J0356	EDB ICAL 6 (1.0ppb)	2J29206-CAL6	009R0101.D	10/11/12 17:56
12J0356	EDB ICAL 6 (1.0ppb)	2J29206-CAL6	009F0101.D	10/11/12 17:56

ANALYSIS SEQUENCE SUMMARY

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2J29206	Instrument:	GL-ECD2
Calibration:	2292002		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2J29206-CAL1	004R0101.D	10/11/12 16:10
Cal Standard	2J29206-CAL1	004F0101.D	10/11/12 16:10
Cal Standard	2J29206-CAL2	005R0101.D	10/11/12 16:31
Cal Standard	2J29206-CAL2	005F0101.D	10/11/12 16:31
Cal Standard	2J29206-CAL3	006R0101.D	10/11/12 16:53
Cal Standard	2J29206-CAL3	006F0101.D	10/11/12 16:53
Cal Standard	2J29206-CAL4	007R0101.D	10/11/12 17:14
Cal Standard	2J29206-CAL4	007F0101.D	10/11/12 17:14
Cal Standard	2J29206-CAL5	008R0101.D	10/11/12 17:35
Cal Standard	2J29206-CAL5	008F0101.D	10/11/12 17:35
Cal Standard	2J29206-CAL6	009R0101.D	10/11/12 17:56
Cal Standard	2J29206-CAL6	009F0101.D	10/11/12 17:56
Initial Cal Check	2J29206-ICV1	010R0101.D	10/11/12 18:18
Initial Cal Check	2J29206-ICV1	010F0101.D	10/11/12 18:18

ANALYSIS SEQUENCE SUMMARY

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32303	Instrument:	GL-ECD2
Calibration:	2292002		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2K32303-CCV1	002R0101.D	11/14/12 16:57
Calibration Check	2K32303-CCV1	002F0101.D	11/14/12 16:57
Blank	2K14021-BLK1	003R0101.D	11/14/12 17:18
Blank	2K14021-BLK1	003F0101.D	11/14/12 17:18
LCS	2K14021-BS1	004R0101.D	11/14/12 17:39
LCS	2K14021-BS1	004F0101.D	11/14/12 17:39
LCS Dup	2K14021-BSD1	005R0101.D	11/14/12 18:01
LCS Dup	2K14021-BSD1	005F0101.D	11/14/12 18:01
Calibration Check	2K32303-CCV2	013R0101.D	11/14/12 20:52
Calibration Check	2K32303-CCV2	013F0101.D	11/14/12 20:52

ANALYSIS SEQUENCE SUMMARY

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32804	Instrument:	GL-ECD2
Calibration:	2292002		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2K32804-CCV1	002R0101.D	11/20/12 12:14
Calibration Check	2K32804-CCV1	002F0101.D	11/20/12 12:14
Blank	2K20015-BLK1	003R0101.D	11/20/12 12:34
Blank	2K20015-BLK1	003F0101.D	11/20/12 12:34
LCS	2K20015-BS1	004R0101.D	11/20/12 12:56
LCS	2K20015-BS1	004F0101.D	11/20/12 12:56
LCS Dup	2K20015-BSD1	005R0101.D	11/20/12 13:17
LCS Dup	2K20015-BSD1	005F0101.D	11/20/12 13:17
GW0860	1211147-01	007R0101.D	11/20/12 14:00
GW0860	1211147-01	007F0101.D	11/20/12 14:00
GW0756	1211133-01RE1	009R0101.D	11/20/12 14:43
GW0756	1211133-01RE1	009F0101.D	11/20/12 14:43
Calibration Check	2K32804-CCV2	011R0101.D	11/20/12 15:25
Calibration Check	2K32804-CCV2	011F0101.D	11/20/12 15:25

INITIAL CALIBRATION DATA

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072	
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011	
Calibration:	2292002	Instrument:	GL-ECD2	
Matrix:	Water	Calibration Dates:	10/11/12 16:10	10/11/12 17:56

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	0.02	10650	0.05	10860	0.1	10660	0.2	9475	0.5	9386	1	8356
1,2-Dibromoethane [2C]	0.02	31550	0.05	34320	0.1	34660	0.2	32510	0.5	31110	1	30406
1,2-Dibromo-3-chloropropane	0.02	22600	0.05	20080	0.1	19070	0.2	16850	0.5	15220	1	13344
1,2-Dibromo-3-chloropropane [2C]	0.02	68550	0.05	63880	0.1	59900	0.2	56300	0.5	56304	1	53927
1,3-Dibromopropane	0.09944	6244.972	0.1989	~~2885.872~~	0.4972	6391.794	0.9944	5737.128	1.989	5078.431	3.978	4436.4
1,3-Dibromopropane [2C]	0.09944	26739.74	0.1989	~~12227.25~~	0.4972	24656.07	0.9944	22013.27	1.989	19895.93	3.978	17722.72

INITIAL CALIBRATION DATA (Continued)

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072	
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011	
Calibration:	2292002	Instrument:	GL-ECD2	
Matrix:	Water	Calibration Dates:	10/11/12 16:10	10/11/12 17:56

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,2-Dibromoethane	9897.833	9.991906	2.694	0.0551041			20	
1,2-Dibromoethane [2C]	32426	5.370791	2.66	1.685277E-02			20	
1,2-Dibromo-3-chloropropane	17860.67	18.94447	8.78	1.335599E-02			20	
1,2-Dibromo-3-chloropropane [2C]	59810.17	9.224062	9.119333	2.295245E-02			20	
1,3-Dibromopropane	5577.745	14.68939	6.0154	2.089261E-02			20	
1,3-Dibromopropane [2C]	22205.55	16.242	6.0692	2.971043E-02			20	

INITIAL CALIBRATION CHECK

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-ECD2	Calibration:	2292002
Lab File ID:	010F0101.D	Calibration Date:	10/18/12 12:29
Sequence:	2J29206	Injection Date:	10/11/12
Lab Sample ID:	2J29206-ICV1	Injection Time:	18:18

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
1,2-Dibromoethane	A	0.5000	0.4839	9897.833	9580		-3.2	20
1,2-Dibromoethane [2C]	A	0.5000	0.4886	32426	31684		-2.3	20
1,3-Dibromopropane	A	1.989	1.779	5577.745	4989.945		-10.5	20
1,3-Dibromopropane [2C]	A	1.989	1.741	22205.55	19441.43		-12.4	20

CONTINUING CALIBRATION CHECK

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-ECD2	Calibration:	2292002
Lab File ID:	002F0101.D	Calibration Date:	10/18/12 12:29
Sequence:	2K32303	Injection Date:	11/14/12
Lab Sample ID:	2K32303-CCV1	Injection Time:	16:57

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dibromoethane	A	0.5000	0.5327	9897.833	10546		6.5	20
1,2-Dibromoethane [2C]	A	0.5000	0.5552	32426	36006		11.0	20
1,3-Dibromopropane	A	1.989	1.928	5577.745	5407.24		-3.1	20
1,3-Dibromopropane [2C]	A	1.989	1.879	22205.55	20973.86		-5.5	20

CONTINUING CALIBRATION CHECK

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-ECD2	Calibration:	2292002
Lab File ID:	013F0101.D	Calibration Date:	10/18/12 12:29
Sequence:	2K32303	Injection Date:	11/14/12
Lab Sample ID:	2K32303-CCV2	Injection Time:	20:52

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dibromoethane	A	0.5000	0.4526	9897.833	8960		-9.5	20
1,2-Dibromoethane [2C]	A	0.5000	0.4058	32426	26320		-18.8	20
1,3-Dibromopropane	A	1.989	1.685	5577.745	4724.485		-15.3	20
1,3-Dibromopropane [2C]	A	1.989	1.378	22205.55	15384.11		-30.7	20 *

CONTINUING CALIBRATION CHECK

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-ECD2	Calibration:	2292002
Lab File ID:	002F0101.D	Calibration Date:	10/18/12 12:29
Sequence:	2K32804	Injection Date:	11/20/12
Lab Sample ID:	2K32804-CCV1	Injection Time:	12:14

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dibromoethane	A	0.5000	0.5340	9897.833	10572		6.8	20
1,2-Dibromoethane [2C]	A	0.5000	0.4646	32426	30130		-7.1	20
1,3-Dibromopropane	A	1.989	1.931	5577.745	5414.781		-2.9	20
1,3-Dibromopropane [2C]	A	1.989	1.621	22205.55	18097.54		-18.5	20

CONTINUING CALIBRATION CHECK

SW8011

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-ECD2	Calibration:	2292002
Lab File ID:	011F0101.D	Calibration Date:	10/18/12 12:29
Sequence:	2K32804	Injection Date:	11/20/12
Lab Sample ID:	2K32804-CCV2	Injection Time:	15:25

		CONC. (ug/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,2-Dibromoethane	A	0.5000	0.5158	9897.833	10210		3.2	20
1,2-Dibromoethane [2C]	A	0.5000	0.4545	32426	29478		-9.1	20
1,3-Dibromopropane	A	1.989	1.864	5577.745	5227.25		-6.3	20
1,3-Dibromopropane [2C]	A	1.989	1.620	22205.55	18091.5		-18.5	20

FORM X
IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

GW0756

Lab Name: Empirical Laboratories, LLC

Lab Sample ID: 1211133-01RE1

Date(s) Analyzed: 11/20/2012 11/20/2012

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	2.69	2.66	2.72	4.87	
	2	2.65	2.63	2.69	4.93	1

FORM X
IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

LCS

Lab Name: Empirical Laboratories, LLC

Lab Sample ID: 2K14021-BS1 Date(s) Analyzed: 11/14/2012 11/14/2012

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	2.69	2.66	2.72	0.4992	
	2	2.66	2.63	2.69	0.4927	1

FORM X
IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Name: Empirical Laboratories, LLC

Lab Sample ID: 2K14021-BSD1 Date(s) Analyzed: 11/14/2012 11/14/2012

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	2.69	2.66	2.72	0.5046	
	2	2.66	2.63	2.69	0.4988	1

FORM X
IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

LCS

Lab Name: Empirical Laboratories, LLC

Lab Sample ID: 2K20015-BS1 Date(s) Analyzed: 11/20/2012 11/20/2012

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	2.69	2.66	2.72	0.5380	
	2	2.65	2.63	2.69	0.4826	11

FORM X
IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

LCS Dup

Lab Name: Empirical Laboratories, LLC

Lab Sample ID: 2K20015-BSD1 Date(s) Analyzed: 11/20/2012 11/20/2012

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	2.69	2.66	2.72	0.5346	
	2	2.65	2.63	2.69	0.4820	10

HOLDING TIME SUMMARY

SW8011

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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
GW0756	11/12/12 10:57	11/14/12 08:30	11/14/12 11:46	N/A	14.00	11/20/12 14:43	8.20	14.00	
GW0860	11/14/12 16:06	11/16/12 08:30	11/20/12 09:33	N/A	14.00	11/20/12 14:00	5.87	14.00	

PREPARATION BENCH SHEET

2K14021

Empirical Laboratories, LLC

Printed: 11/27/2012 2:51:51PM

Instrument:

Matrix: Water **Prepared using: GCLC - EDB** **Surrogate used: 12K0201**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211091-01	H	SGC_EDB_8011	11/14/2012	36.83	35				140	NA	Run dilutions based on 8260 results!
1211091-03	I	SGC_EDB_8011	11/14/2012	37.37	35				140	NA	Run dilutions based on 8260 results!
1211091-03RE1	I	SGC_EDB_8011	11/14/2012	37.37	35				140	NA	Added 11/18/2012 by PRC
1211109-01	C	SGC_EDB_8011	11/14/2012	35	35				140	NA	
1211132-01	I	SGC_EDB_8011	11/14/2012	37.04	35				140	NA	Run dilutions based on 8260 results!
1211132-03	I	SGC_EDB_8011	11/14/2012	37.04	35				140	NA	Run dilutions based on 8260 results!
1211132-05	I	SGC_EDB_8011	11/14/2012	37.33	35				140	NA	Run dilutions based on 8260 results!
1211133-01	I	SGC_EDB_8011	11/14/2012	37.39	35				140	NA	Run dilutions based on 8260 results!
1211133-01RE1	I	SGC_EDB_8011	11/14/2012	37.39	35				140	NA	Added 11/18/2012 by PRC
2K14021-BLK1		QC	11/14/2012	35	35				140	NA	
2K14021-BS1		QC	11/14/2012	35	35	12K0443		35	140	NA	
2K14021-BSD1		QC	11/14/2012	35	35	12K0443		35	140	NA	

Reagents Used:

Standard	Description

PREPARATION BENCH SHEET

2K20015

Empirical Laboratories, LLC

Printed: 11/27/2012 2:53:47PM

Instrument:

Matrix: Water **Prepared using: GCLC - EDB** **Surrogate used: 12K0201**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211146-01	I	SGC_EDB_8011	11/20/2012	36.76	35				140	NA	Run dilutions based on 8260 results!
1211147-01	I	SGC_EDB_8011	11/20/2012	37.19	35				140	NA	Run dilutions based on 8260 results!
1211166-01	I	SGC_EDB_8011	11/20/2012	37.04	35				140	NA	Run dilutions based on 8260 results!
2K20015-BLK1		QC	11/20/2012	35	35				140	NA	
2K20015-BS1		QC	11/20/2012	35	35	12K0443		35	140	NA	
2K20015-BSD1		QC	11/20/2012	35	35	12K0443		35	140	NA	

Reagents Used:

Standard	Description

SW8015B (DRO)
Forms

Sample Extraction Data

Prep Method: EXT_3510-SW8015B DRO

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01RE1 [GW0756]	2K14019	1,000.00/1.00	1020	1.00	50.00			11/14/12

Sample Extraction Data

Prep Method: EXT_3510-SW8015B DRO

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-01 [GW0860]	2K16019	1,000.00/1.00	1000	1.00	1.00			11/16/12

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01RE1	File ID:	004F0401.D
Sampled:	11/12/12 10:57	Prepared:	11/14/12 11:40	Analyzed:	11/21/12 18:03
Solids:		Preparation:	EXT_3510	Dilution:	50

Batch: 2K14019 Sequence: 2K33210 Calibration: 2320005 Instrument: GL-GCFID2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
11-84-7	Diesel Range Organics (C10-C28)	**22.6**	4.90	9.80	19.6	D

Total Target Analytes Reported: 1

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
o-Terphenyl	0.01961	0.06180	315	30 - 140	D

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01	File ID:	004FA401.D
Sampled:	11/14/12 16:06	Prepared:	11/16/12 10:30	Analyzed:	11/19/12 06:04
Solids:		Preparation:	EXT_3510	Dilution:	1

Batch: 2K16019 Sequence: 2K32408 Calibration: 2320005 Instrument: GL-GCFID2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
11-84-7	Diesel Range Organics (C10-C28)		0.100	0.200	0.400	U

Total Target Analytes Reported: 1

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
o-Terphenyl	0.02000	0.01334	66.7	30 - 140	Y

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32408	Instrument:	GL-GCFID2
		Calibration:	2320005

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K32408-CCV1) mg/L				Lab File ID: 014F1401.D		Analyzed: 11/16/12 03:37		
o-Terphenyl	50.00	82.5	80 - 120	11.443	11.443	0.0000	+/-0.100	
Blank (2K14019-BLK1) mg/L				Lab File ID: 015F1501.D		Analyzed: 11/16/12 04:10		
o-Terphenyl	0.02000	73.4	30 - 140	11.443	11.443	0.0000	+/-0.100	
LCS (2K14019-BS1) mg/L				Lab File ID: 016F1601.D		Analyzed: 11/16/12 04:43		
o-Terphenyl	0.02000	89.5	30 - 140	11.46	11.443	0.0170	+/-0.100	
LCS Dup (2K14019-BSD1) mg/L				Lab File ID: 017F1701.D		Analyzed: 11/16/12 05:17		
o-Terphenyl	0.02000	82.6	30 - 140	11.443	11.443	0.0000	+/-0.100	
Calibration Check (2K32408-CCV2) mg/L				Lab File ID: 022F2201.D		Analyzed: 11/16/12 08:03		
o-Terphenyl	50.00	94.2	80 - 120	11.453	11.443	0.0100	+/-0.100	
Calibration Check (2K32408-CCV9) mg/L				Lab File ID: 099F9901.D		Analyzed: 11/19/12 03:19		
o-Terphenyl	50.00	92.7	80 - 120	11.45	11.443	0.0070	+/-0.100	
Blank (2K16019-BLK1) mg/L				Lab File ID: 100FA001.D		Analyzed: 11/19/12 03:52		
o-Terphenyl	0.02000	91.0	30 - 140	11.456	11.443	0.0130	+/-0.100	
LCS (2K16019-BS1) mg/L				Lab File ID: 001FA101.D		Analyzed: 11/19/12 04:25		
o-Terphenyl	0.02000	75.8	30 - 140	11.46	11.443	0.0170	+/-0.100	
LCS Dup (2K16019-BSD1) mg/L				Lab File ID: 002FA201.D		Analyzed: 11/19/12 04:58		
o-Terphenyl	0.02000	63.9	30 - 140	11.446	11.443	0.0030	+/-0.100	
GW0860 (1211147-01) mg/L				Lab File ID: 004FA401.D		Analyzed: 11/19/12 06:04		
o-Terphenyl	0.02000	66.7	30 - 140	11.47	11.443	0.0270	+/-0.100	
Calibration Check (2K32408-CCVA) mg/L				Lab File ID: 005FA501.D		Analyzed: 11/19/12 06:37		
o-Terphenyl	50.00	70.8	80 - 120	11.463	11.443	0.0200	+/-0.100	*

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K33210	Instrument:	GL-GCFID2
		Calibration:	2320005

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K33210-CCV1) mg/L				Lab File ID: 003F0301.D		Analyzed: 11/21/12 17:30		
o-Terphenyl	50.00	93.8	80 - 120	11.45	11.45	0.0000	+/-0.100	
GW0756 (1211133-01RE1) mg/L				Lab File ID: 004F0401.D		Analyzed: 11/21/12 18:03		
o-Terphenyl	0.01961	315	30 - 140	11.426	11.45	-0.0240	+/-0.100	*
Calibration Check (2K33210-CCV2) mg/L				Lab File ID: 014F1401.D		Analyzed: 11/21/12 23:34		
o-Terphenyl	50.00	90.7	80 - 120	11.413	11.45	-0.0370	+/-0.100	

LCS / LCS DUPLICATE RECOVERY

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K14019	Laboratory ID:	2K14019-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	0.7061	70.6	50 - 150

ANALYTE	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Diesel Range Organics (C10-C28)	1.000	0.6642	66.4	6.12	30	50 - 150

LCS / LCS DUPLICATE RECOVERY

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K16019	Laboratory ID:	2K16019-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	0.8229	82.3	50 - 150

ANALYTE	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Diesel Range Organics (C10-C28)	1.000	0.7316	73.2	11.7	30	50 - 150

PREPARATION BATCH SUMMARY

SW8015B DRO

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K14019 Batch Matrix: Water Preparation: EXT_3510

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01RE1	11/14/12 11:40	1,020.00	1.00
Blank	2K14019-BLK1	11/14/12 11:40	1,000.00	1.00
LCS	2K14019-BS1	11/14/12 11:40	1,000.00	1.00
LCS Dup	2K14019-BSD1	11/14/12 11:40	1,000.00	1.00

PREPARATION BATCH SUMMARY

SW8015B DRO

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K16019 Batch Matrix: Water Preparation: EXT_3510

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0860	1211147-01	11/16/12 10:30	1,000.00	1.00
Blank	2K16019-BLK1	11/16/10 10:30	1,000.00	1.00
LCS	2K16019-BS1	11/16/10 10:30	1,000.00	1.00
LCS Dup	2K16019-BSD1	11/16/10 10:30	1,000.00	1.00

ANALYSIS DATA SHEET

Blank

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K14019-BLK1	File ID:	015F1501.D
Sampled:		Prepared:		Analyzed:	11/16/12 04:10
Solids:		Preparation:	EXT_3510	Dilution:	

Batch:	2K14019	Sequence:	2K32408	Calibration:	2320005	Instrument:	GL-GCFID2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
11-84-7	Diesel Range Organics (C10-C28)		0.100	0.200	0.400	U

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
o-Terphenyl	0.02000	0.01468	73.4	30 - 140	

ANALYSIS DATA SHEET

LCS

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K14019-BS1	File ID:	016F1601.D
Sampled:		Prepared:		Analyzed:	11/16/12 04:43
Solids:		Preparation:	EXT_3510	Dilution:	

Batch:	2K14019	Sequence:	2K32408	Calibration:	2320005	Instrument:	GL-GCFID2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
11-84-7	Diesel Range Organics (C10-C28)	**0.7061**	0.100	0.200	0.400	

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
o-Terphenyl	0.02000	0.01790	89.5	30 - 140	

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K14019-BSD1	File ID:	017F1701.D
Sampled:		Prepared:		Analyzed:	11/16/12 05:17
Solids:		Preparation:	EXT_3510	Dilution:	

Batch:	2K14019	Sequence:	2K32408	Calibration:	2320005	Instrument:	GL-GCFID2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
11-84-7	Diesel Range Organics (C10-C28)	**0.6642**	0.100	0.200	0.400	

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
o-Terphenyl	0.02000	0.01652	82.6	30 - 140	

ANALYSIS DATA SHEET

Blank

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K16019-BLK1	File ID:	100FA001.D
Sampled:		Prepared:		Analyzed:	11/19/12 03:52
Solids:		Preparation:	EXT_3510	Dilution:	

Batch:	2K16019	Sequence:	2K32408	Calibration:	2320005	Instrument:	GL-GCFID2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
11-84-7	Diesel Range Organics (C10-C28)		0.100	0.200	0.400	U

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
o-Terphenyl	0.02000	0.01819	91.0	30 - 140	Y

ANALYSIS DATA SHEET

LCS

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K16019-BS1	File ID:	001FA101.D
Sampled:		Prepared:		Analyzed:	11/19/12 04:25
Solids:		Preparation:	EXT_3510	Dilution:	

Batch:	2K16019	Sequence:	2K32408	Calibration:	2320005	Instrument:	GL-GCFID2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
11-84-7	Diesel Range Organics (C10-C28)	**0.8229**	0.100	0.200	0.400	

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
o-Terphenyl	0.02000	0.01516	75.8	30 - 140	Y

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K16019-BSD1	File ID:	002FA201.D
Sampled:		Prepared:		Analyzed:	11/19/12 04:58
Solids:		Preparation:	EXT_3510	Dilution:	

Batch:	2K16019	Sequence:	2K32408	Calibration:	2320005	Instrument:	GL-GCFID2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
11-84-7	Diesel Range Organics (C10-C28)	**0.7316**	0.100	0.200	0.400	

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
o-Terphenyl	0.02000	0.01278	63.9	30 - 140	Y

INITIAL CALIBRATION STANDARDS

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32018	Instrument:	GL-GCFID2
Calibration:	2320005		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
12J0092	DRO/OTP Cal6 (100/5ppm)	2K32018-CAL6	010F1001.D	11/15/12 02:14
12J0091	DRO/OTP Cal5 (250/12.5ppm)	2K32018-CAL5	011F1101.D	11/15/12 02:47
12J0090	DRO/OTP Cal4 (500/25ppm)	2K32018-CAL4	012F1201.D	11/15/12 03:20
12J0089	DRO/OTP Cal3 (1000/50ppm)	2K32018-CAL3	013F1301.D	11/15/12 03:53
12J0088	DRO/OTP Cal2 (2500/125ppm)	2K32018-CAL2	014F1401.D	11/15/12 04:26
12J0087	DRO/OTP Cal1 (5000/250ppm)	2K32018-CAL1	015F1501.D	11/15/12 04:59

ANALYSIS SEQUENCE SUMMARY

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32018	Instrument:	GL-GCFID2
Calibration:	2320005		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2K32018-CAL6	010F1001.D	11/15/12 02:14
Cal Standard	2K32018-CAL5	011F1101.D	11/15/12 02:47
Cal Standard	2K32018-CAL4	012F1201.D	11/15/12 03:20
Cal Standard	2K32018-CAL3	013F1301.D	11/15/12 03:53
Cal Standard	2K32018-CAL2	014F1401.D	11/15/12 04:26
Cal Standard	2K32018-CAL1	015F1501.D	11/15/12 04:59
Initial Cal Check	2K32018-ICV1	016F1601.D	11/15/12 05:32

ANALYSIS SEQUENCE SUMMARY

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32408	Instrument:	GL-GCFID2
Calibration:	2320005		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2K32408-CCV1	014F1401.D	11/16/12 03:37
Blank	2K14019-BLK1	015F1501.D	11/16/12 04:10
LCS	2K14019-BS1	016F1601.D	11/16/12 04:43
LCS Dup	2K14019-BSD1	017F1701.D	11/16/12 05:17
Calibration Check	2K32408-CCV2	022F2201.D	11/16/12 08:03
Calibration Check	2K32408-CCV9	099F9901.D	11/19/12 03:19
Blank	2K16019-BLK1	100FA001.D	11/19/12 03:52
LCS	2K16019-BS1	001FA101.D	11/19/12 04:25
LCS Dup	2K16019-BSD1	002FA201.D	11/19/12 04:58
GW0860	1211147-01	004FA401.D	11/19/12 06:04
Calibration Check	2K32408-CCVA	005FA501.D	11/19/12 06:37

ANALYSIS SEQUENCE SUMMARY

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K33210	Instrument:	GL-GCFID2
Calibration:	2320005		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2K33210-CCV1	003F0301.D	11/21/12 17:30
GW0756	1211133-01RE1	004F0401.D	11/21/12 18:03
Calibration Check	2K33210-CCV2	014F1401.D	11/21/12 23:34

INITIAL CALIBRATION DATA

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072	
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011	
Calibration:	2320005	Instrument:	GL-GCFID2	
Matrix:	Water	Calibration Dates:	11/15/12 2:14	11/15/12 4:59

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)	5000	476.824	2500	448.1404	1000	538.35	500	274.594	250	340.924	100	614.25
o-Terphenyl	250	540.764	125	556.872	50	720.8	25	438.2	12.5	561.6	5	856

INITIAL CALIBRATION DATA (Continued)

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072	
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011	
Calibration:	2320005	Instrument:	GL-GCFID2	
Matrix:	Water	Calibration Dates:	11/15/12 2:14	11/15/12 4:59

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Diesel Range Organics (C10-C28)	448.8471	27.85601	6.44	2.123135E-02	0.9957564		0.995	
o-Terphenyl	612.3727	24.46579	11.455	0.1110084		0.9960525	0.99	

INITIAL CALIBRATION CHECK

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCFID2	Calibration:	2320005
Lab File ID:	016F1601.D	Calibration Date:	11/15/12 02:14
Sequence:	2K32018	Injection Date:	11/15/12
Lab Sample ID:	2K32018-ICV1	Injection Time:	05:32

		CONC. (mg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Diesel Range Organics (C10-C28)	L	1000	822.7	448.8471	367.651		-17.7	20

CONTINUING CALIBRATION CHECK

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCFID2	Calibration:	2320005
Lab File ID:	014F1401.D	Calibration Date:	11/15/12 02:14
Sequence:	2K32408	Injection Date:	11/16/12
Lab Sample ID:	2K32408-CCV1	Injection Time:	03:37

		CONC. (mg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Diesel Range Organics (C10-C28)	L	1000	810.6	448.8471	361.849		-18.9	20
o-Terphenyl	Q	50.00	41.26	612.3727	503.32		-17.5	20

CONTINUING CALIBRATION CHECK

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCFID2	Calibration:	2320005
Lab File ID:	022F2201.D	Calibration Date:	11/15/12 02:14
Sequence:	2K32408	Injection Date:	11/16/12
Lab Sample ID:	2K32408-CCV2	Injection Time:	08:03

		CONC. (mg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Diesel Range Organics (C10-C28)	L	1000	875.2	448.8471	392.875		-12.5	20
o-Terphenyl	Q	50.00	47.12	612.3727	573.72		-5.8	20

CONTINUING CALIBRATION CHECK

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCFID2	Calibration:	2320005
Lab File ID:	099F9901.D	Calibration Date:	11/15/12 02:14
Sequence:	2K32408	Injection Date:	11/19/12
Lab Sample ID:	2K32408-CCV9	Injection Time:	03:19

		CONC. (mg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Diesel Range Organics (C10-C28)	L	1000	1074	448.8471	488.28		7.4	20
o-Terphenyl	Q	50.00	46.34	612.3727	564.44		-7.3	20

CONTINUING CALIBRATION CHECK

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCFID2	Calibration:	2320005
Lab File ID:	005FA501.D	Calibration Date:	11/15/12 02:14
Sequence:	2K32408	Injection Date:	11/19/12
Lab Sample ID:	2K32408-CCVA	Injection Time:	06:37

		CONC. (mg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Diesel Range Organics (C10-C28)	L	1000	871.5	448.8471	391.099		-12.8	20
o-Terphenyl	Q	50.00	35.38	612.3727	431.98		-29.2	20 *

CONTINUING CALIBRATION CHECK

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCFID2	Calibration:	2320005
Lab File ID:	003F0301.D	Calibration Date:	11/15/12 02:14
Sequence:	2K33210	Injection Date:	11/21/12
Lab Sample ID:	2K33210-CCV1	Injection Time:	17:30

		CONC. (mg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Diesel Range Organics (C10-C28)	L	1000	1040	448.8471	472.252		4.0	20
o-Terphenyl	Q	50.00	46.88	612.3727	570.9		-6.2	20

CONTINUING CALIBRATION CHECK

SW8015B DRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCFID2	Calibration:	2320005
Lab File ID:	014F1401.D	Calibration Date:	11/15/12 02:14
Sequence:	2K33210	Injection Date:	11/21/12
Lab Sample ID:	2K33210-CCV2	Injection Time:	23:34

		CONC. (mg/L)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Diesel Range Organics (C10-C28)	L	1000	1121	448.8471	511.196		12.1	20
o-Terphenyl	Q	50.00	45.34	612.3727	552.44		-9.3	20

HOLDING TIME SUMMARY

SW8015B DRO

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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
GW0756	11/12/12 10:57	11/14/12 08:30	11/14/12 11:40	2.07	7.00	11/21/12 18:03	7.27	40.00	
GW0860	11/14/12 16:06	11/16/12 08:30	11/16/12 10:30	1.73	7.00	11/19/12 06:04	2.82	40.00	

PREPARATION BENCH SHEET

2K14019

Empirical Laboratories, LLC

Printed: 11/28/2012 8:36:58AM

Instrument:

Matrix: Water **Prepared using: EXT - EXT_3510** **Surrogate used: 12K0387**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211132-01	O	SGC_DRO_8015B_3510	11/14/2012	1020	1				1000	NA	
1211132-03	P	SGC_DRO_8015B_3510	11/14/2012	1000	1				1000	NA	
1211132-05	O	SGC_DRO_8015B_3510	11/14/2012	1000	1				1000	NA	
1211133-01	P	SGC_DRO_8015B_3510	11/14/2012	1020	1				1000	NA	
1211133-01RE1	P	SGC_DRO_8015B_3510	11/14/2012	1020	1				1000	NA	Added 11/23/2012 by PRC
2K14019-BLK1		QC	11/14/2012	1000	1				1000	NA	
2K14019-BS1		QC	11/14/2012	1000	1	12J0832		1000	1000	NA	
2K14019-BSD1		QC	11/14/2012	1000	1	12J0832		1000	1000	NA	

Reagents Used:

Standard	Description
12J0552	1:1 H2SO4/DIH2O
12J0575	Sodium Sulfate Anhydrous
12K0428	Methylene Chloride

PREPARATION BENCH SHEET

2K16019

Empirical Laboratories, LLC

Printed: 11/28/2012 8:38:09AM

Instrument:

Matrix: Water **Prepared using: EXT - EXT_3510** **Surrogate used: 12K0387**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211146-01	N	SGC_DRO_8015B_3510	11/16/2012	1040	1				1000	NA	
1211147-01	N	SGC_DRO_8015B_3510	11/16/2012	1000	1				1000	NA	
2K16019-BLK1		QC	11/16/2010	1000	1				1000	NA	
2K16019-BS1		QC	11/16/2010	1000	1	12K0544		1000	1000	NA	
2K16019-BSD1		QC	11/16/2010	1000	1	12K0544		1000	1000	NA	

Reagents Used:

Standard	Description
12J0552	1:1 H2SO4/DIH2O
12J0575	Sodium Sulfate Anhydrous
12K0428	Methylene Chloride

SW8015B (GRO)
Forms

Sample Extraction Data

Prep Method: 8015GRO-SW8015B GRO

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-01 [GW0860]	2K15028	5.00/5.00	5.00	5.00	1.00			11/20/12

Sample Extraction Data

Prep Method: 8015GRO-SW8015B GRO

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01RE1 [GW0756]	2K26017	5.00/5.00	5.00	5.00	5.00			11/26/12

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01RE1	File ID:	008F0801.D
Sampled:	11/12/12 10:57	Prepared:	11/26/12 18:22	Analyzed:	11/26/12 18:22
Solids:		Preparation:	8015GRO	Dilution:	5

Batch: 2K26017 Sequence: 2K33317 Calibration: 2323001 Instrument: GL-GCVOA2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
8006-61-9	Gasoline Range Organics (C6-C10)	**6.87**	0.250	0.500	0.750	D

Total Target Analytes Reported: 1

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	0.05000	0.06403	128	50 - 150	X

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC			SDG:	kirtland_072
Client:	Shaw E & I (I700)			Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01	File ID:	028F2801.D
Sampled:	11/14/12 16:06	Prepared:	11/20/12 06:09	Analyzed:	11/20/12 06:09
Solids:		Preparation:	8015GRO	Dilution:	1

Batch: 2K15028 Sequence: 2K33114 Calibration: 2323001 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

Total Target Analytes Reported: 1

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	0.05000	0.06946	139	50 - 150	X

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K33114	Instrument:	GL-GCVOA2
		Calibration:	2323001

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K33114-CCV1) ug/mL				Lab File ID: 003F0301.D		Analyzed: 11/19/12 14:14		
Bromofluorobenzene	0.05000	134	80 - 120	20.293	20.293	0.0000	+/-0.210	*
Blank (2K15028-BLK1) mg/L				Lab File ID: 008F0801.D		Analyzed: 11/19/12 17:26		
Bromofluorobenzene	0.05000	157	50 - 150	20.313	20.293	0.0200	+/-0.210	*
LCS (2K15028-BS1) mg/L				Lab File ID: 009F0901.D		Analyzed: 11/19/12 18:04		
Bromofluorobenzene	0.05000	128	50 - 150	20.313	20.293	0.0200	+/-0.210	
LCS Dup (2K15028-BSD1) mg/L				Lab File ID: 010F1001.D		Analyzed: 11/19/12 18:42		
Bromofluorobenzene	0.05000	121	50 - 150	20.316	20.293	0.0230	+/-0.210	
Calibration Check (2K33114-CCV2) ug/mL				Lab File ID: 019F1901.D		Analyzed: 11/20/12 00:25		
Bromofluorobenzene	0.05000	140	80 - 120	20.326	20.293	0.0330	+/-0.210	*
GW0860 (1211147-01) mg/L				Lab File ID: 028F2801.D		Analyzed: 11/20/12 06:09		
Bromofluorobenzene	0.05000	139	50 - 150	20.33	20.293	0.0370	+/-0.210	
Calibration Check (2K33114-CCV3) ug/mL				Lab File ID: 033F3301.D		Analyzed: 11/20/12 12:42		
Bromofluorobenzene	0.05000	118	80 - 120	20.31	20.293	0.0170	+/-0.210	

SURROGATE STANDARD RECOVERY AND RT SUMMARY

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K33317	Instrument:	GL-GCVOA2
		Calibration:	2323001

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	RT	CCV RT	RT Diff	RT Diff Limit	Q
Calibration Check (2K33317-CCV1) ug/mL				Lab File ID: 003F0301.D		Analyzed: 11/26/12 15:10		
Bromofluorobenzene	0.05000	130	80 - 120	20.3	20.3	0.0000	+/-0.210	*
Blank (2K26017-BLK1) mg/L				Lab File ID: 004F0401.D		Analyzed: 11/26/12 15:48		
Bromofluorobenzene	0.05000	144	50 - 150	20.306	20.3	0.0060	+/-0.210	
LCS (2K26017-BS1) mg/L				Lab File ID: 005F0501.D		Analyzed: 11/26/12 16:26		
Bromofluorobenzene	0.05000	128	50 - 150	20.313	20.3	0.0130	+/-0.210	
LCS Dup (2K26017-BSD1) mg/L				Lab File ID: 006F0601.D		Analyzed: 11/26/12 17:05		
Bromofluorobenzene	0.05000	123	50 - 150	20.313	20.3	0.0130	+/-0.210	
GW0756 (1211133-01RE1) mg/L				Lab File ID: 008F0801.D		Analyzed: 11/26/12 18:22		
Bromofluorobenzene	0.05000	128	50 - 150	20.316	20.3	0.0160	+/-0.210	
Calibration Check (2K33317-CCV2) ug/mL				Lab File ID: 010F1001.D		Analyzed: 11/26/12 19:39		
Bromofluorobenzene	0.05000	123	80 - 120	20.316	20.3	0.0160	+/-0.210	*

LCS / LCS DUPLICATE RECOVERY

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K15028	Laboratory ID:	2K15028-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	0.5724	114	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	0.5535	111	3.36	30	50 - 150

LCS / LCS DUPLICATE RECOVERY

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K26017	Laboratory ID:	2K26017-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	0.5568	111	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	0.5053	101	9.69	30	50 - 150

PREPARATION BATCH SUMMARY

SW8015B GRO

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K15028 Batch Matrix: Water Preparation: 8015GRO

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0860	1211147-01	11/20/12 06:09	5.00	5.00
Blank	2K15028-BLK1	11/19/12 17:26	5.00	5.00
LCS	2K15028-BS1	11/19/12 18:04	5.00	5.00
LCS Dup	2K15028-BSD1	11/19/12 18:42	5.00	5.00

PREPARATION BATCH SUMMARY

SW8015B GRO

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K26017 Batch Matrix: Water Preparation: 8015GRO

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01RE1	11/26/12 18:22	5.00	5.00
Blank	2K26017-BLK1	11/26/12 15:48	5.00	5.00
LCS	2K26017-BS1	11/26/12 16:26	5.00	5.00
LCS Dup	2K26017-BSD1	11/26/12 17:05	5.00	5.00

ANALYSIS DATA SHEET

Blank

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K15028-BLK1	File ID:	008F0801.D
Sampled:		Prepared:		Analyzed:	11/19/12 17:26
Solids:		Preparation:	8015GRO	Dilution:	

Batch:	2K15028	Sequence:	2K33114	Calibration:	2323001	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	0.07873	157	50 - 150	X

ANALYSIS DATA SHEET

LCS

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K15028-BS1	File ID:	009F0901.D
Sampled:		Prepared:		Analyzed:	11/19/12 18:04
Solids:		Preparation:	8015GRO	Dilution:	

Batch:	2K15028	Sequence:	2K33114	Calibration:	2323001	Instrument:	GL-GCVOA2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
8006-61-9	Gasoline Range Organics (C6-C10)	**0.5724**	0.0500	0.100	0.150	

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	0.05000	0.06380	128	50 - 150	X

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K15028-BSD1	File ID:	010F1001.D
Sampled:		Prepared:		Analyzed:	11/19/12 18:42
Solids:		Preparation:	8015GRO	Dilution:	

Batch:	2K15028	Sequence:	2K33114	Calibration:	2323001	Instrument:	GL-GCVOA2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
8006-61-9	Gasoline Range Organics (C6-C10)	**0.5535**	0.0500	0.100	0.150	

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	0.05000	0.06057	121	50 - 150	X

ANALYSIS DATA SHEET

Blank

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K26017-BLK1	File ID:	004F0401.D
Sampled:		Prepared:		Analyzed:	11/26/12 15:48
Solids:		Preparation:	8015GRO	Dilution:	

Batch:	2K26017	Sequence:	2K33317	Calibration:	2323001	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	0.07207	144	50 - 150	X

ANALYSIS DATA SHEET

LCS

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K26017-BS1	File ID:	005F0501.D
Sampled:		Prepared:		Analyzed:	11/26/12 16:26
Solids:		Preparation:	8015GRO	Dilution:	

Batch:	2K26017	Sequence:	2K33317	Calibration:	2323001	Instrument:	GL-GCVOA2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
8006-61-9	Gasoline Range Organics (C6-C10)	**0.5568**	0.0500	0.100	0.150	

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	0.05000	0.06403	128	50 - 150	X

ANALYSIS DATA SHEET

LCS Dup

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011

Matrix:		Laboratory ID:	2K26017-BSD1	File ID:	006F0601.D
Sampled:		Prepared:		Analyzed:	11/26/12 17:05
Solids:		Preparation:	8015GRO	Dilution:	

Batch:	2K26017	Sequence:	2K33317	Calibration:	2323001	Instrument:	GL-GCVOA2

CAS NO.	COMPOUND	CONC. (mg/L)	DL	LOD	LOQ	Q
8006-61-9	Gasoline Range Organics (C6-C10)	**0.5053**	0.0500	0.100	0.150	

SYSTEM MONITORING COMPOUND	ADDED (mg/L)	CONC (mg/L)	% REC	QC LIMITS	Q
Bromofluorobenzene	0.05000	0.06169	123	50 - 150	X

INITIAL CALIBRATION STANDARDS

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32304	Instrument:	GL-GCVOA2
Calibration:	2323001		

Standard ID	Description	Lab Sample ID	Lab File ID	Analysis Date/Time
12K0535	GRO Cal 0.1ppm	2K32304-CAL1	003F0101.D	11/14/12 12:23
12K0536	GRO Cal 0.2ppm	2K32304-CAL2	004F0201.D	11/14/12 13:01
12K0537	GRO Cal 0.5ppm	2K32304-CAL3	005F0301.D	11/14/12 13:39
12K0538	GRO Cal 1.0ppm	2K32304-CAL4	006F0401.D	11/14/12 14:16
12K0539	GRO Cal 2.0ppm	2K32304-CAL5	007F0501.D	11/14/12 14:54
12K0540	GRO Cal 5.0ppm	2K32304-CAL6	008F0601.D	11/14/12 15:32

ANALYSIS SEQUENCE SUMMARY

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32304	Instrument:	GL-GCVOA2
Calibration:	2323001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2K32304-CAL1	003F0101.D	11/14/12 12:23
Cal Standard	2K32304-CAL2	004F0201.D	11/14/12 13:01
Cal Standard	2K32304-CAL3	005F0301.D	11/14/12 13:39
Cal Standard	2K32304-CAL4	006F0401.D	11/14/12 14:16
Cal Standard	2K32304-CAL5	007F0501.D	11/14/12 14:54
Cal Standard	2K32304-CAL6	008F0601.D	11/14/12 15:32
Initial Cal Check	2K32304-ICV1	009F0501.D	11/14/12 19:32

ANALYSIS SEQUENCE SUMMARY

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K33114	Instrument:	GL-GCVOA2
Calibration:	2323001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2K33114-CCV1	003F0301.D	11/19/12 14:14
Blank	2K15028-BLK1	008F0801.D	11/19/12 17:26
LCS	2K15028-BS1	009F0901.D	11/19/12 18:04
LCS Dup	2K15028-BSD1	010F1001.D	11/19/12 18:42
Calibration Check	2K33114-CCV2	019F1901.D	11/20/12 00:25
GW0860	1211147-01	028F2801.D	11/20/12 06:09
Calibration Check	2K33114-CCV3	033F3301.D	11/20/12 12:42

ANALYSIS SEQUENCE SUMMARY

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K33317	Instrument:	GL-GCVOA2
Calibration:	2323001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2K33317-CCV1	003F0301.D	11/26/12 15:10
Blank	2K26017-BLK1	004F0401.D	11/26/12 15:48
LCS	2K26017-BS1	005F0501.D	11/26/12 16:26
LCS Dup	2K26017-BSD1	006F0601.D	11/26/12 17:05
GW0756	1211133-01RE1	008F0801.D	11/26/12 18:22
Calibration Check	2K33317-CCV2	010F1001.D	11/26/12 19:39

INITIAL CALIBRATION DATA

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072	
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011	
Calibration:	2323001	Instrument:	GL-GCVOA2	
Matrix:	Water	Calibration Dates:	11/14/12 12:23	11/14/12 15:32

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	0.1	1314720	0.2	1012795	0.5	832834	1	831428	2	813135.5	5	785792.8
Bromofluorobenzene	0.01	1087700	0.02	641800	0.05	475580	0.1	394780	0.2	376345	0.5	375376

INITIAL CALIBRATION DATA (Continued)

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072	
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011	
Calibration:	2323001	Instrument:	GL-GCVOA2	
Matrix:	Water	Calibration Dates:	11/14/12 12:23	11/14/12 15:32

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Gasoline Range Organics (C6-C10)	931784.2	21.91326	7.793	1.770253E-02	0.9998994		0.995	
Bromofluorobenzene	558596.8	49.82974	20.3135	9.003825E-03	0.9993063		0.995	

INITIAL CALIBRATION CHECK

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCVOA2	Calibration:	2323001
Lab File ID:	009F0501.D	Calibration Date:	11/14/12 12:23
Sequence:	2K32304	Injection Date:	11/14/12
Lab Sample ID:	2K32304-ICV1	Injection Time:	19:32

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN (#)	ICV	LIMIT (#)
Gasoline Range Organics (C6-C10)	L	0.5000	0.5632	931784.2	974078		12.6	20

CONTINUING CALIBRATION CHECK

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCVOA2	Calibration:	2323001
Lab File ID:	003F0301.D	Calibration Date:	11/14/12 12:23
Sequence:	2K33114	Injection Date:	11/19/12
Lab Sample ID:	2K33114-CCV1	Injection Time:	14:14

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Gasoline Range Organics (C6-C10)	L	0.5000	0.5935	931784.2	1021206		18.7	20
Bromofluorobenzene	L	0.05000	0.06713	558596.8	589140		34.3	20 *

CONTINUING CALIBRATION CHECK

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCVOA2	Calibration:	2323001
Lab File ID:	019F1901.D	Calibration Date:	11/14/12 12:23
Sequence:	2K33114	Injection Date:	11/20/12
Lab Sample ID:	2K33114-CCV2	Injection Time:	00:25

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Gasoline Range Organics (C6-C10)	L	0.5000	0.5472	931784.2	949098		9.4	20
Bromofluorobenzene	L	0.05000	0.07007	558596.8	610460		40.1	20 *

CONTINUING CALIBRATION CHECK

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCVOA2	Calibration:	2323001
Lab File ID:	033F3301.D	Calibration Date:	11/14/12 12:23
Sequence:	2K33114	Injection Date:	11/20/12
Lab Sample ID:	2K33114-CCV3	Injection Time:	12:42

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Gasoline Range Organics (C6-C10)	L	0.5000	0.4995	931784.2	874960		-0.1	20
Bromofluorobenzene	L	0.05000	0.05917	558596.8	531360		18.3	20

CONTINUING CALIBRATION CHECK

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCVOA2	Calibration:	2323001
Lab File ID:	003F0301.D	Calibration Date:	11/14/12 12:23
Sequence:	2K33317	Injection Date:	11/26/12
Lab Sample ID:	2K33317-CCV1	Injection Time:	15:10

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Gasoline Range Organics (C6-C10)	L	0.5000	0.5475	931784.2	949634		9.5	20
Bromofluorobenzene	L	0.05000	0.06505	558596.8	574060		30.1	20 *

CONTINUING CALIBRATION CHECK

SW8015B GRO

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Instrument ID:	GL-GCVOA2	Calibration:	2323001
Lab File ID:	010F1001.D	Calibration Date:	11/14/12 12:23
Sequence:	2K33317	Injection Date:	11/26/12
Lab Sample ID:	2K33317-CCV2	Injection Time:	19:39

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Gasoline Range Organics (C6-C10)	L	0.5000	0.5310	931784.2	924016		6.2	20
Bromofluorobenzene	L	0.05000	0.06154	558596.8	548580		23.1	20 *

HOLDING TIME SUMMARY

SW8015B GRO

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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
GW0756	11/12/12 10:57	11/14/12 08:30	11/26/12 18:22	N/A	14.00	11/26/12 18:22	14.35	14.00	
GW0860	11/14/12 16:06	11/16/12 08:30	11/20/12 06:09	N/A	14.00	11/20/12 06:09	5.54	14.00	

PREPARATION BENCH SHEET

2K15028

Empirical Laboratories, LLC

Printed: 11/28/2012 8:42:50AM

Instrument:

Matrix: Water **Prepared using: GCLC - 8015GRO** **Surrogate used: 12J0399**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211021-01	A	VGC_GRO_8015C	11/19/2012	5	5				20	2	Check results against expected concentration!
1211066-01RE1	E	VGC_GRO_8015B	11/19/2012	5	5				20	2	From 2K15027 by JST on 11/19/2012
1211066-03RE1	E	VGC_GRO_8015B	11/19/2012	5	5				20	2	From 2K15027 by JST on 11/19/2012
1211070-05	D	VGC_GRO_8015B	11/19/2012	5	5				20	2	TN-GRO; Rerun at dilution.
1211074-01	D	VGC_GRO_8015B	11/19/2012	5	5				20	2	Rerun due to carryover.
1211074-03	D	VGC_GRO_8015B	11/19/2012	5	5				20	2	
1211074-05	D	VGC_GRO_8015B	11/19/2012	5	5				20	2	
1211091-01	D	VGC_GRO_8015B	11/19/2012	5	5				20	2	
1211091-03	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	
1211098-03	D	VGC_GRO_8015B	11/19/2012	5	5				20	2	
1211098-05	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	
1211098-06	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	
1211098-07	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	
1211098-08	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	
1211098-09	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	limited volume
1211133-01	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	Rerun for possible carryover.
1211146-01	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	
1211146-01	D	VGC_GRO_8015C	11/19/2012	5	5				20		Added for BatchQC in: 2K15028
1211147-01	D	VGC_GRO_8015B	11/20/2012	5	5				20	2	
2K15028-BLK1		QC	11/19/2012	5	5				20	NA	
2K15028-BS1		QC	11/19/2012	5	5	12G0753		5	20	NA	
2K15028-BSD1		QC	11/19/2012	5	5	12G0753		5	20	NA	

PREPARATION BENCH SHEET

2K15028

Empirical Laboratories, LLC

Printed: 11/28/2012 8:42:50AM

Instrument:

Matrix: Water **Prepared using: GCLC - 8015GRO** **Surrogate used: 12J0399**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
2K15028-MS1		QC	11/20/2012	5	5	12G0753	1211146-01	5	20	NA	
2K15028-MSD1		QC	11/20/2012	5	5	12G0753	1211146-01	5	20	NA	

Reagents Used:

Standard	Description

PREPARATION BENCH SHEET

2K26017

Empirical Laboratories, LLC

Printed: 11/30/2012 1:39:18PM

Instrument:

Matrix: Water **Prepared using: GCLC - 8015GRO** **Surrogate used: 12J0399**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211070-05RE1	D	VGC_GRO_8015B	11/26/2012	5	5				20	2	TN-GRO Sample needs a 10x dilution. Sample expired 11/21/12
1211074-01RE1	D	VGC_GRO_8015B	11/26/2012	5	5				20	2	From 2K15028 by EAP on 11/26/2012 Sample needs a 1x due to carryover. Sample expired 11/21/12.
1211133-01RE1	D	VGC_GRO_8015B	11/26/2012	5	5				20	2	From 2K15028 by EAP on 11/26/2012 Sample was run at a dilution but may have carryover.
2K26017-BLK1		QC	11/26/2012	5	5				20	NA	
2K26017-BS1		QC	11/26/2012	5	5	12G0753		5	20	NA	
2K26017-BSD1		QC	11/26/2012	5	5	12G0753		5	20	NA	

Reagents Used:

Standard	Description

From 2K15028 on 11/26/2012 by EAP

Data for SW6010B Forms

Sample Extraction Data

Prep Method: MET_3005A-SW6010B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-02 [GW0756]	2K14027	50.00/50.00	50.0	50.0	1.00			11/14/12

Sample Extraction Data

Prep Method: MET_3005A-SW6010B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01 [GW0756]	2K19017	50.00/50.00	50.0	50.0	1.00			11/19/12
1211147-01 [GW0860]	2K19017	50.00/50.00	50.0	50.0	1.00			11/19/12

Sample Extraction Data

Prep Method: MET_3005A-SW6010B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-02 [GW0860]	2K19024	50.00/50.00	50.0	50.0	1.00			11/19/12

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01
Sampled:	11/12/12 10:57	Received:	11/14/12 08:30
% Solids:	0.00		

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7440-70-2	Calcium	**136000**	1000	2000	5000	1		SW6010B	2K19017	11/30/12 14:09
7439-92-1	Lead		1.50	3.00	3.00	1	U	SW6010B	2K19017	11/30/12 14:09
7439-95-4	Magnesium	**20800**	1000	3000	5000	1		SW6010B	2K19017	11/30/12 14:09
7440-09-7	Potassium	**5070**	1000	3000	5000	1		SW6010B	2K19017	11/30/12 14:09
7440-23-5	Sodium	**64900**	1000	3000	5000	1		SW6010B	2K19017	11/30/12 14:09

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-02
Sampled:	11/12/12 10:57	Received:	11/14/12 08:30
% Solids:	0.00		

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7439-89-6	Iron (dissolved)	**125**	30.0	60.0	100	1		SW6010B	2K14027	11/14/12 15:28
7439-96-5	Manganese (dissolved)	**4280**	3.00	6.00	15.0	1		SW6010B	2K14027	11/14/12 15:28

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01
Sampled:	11/14/12 16:06	Received:	11/16/12 08:30
% Solids:	0.00		

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7440-70-2	Calcium	**37800**	1000	2000	5000	1		SW6010B	2K19017	11/30/12 14:13
7439-92-1	Lead		1.50	3.00	3.00	1	U	SW6010B	2K19017	11/30/12 14:13
7439-95-4	Magnesium	**5240**	1000	3000	5000	1		SW6010B	2K19017	11/30/12 14:13
7440-09-7	Potassium	**2270**	1000	3000	5000	1	J	SW6010B	2K19017	11/30/12 14:13
7440-23-5	Sodium	**20900**	1000	3000	5000	1		SW6010B	2K19017	11/30/12 14:13

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-02
Sampled:	11/14/12 16:06	Received:	11/16/12 08:30
% 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	2K19024	11/19/12 11:29
7439-96-5	Manganese (dissolved)		3.00	6.00	15.0	1	U	SW6010B	2K19024	11/19/12 11:29

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K14027-BLK1

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7439-89-6	Iron (dissolved)	**31.4**	30.0	60.0	100	1	J	SW6010B	2K14027	11/14/12 13:47
7439-96-5	Manganese (dissolved)	ND	3.00	6.00	15.0	1	U	SW6010B	2K14027	11/14/12 13:47

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC

Client: Shaw E & I (I700)

Matrix: Water

% Solids:

SDG: kirtland_072

Project: Kirtland AFB 2011

Laboratory ID: 2K14027-BS1

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7439-89-6	Iron (dissolved)	**1094**	30.0	60.0	100	1		SW6010B	2K14027	11/14/12 13:52
7439-96-5	Manganese (dissolved)	**513.2**	3.00	6.00	15.0	1		SW6010B	2K14027	11/14/12 13:52

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K19017-BLK1

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7440-70-2	Calcium	ND	1000	2000	5000	1	U	SW6010B	2K19017	11/30/12 13:21
7439-92-1	Lead	ND	1.50	3.00	3.00	1	U	SW6010B	2K19017	11/30/12 13:21
7439-95-4	Magnesium	ND	1000	3000	5000	1	U	SW6010B	2K19017	11/30/12 13:21
7440-09-7	Potassium	ND	1000	3000	5000	1	U	SW6010B	2K19017	11/30/12 13:21
7440-23-5	Sodium	ND	1000	3000	5000	1	U	SW6010B	2K19017	11/30/12 13:21

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Matrix: Water
Laboratory ID: 2K19017-BS1
% Solids:

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7440-70-2	Calcium	**4820**	1000	2000	5000	1	J	SW6010B	2K19017	11/30/12 13:26
7439-92-1	Lead	**248.6**	1.50	3.00	3.00	1		SW6010B	2K19017	11/30/12 13:26
7439-95-4	Magnesium	**4590**	1000	3000	5000	1	J	SW6010B	2K19017	11/30/12 13:26
7440-09-7	Potassium	**4618**	1000	3000	5000	1	J	SW6010B	2K19017	11/30/12 13:26
7440-23-5	Sodium	**4708**	1000	3000	5000	1	J	SW6010B	2K19017	11/30/12 13:26

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K19024-BLK1

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7439-89-6	Iron (dissolved)	ND	30.0	60.0	100	1	U	SW6010B	2K19024	11/19/12 11:11
7439-96-5	Manganese (dissolved)	ND	3.00	6.00	15.0	1	U	SW6010B	2K19024	11/19/12 11:11

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Matrix: Water
Laboratory ID: 2K19024-BS1
% Solids:

CAS NO.	Analyte	Conc. (ug/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7439-89-6	Iron (dissolved)	**1016**	30.0	60.0	100	1		SW6010B	2K19024	11/19/12 11:16
7439-96-5	Manganese (dissolved)	**505.7**	3.00	6.00	15.0	1		SW6010B	2K19024	11/19/12 11:16

INITIAL AND CONTINUING CALIBRATION CHECK

SW6010B

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: ME-ICP

SDG: kirtland_072
Project: Kirtland AFB 2011
Calibration: 2319004
Sequence: 2K31912

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2K31912-ICV1	Iron (dissolved)	10000	10480	105	ug/L	+/- 10.00%
	Manganese (dissolved)	1000	998.2	99.8	ug/L	+/- 10.00%
2K31912-CCV1	Iron (dissolved)	10000	10200	102	ug/L	+/- 10.00%
	Manganese (dissolved)	1000	994.1	99.4	ug/L	+/- 10.00%
2K31912-CCV3	Iron (dissolved)	10000	10470	105	ug/L	+/- 10.00%
	Manganese (dissolved)	1000	1001	100	ug/L	+/- 10.00%
2K31912-CCV4	Iron (dissolved)	10000	10390	104	ug/L	+/- 10.00%
	Manganese (dissolved)	1000	991.0	99.1	ug/L	+/- 10.00%
2K31912-CCV5	Iron (dissolved)	10000	10210	102	ug/L	+/- 10.00%
	Manganese (dissolved)	1000	978.6	97.9	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_072
Project: Kirtland AFB 2011
Calibration: 2324004
Sequence: 2K32416

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2K32416-ICV1	Iron (dissolved)	10000	9773	97.7	ug/L	+/- 10.00%
	Manganese (dissolved)	1000	1011	101	ug/L	+/- 10.00%
2K32416-CCV1	Iron (dissolved)	10000	10150	102	ug/L	+/- 10.00%
	Manganese (dissolved)	1000	992.8	99.3	ug/L	+/- 10.00%
2K32416-CCV2	Iron (dissolved)	10000	10040	100	ug/L	+/- 10.00%
	Manganese (dissolved)	1000	1002	100	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_072
Project: Kirtland AFB 2011
Calibration: 2338002
Sequence: 2L33804

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2L33804-ICV1	Calcium	50000	51780	104	ug/L	+/- 10.00%
	Lead	1000	959.0	95.9	ug/L	+/- 10.00%
	Magnesium	50000	51910	104	ug/L	+/- 10.00%
	Potassium	10000	9953	99.5	ug/L	+/- 10.00%
	Sodium	50000	51440	103	ug/L	+/- 10.00%
2L33804-CCV1	Calcium	50000	50300	101	ug/L	+/- 10.00%
	Lead	1000	963.0	96.3	ug/L	+/- 10.00%
	Magnesium	50000	46640	93.3	ug/L	+/- 10.00%
	Potassium	10000	9600	96.0	ug/L	+/- 10.00%
	Sodium	50000	50160	100	ug/L	+/- 10.00%
2L33804-CCV2	Calcium	50000	49230	98.5	ug/L	+/- 10.00%
	Lead	1000	954.2	95.4	ug/L	+/- 10.00%
	Magnesium	50000	45030	90.1	ug/L	+/- 10.00%
	Potassium	10000	9386	93.9	ug/L	+/- 10.00%
	Sodium	50000	49160	98.3	ug/L	+/- 10.00%

CRDL STANDARD

SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: ME-ICP

Calibration: 2319004

Sequence: 2K31912

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2K31912-CRL1	Iron (dissolved)	60.00	70.24	117	ug/L	80 - 120
	Manganese (dissolved)	6.000	6.230	104	ug/L	80 - 120

CRDL STANDARD

SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: ME-ICP

Calibration: 2324004

Sequence: 2K32416

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2K32416-CRL1	Iron (dissolved)	60.00	61.10	102	ug/L	80 - 120
	Manganese (dissolved)	6.000	5.949	99.2	ug/L	80 - 120

CRDL STANDARD

SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: ME-ICP

Calibration: 2338002

Sequence: 2L33804

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2L33804-CRL1	Calcium	2000	2042	102	ug/L	80 - 120
	Lead	3.000	3.048	102	ug/L	80 - 120
	Magnesium	3000	2932	97.7	ug/L	80 - 120
	Potassium	3000	2925	97.5	ug/L	80 - 120
	Sodium	3000	3003	100	ug/L	80 - 120

BLANKS
SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Instrument ID: ME-ICP
Project: Kirtland AFB 2011
Sequence: 2K31912
Calibration: 2319004

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K31912-ICB1	Iron (dissolved)	14.19	30.0	100	ug/L	U	SW6010B
	Manganese (dissolved)	0.03410	3.00	15.0	ug/L	U	SW6010B
2K31912-CCB1	Iron (dissolved)	4.96	30.0	100	ug/L	U	SW6010B
	Manganese (dissolved)	0.0526	3.00	15.0	ug/L	U	SW6010B
2K31912-CCB3	Iron (dissolved)	39.0	30.0	100	ug/L	J	SW6010B
	Manganese (dissolved)	0.245	3.00	15.0	ug/L	U	SW6010B
2K14027-BLK1	Iron (dissolved)	31.4	30.0	100	ug/L	J	SW6010B
	Manganese (dissolved)	0.148	3.00	15.0	ug/L	U	SW6010B
2K31912-CCB4	Iron (dissolved)	2.90	30.0	100	ug/L	U	SW6010B
	Manganese (dissolved)	0.170	3.00	15.0	ug/L	U	SW6010B
2K31912-CCB5	Iron (dissolved)	9.31	30.0	100	ug/L	U	SW6010B
	Manganese (dissolved)	0.184	3.00	15.0	ug/L	U	SW6010B

BLANKS
SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Instrument ID: ME-ICP
Project: Kirtland AFB 2011
Sequence: 2K32416
Calibration: 2324004

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K32416-ICB1	Iron (dissolved)	0.8882	30.0	100	ug/L	U	SW6010B
	Manganese (dissolved)	-0.02825	3.00	15.0	ug/L	U	SW6010B
2K32416-CCB1	Iron (dissolved)	1.14	30.0	100	ug/L	U	SW6010B
	Manganese (dissolved)	-0.0121	3.00	15.0	ug/L	U	SW6010B
2K19024-BLK1	Iron (dissolved)	-0.232	30.0	100	ug/L	U	SW6010B
	Manganese (dissolved)	-0.0388	3.00	15.0	ug/L	U	SW6010B
2K32416-CCB2	Iron (dissolved)	-1.97	30.0	100	ug/L	U	SW6010B
	Manganese (dissolved)	-0.0578	3.00	15.0	ug/L	U	SW6010B

BLANKS
SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Instrument ID: ME-ICP
Project: Kirtland AFB 2011
Sequence: 2L33804
Calibration: 2338002

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2L33804-ICB1	Calcium	0.4700	1000	5000	ug/L	U	SW6010B
	Lead	0.1073	1.50	3.00	ug/L	U	SW6010B
	Magnesium	2.600	1000	5000	ug/L	U	SW6010B
	Potassium	-11.49	1000	5000	ug/L	U	SW6010B
	Sodium	3.220	1000	5000	ug/L	U	SW6010B
2L33804-CCB1	Calcium	-1.18	1000	5000	ug/L	U	SW6010B
	Lead	-0.778	1.50	3.00	ug/L	U	SW6010B
	Magnesium	-5.90	1000	5000	ug/L	U	SW6010B
	Potassium	-14.8	1000	5000	ug/L	U	SW6010B
	Sodium	3.47	1000	5000	ug/L	U	SW6010B
2K19017-BLK1	Calcium	5.09	1000	5000	ug/L	U	SW6010B
	Lead	-0.713	1.50	3.00	ug/L	U	SW6010B
	Magnesium	1.67	1000	5000	ug/L	U	SW6010B
	Potassium	-13.6	1000	5000	ug/L	U	SW6010B
	Sodium	6.47	1000	5000	ug/L	U	SW6010B
2L33804-CCB2	Calcium	3.88	1000	5000	ug/L	U	SW6010B
	Lead	-0.591	1.50	3.00	ug/L	U	SW6010B
	Magnesium	-0.110	1000	5000	ug/L	U	SW6010B
	Potassium	-5.48	1000	5000	ug/L	U	SW6010B
	Sodium	-0.450	1000	5000	ug/L	U	SW6010B

ICP INTERFERENCE CHECK SAMPLE

SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Instrument ID: ME-ICP
Calibration: 2319004
Sequence: 2K31912

Lab Sample ID	Analyte	True	Found	%R	Units
2K31912-IFA1	Iron (dissolved)	200000	201,290.00	101	ug/L
	Manganese (dissolved)		-3.91		ug/L
2K31912-IFB1	Iron (dissolved)	200000	209,850.00	105	ug/L
	Manganese (dissolved)	500.0	468.41	93.7	ug/L

ICP INTERFERENCE CHECK SAMPLE

SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Instrument ID: ME-ICP
Calibration: 2324004
Sequence: 2K32416

Lab Sample ID	Analyte	True	Found	%R	Units
2K32416-IFA1	Iron (dissolved)	200000	211,600.00	106	ug/L
	Manganese (dissolved)		-3.72		ug/L
2K32416-IFB1	Iron (dissolved)	200000	211,620.00	106	ug/L
	Manganese (dissolved)	500.0	465.32	93.1	ug/L

ICP INTERFERENCE CHECK SAMPLE

SW6010B

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Instrument ID: ME-ICP
Calibration: 2338002
Sequence: 2L33804

Lab Sample ID	Analyte	True	Found	%R	Units
2L33804-IFA1	Calcium	500000	465,710.00	93.1	ug/L
	Lead		-1.32		ug/L
	Magnesium	500000	447,720.00	89.5	ug/L
	Potassium		-40.02		ug/L
	Sodium		51.71		ug/L
2L33804-IFB1	Calcium	500000	472,200.00	94.4	ug/L
	Lead	50.00	46.53	93.1	ug/L
	Magnesium	500000	457,820.00	91.6	ug/L
	Potassium		-27.34		ug/L
	Sodium		40.78		ug/L

LCS / LCS DUPLICATE RECOVERY

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K14027	Laboratory ID:	2K14027-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	1094	109	80 - 120
Manganese (dissolved)	500.0	513.2	103	80 - 120

LCS / LCS DUPLICATE RECOVERY

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19017	Laboratory ID:	2K19017-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	4820	96.4	80 - 120
Lead	250.0	248.6	99.4	80 - 120
Magnesium	5000	4590	91.8	80 - 120
Potassium	5000	4618	92.4	80 - 120
Sodium	5000	4708	94.2	80 - 120

LCS / LCS DUPLICATE RECOVERY

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19024	Laboratory ID:	2K19024-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	1016	102	80 - 120
Manganese (dissolved)	500.0	505.7	101	80 - 120

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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_072

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 12/30/2011

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
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	0.000274	0.002914	0.000021	0.000325	0.0000000
Lead	220.3	0.000274	0.002914	0.000021	0.000325	0.0000000
Magnesium	279.0	0.0000000	0.0000000	-0.000001	0.0000000	0.0000000
Magnesium	279.0	0.0000000	0.0000000	-0.000001	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.000032	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.000032	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	589.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.6	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_072

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 12/30/2011

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
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
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
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	589.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.6	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_072

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 12/30/2011

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
Iron	261.1	0.0000000	-0.000701	0.0000000	0.0000000	-0.000794
Iron	261.1	0.0000000	-0.000701	0.0000000	0.0000000	-0.000794
Lead	220.3	-0.000077	0.0000000	0.000101	0.0000000	0.000116
Lead	220.3	-0.000077	0.0000000	0.000101	0.0000000	0.000116
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
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	589.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.6	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_072

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 12/30/2011

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
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	-0.002028	0.0000000	0.000100	0.0000000	0.0000000
Lead	220.3	-0.002028	0.0000000	0.000100	0.0000000	0.0000000
Magnesium	279.0	-0.000013	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.0	-0.000013	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
Sodium	589.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

FORM XA-IN

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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_072

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 12/30/2011

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
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	-0.000006	0.0000000	-0.000072
Lead	220.3	0.0000000	0.0000000	-0.000006	0.0000000	-0.000072
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
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	589.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.6	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_072

ICP-AES Instrument ID: Thermo Jarrell Ashe ICAP Date: 12/30/2011

Analyte	Wave-length (nm)	Interelement Correction Factors for: Zn				
Calcium	317.9	0.0000000				
Calcium	317.9	0.0000000				
Iron	261.1	0.0000000				
Iron	261.1	0.0000000				
Lead	220.3	0.0000000				
Lead	220.3	0.0000000				
Magnesium	279.0	0.0000000				
Magnesium	279.0	0.0000000				
Manganese	257.6	0.0000000				
Manganese	257.6	0.0000000				
Potassium	766.4	0.0000000				
Potassium	766.4	0.0000000				
Sodium	589.6	0.0000000				
Sodium	589.6	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_072

Project: Kirtland AFB 2011

ICP Instrument ID: ME-ICP Date: 12/30/2011

Analyte	Integ. Time (Sec.)	Concentration ug/L	M
Calcium	15	500000	P
Calcium	15	500000	P
Iron	15	500000	P
Iron	15	500000	P
Lead	15	10000	P
Lead	15	10000	P
Magnesium	15	500000	P
Magnesium	15	500000	P
Manganese	15	10000	P
Manganese	15	10000	P
Potassium	15	100000	P
Potassium	15	100000	P
Sodium	15	500000	P
Sodium	15	500000	P

PREPARATION BATCH SUMMARY

SW6010B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K14027 Batch Matrix: Water Preparation: MET_3005A

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-02	11/14/12 13:37	50.00	50.00
Blank	2K14027-BLK1	11/14/12 13:37	50.00	50.00
LCS	2K14027-BS1	11/14/12 13:37	50.00	50.00

PREPARATION BATCH SUMMARY

SW6010B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K19017 Batch Matrix: Water Preparation: MET_3005A

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01	11/19/12 09:19	50.00	50.00
GW0860	1211147-01	11/19/12 09:19	50.00	50.00
Blank	2K19017-BLK1	11/19/12 09:19	50.00	50.00
LCS	2K19017-BS1	11/19/12 09:19	50.00	50.00

PREPARATION BATCH SUMMARY

SW6010B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K19024 Batch Matrix: Water Preparation: MET_3005A

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0860	1211147-02	11/19/12 11:11	50.00	50.00
Blank	2K19024-BLK1	11/19/12 11:11	50.00	50.00
LCS	2K19024-BS1	11/19/12 11:11	50.00	50.00

ANALYSIS SEQUENCE SUMMARY

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K31912	Instrument:	ME-ICP
Calibration:	2319004		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2K31912-CAL1	11-14-12A-001	11/14/12 09:59
Cal Standard	2K31912-CAL2	11-14-12A-002	11/14/12 10:03
Cal Standard	2K31912-CAL3	11-14-12A-003	11/14/12 10:07
Cal Standard	2K31912-CAL4	11-14-12A-004	11/14/12 10:12
Cal Standard	2K31912-CAL5	11-14-12A-005	11/14/12 10:17
Cal Standard	2K31912-CAL6	11-14-12A-006	11/14/12 10:21
Initial Cal Check	2K31912-ICV1	11-14-12B-001	11/14/12 11:00
Initial Cal Blank	2K31912-ICB1	11-14-12B-002	11/14/12 11:07
Instrument RL Check	2K31912-CRL1	11-14-12B-003	11/14/12 11:12
Interference Check A	2K31912-IFA1	11-14-12B-006	11/14/12 11:28
Interference Check B	2K31912-IFB1	11-14-12B-007	11/14/12 11:33
Calibration Check	2K31912-CCV1	11-14-12B-009	11/14/12 11:43
Calibration Blank	2K31912-CCB1	11-14-12B-010	11/14/12 11:51
Calibration Check	2K31912-CCV3	121412C-011	11/14/12 13:33
Calibration Blank	2K31912-CCB3	121412C-012	11/14/12 13:40
Blank	2K14027-BLK1	121412C-013	11/14/12 13:47
LCS	2K14027-BS1	121412C-014	11/14/12 13:52
Calibration Check	2K31912-CCV4	121412C-027	11/14/12 14:53
Calibration Blank	2K31912-CCB4	121412C-028	11/14/12 15:00
GW0756	1211133-02	121412C-034	11/14/12 15:28
Calibration Check	2K31912-CCV5	121412C-038	11/14/12 15:47
Calibration Blank	2K31912-CCB5	121412C-039	11/14/12 15:54

ANALYSIS SEQUENCE SUMMARY

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32416	Instrument:	ME-ICP
Calibration:	2324004		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2K32416-CAL1	11-19-12A-001	11/19/12 09:11
Cal Standard	2K32416-CAL2	11-19-12A-002	11/19/12 09:15
Cal Standard	2K32416-CAL3	11-19-12A-003	11/19/12 09:20
Cal Standard	2K32416-CAL4	11-19-12A-004	11/19/12 09:24
Cal Standard	2K32416-CAL5	11-19-12A-005	11/19/12 09:29
Cal Standard	2K32416-CAL6	11-19-12A-006	11/19/12 09:34
Initial Cal Check	2K32416-ICV1	11-19-12A-012	11/19/12 10:21
Initial Cal Blank	2K32416-ICB1	11-19-12A-013	11/19/12 10:27
Instrument RL Check	2K32416-CRL1	11-19-12A-014	11/19/12 10:32
Interference Check A	2K32416-IFA1	11-19-12A-017	11/19/12 10:47
Interference Check B	2K32416-IFB1	11-19-12A-018	11/19/12 10:52
Calibration Check	2K32416-CCV1	11-19-12A-019	11/19/12 11:00
Calibration Blank	2K32416-CCB1	11-19-12A-020	11/19/12 11:06
Blank	2K19024-BLK1	11-19-12A-021	11/19/12 11:11
LCS	2K19024-BS1	11-19-12A-022	11/19/12 11:16
GW0860	1211147-02	11-19-12A-024	11/19/12 11:29
Calibration Check	2K32416-CCV2	11-19-12A-025	11/19/12 11:34
Calibration Blank	2K32416-CCB2	11-19-12A-026	11/19/12 11:40

ANALYSIS SEQUENCE SUMMARY

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2L33804	Instrument:	ME-ICP
Calibration:	2338002		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2L33804-CAL1	113012A-001	11/30/12 11:04
Cal Standard	2L33804-CAL2	113012A-002	11/30/12 11:09
Cal Standard	2L33804-CAL3	113012A-003	11/30/12 11:13
Cal Standard	2L33804-CAL5	113012A-005	11/30/12 11:22
Cal Standard	2L33804-CAL6	113012A-006	11/30/12 11:27
Cal Standard	2L33804-CAL7	113012A-007	11/30/12 11:33
Cal Standard	2L33804-CAL8	113012A-008	11/30/12 11:38
Initial Cal Check	2L33804-ICV1	113012B-001	11/30/12 12:06
Initial Cal Blank	2L33804-ICB1	113012B-002	11/30/12 12:22
Instrument RL Check	2L33804-CRL1	113012B-004	11/30/12 12:33
Interference Check A	2L33804-IFA1	113012B-008	11/30/12 12:54
Interference Check B	2L33804-IFB1	113012B-009	11/30/12 12:59
Calibration Check	2L33804-CCV1	113012B-011	11/30/12 13:10
Calibration Blank	2L33804-CCB1	113012B-012	11/30/12 13:17
Blank	2K19017-BLK1	113012B-013	11/30/12 13:21
LCS	2K19017-BS1	113012B-014	11/30/12 13:26
GW0756	1211133-01	113012B-023	11/30/12 14:09
GW0860	1211147-01	113012B-024	11/30/12 14:13
Calibration Check	2L33804-CCV2	113012B-029	11/30/12 14:37
Calibration Blank	2L33804-CCB2	113012B-030	11/30/12 14:44

INITIAL CALIBRATION DATA

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2319004	Instrument:	ME-ICP
Matrix:	Water	Calibration Dates:	11/14/12 9:59 11/14/12 10:31

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	2.9148E-05	10000	2.9117E-05			500000	2.7924E-05		
Antimony	0	0	100	0.0005835	1000	6.2841E-04					10000	6.1071E-04
Arsenic	0	0	100	0.0003177	1000	3.4584E-04					10000	3.3262E-04
Barium	0	0	50	0.0108942	1000	0.010634	5000	0.010854				
Beryllium	0	0	100	0.0021918	1000	0.0022418					10000	0.0021715
Boron	0	0	50	0.0000212	1000	2.299E-05					5000	2.1958E-05
Cadmium	0	0	100	0.016961	1000	0.017142					10000	0.016263
Calcium	0	0	1100	6.395455E-05	50000	6.3686E-05					10000	
Chromium	0	0	100	0.0000486	1000	4.772E-05					10000	4.669E-05
Cobalt	0	0	100	0.0046186	1000	0.0045586					10000	0.0045807
Copper	0	0	100	0.0001026	1000	0.0000936					10000	9.1021E-05
Iron	0	0	5100	2.503726E-05	10000	2.4297E-05			500000	2.289E-05	10000	
Lead	0	0	100	0.0011911	1000	0.0011477					10000	0.0011697
Magnesium	0	0	5100		50000	2.7572E-06			500000	2.6706E-06	10000	
Manganese	0	0	100	0.0003727	1000	3.6055E-04	10000	3.5086E-04			10000	
Molybdenum	0	0	100	0.0034614	1000	0.0036237					10000	0.0035252
Nickel	0	0	100	0.0032117	1000	0.0031917					10000	0.0031637
Potassium	0	0	1000	0.0000171	10000	1.9249E-05						
Selenium	0	0	100	0.000323	1000	3.4056E-04					10000	3.2517E-04
Silver	0	0	20	0.000082	500	7.841999E-05	2000	8.090999E-05				
Sodium	0	0	1000		50000	7.1696E-05						
Strontium	0	0	100	0.001712	1000	0.001747					10000	0.001705
Thallium	0	0	100	0.0007636	1000	7.4706E-04					10000	7.5022E-04
Tin	0	0	50	0.0011744	1000	0.0012404					5000	0.0012242
Titanium	0	0	100	0.0001939	1000	1.9792E-04					10000	1.9858E-04
Vanadium	0	0	100	0.000045	1000	4.609E-05					10000	4.4919E-05
Zinc	0	0	100	0.0068507	1000	0.0069972					10000	0.0068277

INITIAL CALIBRATION DATA (Continued)

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2319004	Instrument:	ME-ICP
Matrix:	Water	Calibration Dates:	11/14/12 9:59 11/14/12 10:31

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	0.0000609								
Chromium												
Cobalt												
Copper												
Iron												
Lead												
Magnesium			100000	2.6051E-06								
Manganese												
Molybdenum												
Nickel												
Potassium	100000	1.9426E-05										
Selenium												
Silver												
Sodium	100000	6.964E-05	500000	6.882E-05								
Strontium												
Thallium												
Tin												
Titanium												
Vanadium												
Zinc												

INITIAL CALIBRATION DATA (Continued)

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072		
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011		
Calibration:	2319004	Instrument:	ME-ICP		
Matrix:	Water	Calibration Dates:	11/14/12 9:59	11/14/12 10:31	

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Aluminum	2.154725E-05	66.7191	5.048515	170.9948	0.9999994		0.998	
Antimony	4.55655E-04	66.7898	4.56375	189.4333	0.9999892		0.998	
Arsenic	2.4904E-04	66.82627	3.635307	187.4948	0.9999814		0.998	
Barium	8.09555E-03	66.68163	2.398397	193.1537	0.9999815		0.998	
Beryllium	1.651275E-03	66.69067	13.24289	190.067	0.9999897		0.998	
Boron	1.6537E-05	66.8141	19.10268	184.3815	0.9998998		0.998	
Cadmium	0.0125915	66.73457	2.04508	171.9113	0.9999727		0.998	
Calcium	4.713514E-05	66.73101	2.216653	133.747	0.9999796		0.998	
Chromium	3.57525E-05	66.70241	6.289578	174.6359	0.999996		0.998	
Cobalt	3.439475E-03	66.67056	1.59036	189.3567	0.9999997		0.998	
Copper	7.180525E-05	67.02407	0.9092325	40.50218	0.9999963		0.998	
Iron	1.805606E-05	66.84889	46.52795	198.6077	0.9999988		0.998	
Lead	8.77125E-04	66.69726	5.765607	186.1153	0.9999959		0.998	
Magnesium	2.008225E-06	66.73879	45.25008	198.1436	0.999946		0.998	
Manganese	2.710275E-04	66.74813	27.95518	193.2305	0.9999935		0.998	
Molybdenum	2.652575E-03	66.71416	5.601295	196.3348	0.9999915		0.998	
Nickel	2.391775E-03	66.67175	5.288502	194.4973	0.9999993		0.998	
Potassium	1.394375E-05	67.09645	1.266838	126.3387	0.9999999		0.998	
Selenium	2.471825E-04	66.74163	35.10575	198.4758	0.9999769		0.998	
Silver	6.03325E-05	66.71291	3.602032	138.6164	0.9999279		0.998	
Sodium	5.2539E-05	66.70642	14.95103	191.792	0.9999843		0.998	
Strontium	0.001291	66.68185	2.9142	142.4514	0.9999936		0.998	
Thallium	5.6522E-04	66.67873	9.12732	193.8413	0.9999997		0.998	
Tin	9.0975E-04	66.7381	3.083032	182.8732	0.9999905		0.998	
Titanium	0.0001476	66.68139	2.45188	169.9397	0.9999996		0.998	
Vanadium	3.400225E-05	66.68516	24.82937	193.504	0.9999933		0.998	
Zinc	0.0051689	66.68249	3.686025	193.4176	0.999994		0.998	

INITIAL CALIBRATION DATA

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2324004	Instrument:	ME-ICP
Matrix:	Water	Calibration Dates:	11/19/12 9:11 11/19/12 9:45

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
Aluminum	0	0	5000	2.3076E-05	10000	2.3234E-05			500000	2.3206E-05		
Antimony	0	0	100	0.0006481	1000	7.0458E-04					10000	6.9885E-04
Arsenic	0	0	100	0.0003693	1000	4.1249E-04					10000	4.0174E-04
Barium	0	0	50	0.0123848	1000	0.012217	5000	0.0123536				
Beryllium	0	0	100	0.0035937	1000	0.0036766					10000	0.003473
Boron	0	0	50	0.0000192	1000	2.024E-05					5000	1.9934E-05
Cadmium	0	0	100	0.020594	1000	0.021213					10000	0.019992
Calcium	0	0	1100	8.190909E-05	50000	8.115599E-05					10000	
Chromium	0	0	100	0.0000364	1000	3.638E-05					10000	3.8333E-05
Cobalt	0	0	100	0.0059249	1000	0.0057707					10000	0.0057961
Copper	0	0	100	0.0000866	1000	8.466E-05					10000	8.5194E-05
Iron	0	0	5100	1.474902E-05	10000	1.4175E-05			500000	1.43364E-05	10000	
Lead	0	0	100	0.001522	1000	0.0014672					10000	0.0014911
Magnesium	0	0	5100		50000	3.371E-06			500000	3.4324E-06	10000	
Manganese	0	0	100	0.0003479	1000	3.3892E-04	10000	0.0003313			10000	
Molybdenum	0	0	100	0.0037811	1000	0.0039811					10000	0.0039325
Nickel	0	0	100	0.0040832	1000	0.0040646					10000	0.0040571
Potassium	0	0	1000	1.055E-05	10000	1.267E-05						
Selenium	0	0	100	0.0003229	1000	3.5541E-04					10000	3.4651E-04
Silver	0	0	20	0.000052	500	4.958E-05	2000	5.283E-05				
Sodium	0	0	1000		50000	6.1818E-05						
Strontium	0	0	100	0.002552	1000	0.002556					10000	0.002454
Thallium	0	0	100	0.0009005	1000	9.0998E-04					10000	9.223699E-04
Tin	0	0	50	0.001222	1000	0.0013382					5000	1.33556E-03
Titanium	0	0	100	0.0002377	1000	2.4802E-04					10000	0.0002453
Vanadium	0	0	100	0.0000676	1000	6.808E-05					10000	6.7306E-05
Zinc	0	0	100	0.0078433	1000	0.0081311					10000	0.0079378

INITIAL CALIBRATION DATA (Continued)

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2324004	Instrument:	ME-ICP
Matrix:	Water	Calibration Dates:	11/19/12 9:11 11/19/12 9:45

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
Aluminum												
Antimony												
Arsenic												
Barium												
Beryllium												
Boron												
Cadmium												
Calcium	100000		500000	7.8522E-05								
Chromium												
Cobalt												
Copper												
Iron												
Lead												
Magnesium			100000	3.1888E-06								
Manganese												
Molybdenum												
Nickel												
Potassium	100000	1.3338E-05										
Selenium												
Silver												
Sodium	100000	6.1492E-05	500000	5.952E-05								
Strontium												
Thallium												
Tin												
Titanium												
Vanadium												
Zinc												

INITIAL CALIBRATION DATA (Continued)

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072		
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011		
Calibration:	2324004	Instrument:	ME-ICP		
Matrix:	Water	Calibration Dates:	11/19/12 9:11	11/19/12 9:45	

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Aluminum	1.7379E-05	66.66784	3.461457	151.1842	1		0.998	
Antimony	5.128825E-04	66.85011	3.515197	162.0323	0.999998		0.998	
Arsenic	2.958825E-04	66.95478	5.548925	177.707	0.9999892		0.998	
Barium	9.23885E-03	66.67133	1.252745	163.2104	0.9999944		0.998	
Beryllium	2.685825E-03	66.73928	18.43544	191.2558	0.9999671		0.998	
Boron	1.48435E-05	66.73146	1.885788	134.7258	0.9999898		0.998	
Cadmium	1.544975E-02	66.7447	2.691438	163.985	0.9999642		0.998	
Calcium	6.039677E-05	66.71001	3.193125	146.709	0.9999891		0.998	
Chromium	2.777825E-05	66.74817	1.610968	57.12325	0.9999751		0.998	
Cobalt	4.372925E-03	66.68454	0.9259075	80.06596	0.9999996		0.998	
Copper	6.41135E-05	66.67888	3.042335	118.0088	0.9999994		0.998	
Iron	1.08151E-05	66.70415	70.93077	197.04	0.9999998		0.998	
Lead	1.120075E-03	66.69674	155.3382	199.1707	0.9999971		0.998	
Magnesium	2.49805E-06	66.79515	32.66442	195.0874	0.999789		0.998	
Manganese	2.5453E-04	66.71993	2.177955	114.2972	0.9999956		0.998	
Molybdenum	2.923675E-03	66.73028	3.499838	180.9042	0.9999979		0.998	
Nickel	3.051225E-03	66.66763	21.49598	195.5134	1		0.998	
Potassium	9.1395E-06	67.92318	1.047585	109.2653	0.9999898		0.998	
Selenium	2.56205E-04	66.88132	5.520393	171.0239	0.9999901		0.998	
Silver	3.86025E-05	66.76227	2.269193	88.14102	0.9997238		0.998	
Sodium	4.57075E-05	66.70366	3.671535	186.7327	0.9999586		0.998	
Strontium	0.0018905	66.71334	3.53795	173.795	0.9999836		0.998	
Thallium	6.832125E-04	66.67955	2.201597	168.7624	0.9999989		0.998	
Tin	9.7394E-04	66.89824	3.82516	180.2953	0.9999989		0.998	
Titanium	1.82755E-04	66.70948	4.08943	176.5958	0.9999985		0.998	
Vanadium	5.07465E-05	66.66963	9.495555	186.8016	0.9999988		0.998	
Zinc	5.97805E-03	66.69677	4.65247	181.8225	0.9999939		0.998	

INITIAL CALIBRATION DATA

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2338002	Instrument:	ME-ICP
Matrix:	Water	Calibration Dates:	11/30/12 11:04 11/30/12 11:38

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	2.737E-05	10000	2.732E-05			500000	2.7116E-05		
Antimony	0	0	100	0.00058	1000	6.1319E-04					10000	6.1225E-04
Arsenic	0	0	100	0.0003133	1000	3.3334E-04					10000	3.2841E-04
Barium	0	0	50	0.0104466	1000	0.010118	5000	0.0102238				
Beryllium	0	0	100	0.0022212	1000	0.0022192					10000	0.0021767
Boron	0	0	50	0.0000178	1000	1.676E-05					5000	1.6836E-05
Cadmium	0	0	100	0.01551	1000	0.015741					10000	0.014965
Calcium	0	0	1100	6.667273E-05	50000	6.404E-05					10000	
Chromium	0	0	100	0.000047	1000	4.452E-05					10000	4.4445E-05
Cobalt	0	0	100	0.0043288	1000	0.0042447					10000	0.0043186
Copper	0	0	100	0.0000995	1000	8.945E-05					10000	8.9134E-05
Iron	0	0	5100	2.462549E-05	10000	2.378E-05			500000	2.2728E-05	10000	
Lead	0	0	100	0.0011237	1000	0.0010757					10000	0.0011064
Magnesium	0	0	5100		50000	2.7558E-06			500000	2.806E-06	10000	
Manganese	0	0	100	0.0002859	1000	0.0002717	10000	2.7127E-04			10000	
Molybdenum	0	0	100	0.0032892	1000	0.0034031					10000	0.0033601
Nickel	0	0	100	0.0030754	1000	0.0030426					10000	0.0030874
Potassium	0	0	1000	1.809E-05	10000	1.8457E-05						
Selenium	0	0	100	0.0003198	1000	3.2656E-04					10000	3.1979E-04
Silver	0	0	20	8.149999E-05	500	7.536E-05	2000	8.1015E-05				
Sodium	0	0	1000		50000	4.7336E-05						
Strontium	0	0	100	0.001649	1000	0.001637					10000	0.001638
Thallium	0	0	100	0.0006853	1000	6.7677E-04					10000	6.9689E-04
Tin	0	0	50	0.0011378	1000	0.0011858					5000	1.17588E-03
Titanium	0	0	100	0.0002015	1000	1.9357E-04					10000	1.9649E-04
Vanadium	0	0	100	0.0000449	1000	4.356E-05					10000	4.3481E-05
Zinc	0	0	100	0.0065709	1000	0.0066537					10000	0.0065457

INITIAL CALIBRATION DATA (Continued)

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Calibration:	2338002	Instrument:	ME-ICP
Matrix:	Water	Calibration Dates:	11/30/12 11:04 11/30/12 11:38

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	6.213E-05								
Chromium												
Cobalt												
Copper												
Iron												
Lead												
Magnesium			100000	2.7011E-06								
Manganese												
Molybdenum												
Nickel												
Potassium	100000	1.8861E-05										
Selenium												
Silver												
Sodium	100000	4.7062E-05	500000	4.5956E-05								
Strontium												
Thallium												
Tin												
Titanium												
Vanadium												
Zinc												

INITIAL CALIBRATION DATA (Continued)

SW6010B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072		
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011		
Calibration:	2338002	Instrument:	ME-ICP		
Matrix:	Water	Calibration Dates:	11/30/12 11:04	11/30/12 11:38	

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Aluminum	2.04515E-05	66.66883	9.788915	187.0107	1		0.998	
Antimony	4.5136E-04	66.75425	3.008828	157.1611	0.9999996		0.998	
Arsenic	2.437625E-04	66.75836	11.69548	186.3609	0.9999967		0.998	
Barium	0.0076971	66.69041	3.28083	152.6806	0.9999947		0.998	
Beryllium	1.654275E-03	66.67821	56.87627	197.3699	0.9999965		0.998	
Boron	1.2849E-05	66.76838	2.844925	102.9878	0.9999976		0.998	
Cadmium	0.011554	66.7261	6.021	178.5575	0.9999746		0.998	
Calcium	4.821068E-05	66.77849	3.185138	129.0267	0.9999911		0.998	
Chromium	3.399125E-05	66.75808	5.879125	150.5289	0.9999998		0.998	
Cobalt	3.223025E-03	66.67681	1.547008	132.7429	0.9999969		0.998	
Copper	6.9521E-05	67.0253	1.702425	37.66717	0.9999996		0.998	
Iron	1.778337E-05	66.8094	37.86172	193.1669	0.9999993		0.998	
Lead	8.2645E-04	66.70991	6.496502	183.4628	0.9999915		0.998	
Magnesium	2.065725E-06	66.69891	15.28771	192.7955	0.9999449		0.998	
Manganese	2.072175E-04	66.74732	2.68445	63.85749	0.9999998		0.998	
Molybdenum	0.0025131	66.69286	3.69078	165.8633	0.999998		0.998	
Nickel	2.30135E-03	66.67174	8.55972	185.5225	0.999998		0.998	
Potassium	1.3852E-05	66.70541	5.503325	170.4354	0.9999964		0.998	
Selenium	2.415375E-04	66.67974	162.0773	199.178	0.9999954		0.998	
Silver	5.946875E-05	66.8312	2.409375	33.55504	0.9996487		0.998	
Sodium	3.50885E-05	66.68835	4.36783	144.1246	0.9999777		0.998	
Strontium	0.001231	66.66813	2.874975	124.12	1		0.998	
Thallium	5.1474E-04	66.68591	8.187078	177.991	0.9999927		0.998	
Tin	8.7487E-04	66.7086	1.49702	142.5459	0.9999958		0.998	
Titanium	1.4789E-04	66.70343	6.459433	175.3842	0.9999969		0.998	
Vanadium	3.298525E-05	66.69589	10.51439	174.3599	1		0.998	
Zinc	4.942575E-03	66.6732	6.46469	181.632	0.9999974		0.998	

PREPARATION BENCH SHEET

2K14027

Empirical Laboratories, LLC

Printed: 11/28/2012 8:52:02AM

Instrument:

Matrix: Water **Prepared using: METALS - MET_3005A** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211066-02	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211066-04	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211066-06	C	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	MS/MSD, Fe & Mn
1211066-08	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211066-10	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211066-12	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211074-02	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211074-04	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211074-06	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211091-02	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211091-04	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211132-02	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211132-04	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211132-06	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
1211133-02	A	MET_ICP_6010B_FULL_DIS	11/14/2012	50	50					NA	Fe & Mn
2K14027-BLK1		QC	11/14/2012	50	50					NA	
2K14027-BS1		QC	11/14/2012	50	50	12J0553		50000		NA	
2K14027-DUP1		QC	11/14/2012	50	50		1211066-06			NA	
2K14027-MS1		QC	11/14/2012	50	50	12J0556	1211066-06	50		NA	
2K14027-MSD1		QC	11/14/2012	50	50	12J0556	1211066-06	50		NA	

Reagents Used:

Standard	Description

PREPARATION BENCH SHEET

2K19017

Empirical Laboratories, LLC

Printed: 12/4/2012 3:05:30PM

Instrument:

Matrix: Water **Prepared using: METALS - MET_3005A** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211091-01	K	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	Ca, Pb, K, Na, Mg
1211091-03	L	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	Ca, Pb, K, Na, Mg
1211101-04	O	MET_ICP_200.7_FULL	11/19/2012	50	50					NA	Added for BatchQC in: 2K19017
1211101-04	O	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	MS/MSD, See version
1211101-05	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See version
1211133-01	L	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	Ca, Pb, K, Na, Mg
1211147-01	L	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	Ca, Pb, K, Na, Mg
1211154-02	A	MET_ICP_200.7_FULL	11/19/2012	50	50					NA	
1211156-01	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211156-03	A	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-02	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-03	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-04	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-05	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-06	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-07	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-08	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-09	L	MET_ICP_200.7_FULL	11/19/2012	50	50					NA	Added for BatchQC in: 2K19017
1211157-09	L	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	MS/MSD See Version
1211157-10	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-11	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version
1211157-12	D	MET_ICP_6010B_FULL	11/19/2012	50	50					NA	See Version

PREPARATION BENCH SHEET

2K19017

Empirical Laboratories, LLC

Printed: 12/4/2012 3:05:30PM

Instrument:

Matrix: Water **Prepared using: METALS - MET_3005A** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
2K19017-BLK1		QC	11/19/2012	50	50					NA	
2K19017-BS1		QC	11/19/2012	50	50	12J0553		50000		NA	
2K19017-DUP1		QC	11/19/2012	50	50		1211101-04			NA	
2K19017-DUP2		QC	11/19/2012	50	50		1211157-09			NA	
2K19017-MS1		QC	11/19/2012	50	50	12J0556	1211101-04	50		NA	
2K19017-MS2		QC	11/19/2012	50	50	12J0556	1211157-09	50		NA	
2K19017-MSD1		QC	11/19/2012	50	50	12J0556	1211101-04	50		NA	
2K19017-MSD2		QC	11/19/2012	50	50	12J0556	1211157-09	50		NA	
2K19017-PS1		QC	11/19/2012	20	20	12J0556	1211101-04	20		NA	
2K19017-PS2		QC	11/19/2012	20	20	12J0556	1211157-09	20		NA	

Reagents Used:

Standard	Description
12I0242	Hydrochloric Acid
12K0197	Nitric acid

PREPARATION BENCH SHEET

2K19024

Empirical Laboratories, LLC

Printed: 11/28/2012 8:54:14AM

Instrument:

Matrix: Water **Prepared using: METALS - MET_3005A** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1210265-06	A	MET_ICP_6010B_FULL_DIS	11/19/2012	50	50					NA	filter in lab, Fe & Mn
1210265-14	A	MET_ICP_6010B_FULL_DIS	11/19/2012	50	50					NA	filter in lab, Fe & Mn
1211146-02	A	MET_ICP_6010B_FULL_DIS	11/19/2012	50	50					NA	Fe & Mn
1211147-02	A	MET_ICP_6010B_FULL_DIS	11/19/2012	50	50					NA	Fe & Mn
2K19024-BLK1		QC	11/19/2012	50	50					NA	
2K19024-BS1		QC	11/19/2012	50	50	12J0553		50000		NA	

Reagents Used:

Standard	Description

Data for Wet Chemistry Forms

Sample Extraction Data

Prep Method: pNone-SM4500S2CF

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01 [GW0756]	2K19009	250.00/200.00	295	200	1.00			11/19/12
1211147-01 [GW0860]	2K19009	250.00/200.00	270	200	1.00			11/19/12

Sample Extraction Data

Prep Method: pNone-E300.0

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01 [GW0756]	2K19012	5.00/5.00	5.00	5.00	1.00			11/19/12

Sample Extraction Data

Prep Method: pNone-SM2320B

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01 [GW0756]	2K19019	25.00/25.00	25.0	25.0	1.00			11/19/12
1211147-01 [GW0860]	2K19019	25.00/25.00	25.0	25.0	1.00			11/19/12

Sample Extraction Data

Prep Method: pNone-E300.0

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-01 [GW0860]	2K21012	5.00/5.00	5.00	5.00	1.00			11/20/12

Sample Extraction Data

Prep Method: pNone-E353.2

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01 [GW0756]	2K21016	20.00/20.00	4.00	20.0	1.00			11/21/12
1211147-01 [GW0860]	2K21016	20.00/20.00	4.00	20.0	1.00			11/21/12

Sample Extraction Data

Prep Method: pNone-SM4500NH3BG

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211133-01 [GW0756]	2K29003	100.00/100.00	100	100	1.00			11/29/12

Sample Extraction Data

Prep Method: pNone-SM4500NH3BG

Lab Number [Field ID]	Batch	Nominal Initial/Final	Initial [mL]	Final [mL]	Dilution	% Solids	Notes	Date
1211147-01 [GW0860]	2L04002	100.00/100.00	100	100	1.00			12/04/12

ANALYSIS DATA SHEET

GW0756

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211133-01
Sampled:	11/12/12 10:57	Received:	11/14/12 08:30
% Solids:	0.00		

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7664-41-7	Ammonia as N	**1.84**	0.110	0.150	0.300	1		SM4500NH3BG	2K29003	11/29/12 15:03
18496-25-8	Sulfide	**9.97**	0.678	1.69	3.39	1		SM4500S2CF	2K19009	11/19/12 13:56
71-52-3	Alkalinity, Bicarbonate (as CACO3)	**306**	1.00	1.00	1.00	1		SM2320B	2K19019	11/19/12 11:50
16887-00-6	Chloride	**149**	0.170	0.330	0.500	1		E300.0	2K19012	11/20/12 07:17
NA	Nitrate/Nitrite as N		0.250	0.750	1.50	1	U	E353.2	2K21016	11/21/12 14:50
3812-32-6	Alkalinity, Carbonate (as CACO3)		1.00	1.00	1.00	1	U	SM2320B	2K19019	11/19/12 11:50
14808-79-8	Sulfate as SO4	**28.7**	0.330	1.00	2.50	1	M	E300.0	2K19012	11/20/12 07:17

ANALYSIS DATA SHEET

GW0860

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water	Laboratory ID:	1211147-01
Sampled:	11/14/12 16:06	Received:	11/16/12 08:30
% Solids:	0.00		

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7664-41-7	Ammonia as N	**0.213**	0.110	0.150	0.300	1	J	SM4500NH3BG	2L04002	12/04/12 11:04
18496-25-8	Sulfide		0.741	1.85	3.70	1	U	SM4500S2CF	2K19009	11/19/12 13:58
71-52-3	Alkalinity, Bicarbonate (as CACO3)	**95.7**	1.00	1.00	1.00	1		SM2320B	2K19019	11/19/12 11:55
16887-00-6	Chloride	**14.8**	0.170	0.330	0.500	1		E300.0	2K21012	11/21/12 23:44
NA	Nitrate/Nitrite as N	**0.692**	0.250	0.750	1.50	1	J	E353.2	2K21016	11/21/12 14:51
3812-32-6	Alkalinity, Carbonate (as CACO3)		1.00	1.00	1.00	1	U	SM2320B	2K19019	11/19/12 11:55
14808-79-8	Sulfate as SO4	**35.8**	0.330	1.00	2.50	1	M	E300.0	2K21012	11/21/12 23:44

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K19009-BLK1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
18496-25-8	Sulfide	ND	0.800	2.00	4.00	1	U	SM4500S2CF	2K19009	11/19/12 13:52

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K19009-BS1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
18496-25-8	Sulfide	**1184**	83.3	208	417	1		SM4500S2CF	2K19009	11/19/12 13:50

ANALYSIS DATA SHEET

LCS Dup

Laboratory: Empirical Laboratories, LLC

Client: Shaw E & I (I700)

Matrix: Water

% Solids:

SDG: kirtland_072

Project: Kirtland AFB 2011

Laboratory ID: 2K19009-BSD1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
18496-25-8	Sulfide	**1134**	83.3	208	417	1		SM4500S2CF	2K19009	11/19/12 13:51

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K19012-BLK1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
16887-00-6	Chloride	ND	0.170	0.330	0.500	1	U	E300.0	2K19012	11/19/12 18:31
14808-79-8	Sulfate as SO4	ND	0.330	1.00	2.00	1	U	E300.0	2K19012	11/19/12 18:31

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC

Client: Shaw E & I (I700)

Matrix: Water

% Solids:

SDG: kirtland_072

Project: Kirtland AFB 2011

Laboratory ID: 2K19012-BS1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
16887-00-6	Chloride	**4.429**	0.170	0.330	0.500	1		E300.0	2K19012	11/19/12 17:56
14808-79-8	Sulfate as SO4	**20.80**	0.330	1.00	2.00	1		E300.0	2K19012	11/19/12 17:56

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K19019-BLK1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
471-34-1	Alkalinity, Total (as CACO3)	ND	1.00	1.00	1.00	1	U	SM2320B	2K19019	11/19/12 09:52

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K19019-BS1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
471-34-1	Alkalinity, Total (as CACO3)	**1015**	5.00	5.00	5.00	1		SM2320B	2K19019	11/19/12 09:47

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K21012-BLK1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
16887-00-6	Chloride	ND	0.170	0.330	0.500	1	U	E300.0	2K21012	11/21/12 16:10
14808-79-8	Sulfate as SO4	ND	0.330	1.00	2.00	1	U	E300.0	2K21012	11/21/12 16:10

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K21012-BS1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
16887-00-6	Chloride	**4.599**	0.170	0.330	0.500	1		E300.0	2K21012	11/21/12 15:36
14808-79-8	Sulfate as SO4	**20.77**	0.330	1.00	2.00	1		E300.0	2K21012	11/21/12 15:36

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K21016-BLK1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
NA	Nitrate/Nitrite as N	ND	0.0500	0.150	0.300	1	U	E353.2	2K21016	11/21/12 14:38

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K21016-BS1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
NA	Nitrate/Nitrite as N	**14.54**	1.00	3.00	6.00	1		E353.2	2K21016	11/21/12 14:39

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K29003-BLK1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7664-41-7	Ammonia as N	ND	0.110	0.150	0.300	1	U	SM4500NH3BG	2K29003	11/29/12 15:01

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2K29003-BS1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7664-41-7	Ammonia as N	**4.983**	0.110	0.150	0.300	1		SM4500NH3BG	2K29003	11/29/12 14:54

ANALYSIS DATA SHEET

Blank

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Matrix: Water
% Solids:

SDG: kirtland_072
Project: Kirtland AFB 2011
Laboratory ID: 2L04002-BLK1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7664-41-7	Ammonia as N	ND	0.110	0.150	0.300	1	U	SM4500NH3BG	2L04002	12/04/12 11:02

ANALYSIS DATA SHEET

LCS

Laboratory: Empirical Laboratories, LLC

Client: Shaw E & I (I700)

Matrix: Water

% Solids:

SDG: kirtland_072

Project: Kirtland AFB 2011

Laboratory ID: 2L04002-BS1

CAS NO.	Analyte	Conc. (mg/L)	DL	LOD	LOQ	D.F.	Q	Method	Batch	Analyzed
7664-41-7	Ammonia as N	**5.149**	0.110	0.150	0.300	1		SM4500NH3BG	2L04002	12/04/12 11:03

INITIAL AND CONTINUING CALIBRATION CHECK

E300.0

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: WC-IC

SDG: kirtland_072
Project: Kirtland AFB 2011
Calibration: 2314001
Sequence: 2K31404

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2K31404-ICV1	Chloride	4.800	4.831	101	mg/L	+/- 10.00%
	Sulfate as SO4	24.00	23.52	98.0	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_072
Project: Kirtland AFB 2011
Calibration: 2314001
Sequence: 2K32510

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2K32510-CCV1	Chloride	25.00	25.25	101	mg/L	+/- 10.00%
	Sulfate as SO4	25.00	24.81	99.2	mg/L	+/- 10.00%
2K32510-CCV2	Chloride	25.00	25.18	101	mg/L	+/- 10.00%
	Sulfate as SO4	25.00	25.01	100	mg/L	+/- 10.00%
2K32510-CCV4	Chloride	25.00	25.31	101	mg/L	+/- 10.00%
	Sulfate as SO4	25.00	24.83	99.3	mg/L	+/- 10.00%
2K32510-CCV5	Chloride	25.00	25.41	102	mg/L	+/- 10.00%
	Sulfate as SO4	25.00	25.04	100	mg/L	+/- 10.00%

INITIAL AND CONTINUING CALIBRATION CHECK

E353.2

Laboratory: Empirical Laboratories, LLC
Client: Shaw E & I (I700)
Instrument ID: WC-Lachat

SDG: kirtland_072
Project: Kirtland AFB 2011
Calibration: 2326002
Sequence: 2K32615

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2K32615-ICV1	Nitrate/Nitrite as N	1.200	1.259	105	mg/L	+/- 10.00%
2K32615-CCV1	Nitrate/Nitrite as N	1.200	1.266	106	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_072
Project: Kirtland AFB 2011
Calibration: 2314001
Sequence: 2K33109

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2K33109-CCV1	Chloride	25.00	25.86	103	mg/L	+/- 10.00%
	Sulfate as SO4	25.00	25.63	103	mg/L	+/- 10.00%
2K33109-CCV2	Chloride	25.00	26.08	104	mg/L	+/- 10.00%
	Sulfate as SO4	25.00	25.48	102	mg/L	+/- 10.00%
2K33109-CCV3	Chloride	25.00	26.36	105	mg/L	+/- 10.00%
	Sulfate as SO4	25.00	25.66	103	mg/L	+/- 10.00%
2K33109-CCV4	Chloride	25.00	26.27	105	mg/L	+/- 10.00%
	Sulfate as SO4	25.00	25.67	103	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_072
Project: Kirtland AFB 2011
Calibration: 2334003
Sequence: 2K33408

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2K33408-ICV1	Ammonia as N	2.000	2.071	104	mg/L	+/- 10.00%
2K33408-CCV1	Ammonia as N	2.000	2.169	108	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_072
Project: Kirtland AFB 2011
Calibration: 2339001
Sequence: 2L33904

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
2L33904-ICV1	Ammonia as N	2.000	2.147	107	mg/L	+/- 10.00%
2L33904-CCV1	Ammonia as N	2.000	2.074	104	mg/L	+/- 10.00%

CRDL STANDARD

E300.0

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: WC-IC

Calibration: 2314001

Sequence: 2K32510

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2K32510-CRL1	Chloride	0.5000	0.4470	89.4	mg/L	75 - 125
2K32510-CRL3	Sulfate as SO4	2.500	2.313	92.5	mg/L	75 - 125

CRDL STANDARD

E300.0

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Instrument ID: WC-IC

Calibration: 2314001

Sequence: 2K33109

Lab Sample ID	Analyte	True	Found	%R	Units	QC Limts
2K33109-CRL1	Chloride	0.5000	0.5850	117	mg/L	75 - 125
2K33109-CRL3	Sulfate as SO4	2.500	2.215	88.6	mg/L	75 - 125

METHOD BLANKS
SM4500S2CF

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 2K19009

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K19009-BLK1	Sulfide	0.00	0.800	4.00	mg/L	U	SM4500S2CF

METHOD BLANKS
E300.0

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 2K19012

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K19012-BLK1	Chloride	0.00	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0

METHOD BLANKS
SM2320B

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 2K19019

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K19019-BLK1	Alkalinity, Total (as CACO3)	0.00	1.00	1.00	mg/L	U	SM2320B

METHOD BLANKS
E300.0

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 2K21012

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K21012-BLK1	Chloride	-0.0550	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0

METHOD BLANKS
E353.2

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 2K21016

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K21016-BLK1	Nitrate/Nitrite as N	-0.0384	0.0500	0.300	mg/L	U	E353.2

METHOD BLANKS
SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 2K29003

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K29003-BLK1	Ammonia as N	0.0102	0.110	0.300	mg/L	U	SM4500NH3BG

METHOD BLANKS
SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Batch: 2L04002

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2L04002-BLK1	Ammonia as N	-0.00452	0.110	0.300	mg/L	U	SM4500NH3BG

BLANKS
E300.0

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 2K31404
Calibration: 2314001
Instrument ID: WC-IC

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K31404-ICB1	Chloride	0.000	0.170	0.500	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_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 2K32510
Calibration: 2314001
Instrument ID: WC-IC

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K32510-CCB1	Chloride	0.00	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0
2K32510-CCB2	Chloride	0.00	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0
2K32510-CCB4	Chloride	-0.0460	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0
2K32510-CCB5	Chloride	-0.0560	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0

BLANKS
E353.2

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 2K32615
Calibration: 2326002
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K32615-ICB1	Nitrate/Nitrite as N	-0.03748	0.0500	0.300	mg/L	U	E353.2
2K32615-CCB1	Nitrate/Nitrite as N	-0.0450	0.0500	0.300	mg/L	U	E353.2

BLANKS
E300.0

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 2K33109
Calibration: 2314001
Instrument ID: WC-IC

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K33109-CCB1	Chloride	0.00	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0
2K33109-CCB2	Chloride	0.00	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0
2K33109-CCB3	Chloride	0.00	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0
2K33109-CCB4	Chloride	0.114	0.170	0.500	mg/L	U	E300.0
	Sulfate as SO4	0.00	0.330	2.00	mg/L	U	E300.0

BLANKS
SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 2K33408
Calibration: 2334003
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2K33408-ICB1	Ammonia as N	0.01647	0.110	0.300	mg/L	U	SM4500NH3BG
2K33408-CCB1	Ammonia as N	-0.0102	0.110	0.300	mg/L	U	SM4500NH3BG

BLANKS
SM4500NH3BG

Laboratory: Empirical Laboratories, LLC
SDG: kirtland_072
Client: Shaw E & I (I700)
Project: Kirtland AFB 2011
Sequence: 2L33904
Calibration: 2339001
Instrument ID: WC-Lachat

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
2L33904-ICB1	Ammonia as N	-0.004926	0.110	0.300	mg/L	U	SM4500NH3BG
2L33904-CCB1	Ammonia as N	0.0182	0.110	0.300	mg/L	U	SM4500NH3BG

LCS / LCS DUPLICATE RECOVERY

SM4500S2CF

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19009	Laboratory ID:	2K19009-BS1
Preparation:	pNone	Initial/Final:	3 mL / 250 mL

ANALYTE	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC.	QC LIMITS REC.
Sulfide	1233	1184	96.0	80 - 120

ANALYTE	SPIKE ADDED (mg/L)	LCSD CONCENTRATION (mg/L)	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Sulfide	1233	1134	91.9	4.32	20	80 - 120

LCS / LCS DUPLICATE RECOVERY

E300.0

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19012	Laboratory ID:	2K19012-BS1
Preparation:	pNone	Initial/Final:	5 mL / 5 mL

ANALYTE	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC.	QC LIMITS REC.
Chloride	4.200	4.429	105	90 - 110
Sulfate as SO4	21.00	20.80	99.0	90 - 110

LCS / LCS DUPLICATE RECOVERY

SM2320B

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K19019	Laboratory ID:	2K19019-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	1015	102	80 - 120

LCS / LCS DUPLICATE RECOVERY

E300.0

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K21012	Laboratory ID:	2K21012-BS1
Preparation:	pNone	Initial/Final:	5 mL / 5 mL

ANALYTE	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC.	QC LIMITS REC.
Chloride	4.200	4.599	110	90 - 110
Sulfate as SO4	21.00	20.77	98.9	90 - 110

LCS / LCS DUPLICATE RECOVERY

E353.2

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K21016	Laboratory ID:	2K21016-BS1
Preparation:	pNone	Initial/Final:	1 mL / 20 mL

ANALYTE	SPIKE ADDED (mg/L)	LCS CONCENTRATION (mg/L)	LCS % REC.	QC LIMITS REC.
Nitrate/Nitrite as N	14.10	14.54	103	90 - 110

LCS / LCS DUPLICATE RECOVERY

SM4500NH3BG

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2K29003	Laboratory ID:	2K29003-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	4.983	99.7	80 - 120

LCS / LCS DUPLICATE RECOVERY

SM4500NH3BG

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Matrix:	Water		
Batch:	2L04002	Laboratory ID:	2L04002-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	5.149	103	80 - 120

PREPARATION BATCH SUMMARY

SM4500S2CF

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K19009 Batch Matrix: Water Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01	11/19/12 07:59	295.00	200.00
GW0860	1211147-01	11/19/12 07:59	270.00	200.00
Blank	2K19009-BLK1	11/19/12 07:59	250.00	200.00
LCS	2K19009-BS1	11/19/12 07:59	3.00	250.00
LCS Dup	2K19009-BSD1	11/19/12 07:59	3.00	250.00

PREPARATION BATCH SUMMARY

E300.0

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K19012 Batch Matrix: Water Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01	11/19/12 08:05	5.00	5.00
Blank	2K19012-BLK1	11/19/12 08:05	5.00	5.00
LCS	2K19012-BS1	11/19/12 08:05	5.00	5.00

PREPARATION BATCH SUMMARY

SM2320B

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K19019 Batch Matrix: Water Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01	11/19/12 09:26	25.00	25.00
GW0860	1211147-01	11/19/12 09:26	25.00	25.00
Blank	2K19019-BLK1	11/19/12 09:26	25.00	25.00
LCS	2K19019-BS1	11/19/12 09:26	5.00	25.00

PREPARATION BATCH SUMMARY

E300.0

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K21012 Batch Matrix: Water Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0860	1211147-01	11/20/12 12:37	5.00	5.00
Blank	2K21012-BLK1	11/21/12 10:59	5.00	5.00
LCS	2K21012-BS1	11/21/12 10:59	5.00	5.00

PREPARATION BATCH SUMMARY

E353.2

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K21016 Batch Matrix: Water Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01	11/21/12 13:34	4.00	20.00
GW0860	1211147-01	11/21/12 13:34	4.00	20.00
Blank	2K21016-BLK1	11/21/12 13:34	20.00	20.00
LCS	2K21016-BS1	11/21/12 13:34	1.00	20.00

PREPARATION BATCH SUMMARY

SM4500NH3BG

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2K29003 Batch Matrix: Water Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0756	1211133-01	11/29/12 06:43	100.00	100.00
Blank	2K29003-BLK1	11/29/12 06:43	100.00	100.00
LCS	2K29003-BS1	11/29/12 06:43	100.00	100.00

PREPARATION BATCH SUMMARY

SM4500NH3BG

Laboratory: Empirical Laboratories, LLC SDG: kirtland_072

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

Batch: 2L04002 Batch Matrix: Water Preparation: pNone

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL./WEIGHT	FINAL VOL.
GW0860	1211147-01	12/04/12 06:10	100.00	100.00
Blank	2L04002-BLK1	12/04/12 06:10	100.00	100.00
LCS	2L04002-BS1	12/04/12 06:10	100.00	100.00

ANALYSIS SEQUENCE SUMMARY

SM2320B

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Sequence:

Instrument:

Calibration:

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
LCS	2K19019-BS1	111912-002	11/19/12 09:47
Blank	2K19019-BLK1	111912-003	11/19/12 09:52

ANALYSIS SEQUENCE SUMMARY

SM4500S2CF

Laboratory: Empirical Laboratories, LLC

SDG: kirtland_072

Client: Shaw E & I (I700)

Project: Kirtland AFB 2011

Sequence:

Instrument:

Calibration:

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
LCS	2K19009-BS1	111912-001	11/19/12 13:50
LCS Dup	2K19009-BSD1	111912-002	11/19/12 13:51
Blank	2K19009-BLK1	111912-003	11/19/12 13:52

ANALYSIS SEQUENCE SUMMARY

E300.0

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K31404	Instrument:	WC-IC
Calibration:	2314001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2K31404-CAL1	110612-003	11/06/12 08:58
Cal Standard	2K31404-CAL2	110612-004	11/06/12 09:15
Cal Standard	2K31404-CAL3	110612-005	11/06/12 09:32
Cal Standard	2K31404-CAL4	110612-006	11/06/12 09:50
Cal Standard	2K31404-CAL5	110612-007	11/06/12 10:07
Cal Standard	2K31404-CAL6	110612-008	11/06/12 10:25
Cal Standard	2K31404-CAL7	110612-009	11/06/12 10:42
Cal Standard	2K31404-CAL8	110612-010	11/06/12 10:59
Initial Cal Check	2K31404-ICV1	110612-011	11/06/12 11:17
Initial Cal Blank	2K31404-ICB1	110612-012	11/06/12 11:34

ANALYSIS SEQUENCE SUMMARY

E300.0

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32510	Instrument:	WC-IC
Calibration:	2314001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2K32510-CCV1	111912-003	11/19/12 16:29
Calibration Blank	2K32510-CCB1	111912-004	11/19/12 16:47
Instrument RL Check	2K32510-CRL1	111912-005	11/19/12 17:04
Instrument RL Check	2K32510-CRL3	111912-007	11/19/12 17:39
LCS	2K19012-BS1	111912-008	11/19/12 17:56
Blank	2K19012-BLK1	111912-010	11/19/12 18:31
Calibration Check	2K32510-CCV2	111912-022	11/19/12 22:00
Calibration Blank	2K32510-CCB2	111912-023	11/19/12 22:17
Calibration Check	2K32510-CCV4	111912-046	11/20/12 04:58
Calibration Blank	2K32510-CCB4	111912-047	11/20/12 05:15
GW0756	1211133-01	111912-054	11/20/12 07:17
Calibration Check	2K32510-CCV5	111912-057	11/20/12 08:09
Calibration Blank	2K32510-CCB5	111912-058	11/20/12 08:27

ANALYSIS SEQUENCE SUMMARY

E353.2

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K32615	Instrument:	WC-Lachat
Calibration:	2326002		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2K32615-CAL1	M_11-21-2012_02-20-25PM-0	11/21/12 14:22
Cal Standard	2K32615-CAL2	M_11-21-2012_02-20-25PM-0	11/21/12 14:23
Cal Standard	2K32615-CAL3	M_11-21-2012_02-20-25PM-0	11/21/12 14:25
Cal Standard	2K32615-CAL4	M_11-21-2012_02-20-25PM-0	11/21/12 14:26
Cal Standard	2K32615-CAL5	M_11-21-2012_02-20-25PM-0	11/21/12 14:28
Cal Standard	2K32615-CAL6	M_11-21-2012_02-20-25PM-0	11/21/12 14:29
Cal Standard	2K32615-CAL7	M_11-21-2012_02-20-25PM-0	11/21/12 14:31
Cal Standard	2K32615-CAL8	M_11-21-2012_02-20-25PM-0	11/21/12 14:32
Initial Cal Check	2K32615-ICV1	M_11-21-2012_02-20-25PM-0	11/21/12 14:34
Initial Cal Blank	2K32615-ICB1	M_11-21-2012_02-20-25PM-0	11/21/12 14:35
Blank	2K21016-BLK1	M_11-21-2012_02-20-25PM-0	11/21/12 14:38
LCS	2K21016-BS1	M_11-21-2012_02-20-25PM-0	11/21/12 14:39
GW0756	1211133-01	M_11-21-2012_02-20-25PM-0	11/21/12 14:50
GW0860	1211147-01	M_11-21-2012_02-20-25PM-0	11/21/12 14:51
Calibration Check	2K32615-CCV1	M_11-21-2012_02-20-25PM-0	11/21/12 14:52
Calibration Blank	2K32615-CCB1	M_11-21-2012_02-20-25PM-0	11/21/12 14:54

ANALYSIS SEQUENCE SUMMARY

E300.0

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K33109	Instrument:	WC-IC
Calibration:	2314001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Calibration Check	2K33109-CCV1	112112-003	11/21/12 13:34
Calibration Blank	2K33109-CCB1	112112-004	11/21/12 13:51
Instrument RL Check	2K33109-CRL1	112112-007	11/21/12 14:43
Instrument RL Check	2K33109-CRL3	112112-009	11/21/12 15:18
LCS	2K21012-BS1	112112-010	11/21/12 15:36
Blank	2K21012-BLK1	112112-012	11/21/12 16:10
Calibration Check	2K33109-CCV2	112112-022	11/21/12 19:05
Calibration Blank	2K33109-CCB2	112112-023	11/21/12 19:22
Calibration Check	2K33109-CCV3	112112-034	11/21/12 22:34
Calibration Blank	2K33109-CCB3	112112-035	11/21/12 22:51
GW0860	1211147-01	112112-038	11/21/12 23:44
Calibration Check	2K33109-CCV4	112112-045	11/22/12 01:46
Calibration Blank	2K33109-CCB4	112112-046	11/22/12 02:03

ANALYSIS SEQUENCE SUMMARY

SM4500NH3BG

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2K33408	Instrument:	WC-Lachat
Calibration:	2334003		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2K33408-CAL2	M_11-29-2012_02-41-37PM-0	11/29/12 14:43
Cal Standard	2K33408-CAL1	M_11-29-2012_02-41-37PM-0	11/29/12 14:43
Cal Standard	2K33408-CAL3	M_11-29-2012_02-41-37PM-0	11/29/12 14:44
Cal Standard	2K33408-CAL4	M_11-29-2012_02-41-37PM-0	11/29/12 14:45
Cal Standard	2K33408-CAL5	M_11-29-2012_02-41-37PM-0	11/29/12 14:46
Cal Standard	2K33408-CAL6	M_11-29-2012_02-41-37PM-0	11/29/12 14:47
Cal Standard	2K33408-CAL7	M_11-29-2012_02-41-37PM-0	11/29/12 14:48
Cal Standard	2K33408-CAL8	M_11-29-2012_02-41-37PM-0	11/29/12 14:49
Initial Cal Check	2K33408-ICV1	M_11-29-2012_02-41-37PM-0	11/29/12 14:50
Initial Cal Blank	2K33408-ICB1	M_11-29-2012_02-41-37PM-0	11/29/12 14:51
LCS	2K29003-BS1	M_11-29-2012_02-41-37PM-0	11/29/12 14:54
Blank	2K29003-BLK1	M_11-29-2012_02-41-37PM-0	11/29/12 15:01
GW0756	1211133-01	M_11-29-2012_02-41-37PM-0	11/29/12 15:03
Calibration Check	2K33408-CCV1	M_11-29-2012_02-41-37PM-0	11/29/12 15:09
Calibration Blank	2K33408-CCB1	M_11-29-2012_02-41-37PM-0	11/29/12 15:10

ANALYSIS SEQUENCE SUMMARY

SM4500NH3BG

Laboratory:	Empirical Laboratories, LLC	SDG:	kirtland_072
Client:	Shaw E & I (I700)	Project:	Kirtland AFB 2011
Sequence:	2L33904	Instrument:	WC-Lachat
Calibration:	2339001		

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
Cal Standard	2L33904-CAL1	M_12-4-2012_10-51-25AM-00	12/04/12 10:52
Cal Standard	2L33904-CAL2	M_12-4-2012_10-51-25AM-00	12/04/12 10:53
Cal Standard	2L33904-CAL3	M_12-4-2012_10-51-25AM-00	12/04/12 10:54
Cal Standard	2L33904-CAL4	M_12-4-2012_10-51-25AM-00	12/04/12 10:55
Cal Standard	2L33904-CAL5	M_12-4-2012_10-51-25AM-00	12/04/12 10:56
Cal Standard	2L33904-CAL6	M_12-4-2012_10-51-25AM-00	12/04/12 10:57
Cal Standard	2L33904-CAL7	M_12-4-2012_10-51-25AM-00	12/04/12 10:58
Cal Standard	2L33904-CAL8	M_12-4-2012_10-51-25AM-00	12/04/12 10:59
Initial Cal Check	2L33904-ICV1	M_12-4-2012_10-51-25AM-00	12/04/12 11:00
Initial Cal Blank	2L33904-ICB1	M_12-4-2012_10-51-25AM-01	12/04/12 11:01
Blank	2L04002-BLK1	M_12-4-2012_10-51-25AM-01	12/04/12 11:02
LCS	2L04002-BS1	M_12-4-2012_10-51-25AM-01	12/04/12 11:03
GW0860	1211147-01	M_12-4-2012_10-51-25AM-01	12/04/12 11:04
Calibration Check	2L33904-CCV1	M_12-4-2012_10-51-25AM-02	12/04/12 11:15
Calibration Blank	2L33904-CCB1	M_12-4-2012_10-51-25AM-02	12/04/12 11:16

PREPARATION BENCH SHEET

2K19009

Empirical Laboratories, LLC

Printed: 11/28/2012 9:00:02AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211132-01	M	WC_SULFIDE_4500S2CF	11/19/2012	270	200					NA	
1211132-03	M	WC_SULFIDE_4500S2CF	11/19/2012	295	200					NA	
1211132-05	M	WC_SULFIDE_4500S2CF	11/19/2012	295	200					NA	
1211133-01	M	WC_SULFIDE_4500S2CF	11/19/2012	295	200					NA	
1211146-01	M	WC_SULFIDE_4500S2CF	11/19/2012	295	200					NA	
1211147-01	M	WC_SULFIDE_4500S2CF	11/19/2012	270	200					NA	
1211160-04	H	WC_SULFIDE_4500S2CF	11/19/2012	295	200					NA	
1211160-08	H	WC_SULFIDE_4500S2CF	11/19/2012	270	200					NA	
2K19009-BLK1		QC	11/19/2012	250	200					NA	
2K19009-BS1		QC	11/19/2012	3	250	12K0658		3000		NA	
2K19009-BSD1		QC	11/19/2012	3	250	12K0658		3000		NA	

Reagents Used:

Standard	Description

PREPARATION BENCH SHEET

2K19012

Empirical Laboratories, LLC

Printed: 11/28/2012 9:00:48AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211085-01	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-02	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-03	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-04	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-05	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-06	C	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	MS/MSD.SO4 only
1211085-07	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-08	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-09	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-10	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-11	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-12	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-13	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-14	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211085-15	A	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	SO4 only
1211091-01	I	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	Cl, SO4
1211091-03	J	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	Cl, SO4
1211093-01	C	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211133-01	J	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	Cl, SO4
1211146-01	J	WC_ANIONS_300.0 (Regular)	11/19/2012	5	5					NA	Cl, SO4
2K19012-BLK1		QC	11/19/2012	5	5					NA	
2K19012-BS1		QC	11/19/2012	5	5	12K0289		5000		NA	

PREPARATION BENCH SHEET

2K19012

Empirical Laboratories, LLC

Printed: 11/28/2012 9:00:48AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
2K19012-DUP1		QC	11/19/2012	5	5		1211085-06			NA	
2K19012-DUP2		QC	11/19/2012	5	5		1211091-01			NA	
2K19012-MS1		QC	11/19/2012	22.5	25	12J0966	1211085-06	2500		NA	
2K19012-MS2		QC	11/19/2012	22.5	25	12J0966	1211091-01	2500		NA	
2K19012-MSD1		QC	11/19/2012	22.5	25	12J0966	1211085-06	2500		NA	
2K19012-MSD2		QC	11/19/2012	22.5	25	12J0966	1211091-01	2500		NA	

Reagents Used:

Standard	Description

PREPARATION BENCH SHEET

2K19019

Empirical Laboratories, LLC

Printed: 12/2/2012 10:13:21AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211087-04	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	NO MS/MSD.
1211088-01	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211088-02	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211088-03	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211088-04	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211088-05	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211088-06	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	MS/MSD.
1211097-01	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211097-02	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211097-03	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211097-04	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211097-05	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211097-06	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211097-07	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211097-08	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211133-01	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	carb/bicarb
1211147-01	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	carb/bicarb
1211160-04	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
1211160-08	-	WC_ALKALINITY_2320B	11/19/2012	25	25					NA	
2K19019-BLK1		QC	11/19/2012	25	25					NA	
2K19019-BS1		QC	11/19/2012	5	25	12K0073		5000		NA	
2K19019-MS1		QC	11/19/2012	22.5	25	12K0073	1211087-04	2500		NA	

PREPARATION BENCH SHEET

2K19019

Empirical Laboratories, LLC

Printed: 12/2/2012 10:13:21AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
2K19019-MS2		QC	11/19/2012	22.5	25	12K0073	1211088-06	2500		NA	
2K19019-MSD1		QC	11/19/2012	22.5	25	12K0073	1211087-04	2500		NA	
2K19019-MSD2		QC	11/19/2012	22.5	25	12K0073	1211088-06	2500		NA	

Reagents Used:

Standard	Description
12B0874	pH 4.0 Buffer
12E0017	Alkalinity Sulfuric Acid Solution 0.020 N
12J0158	pH 7.0 Buffer Yellow

PREPARATION BENCH SHEET

2K21012

Empirical Laboratories, LLC

Printed: 12/10/2012 11:44:04AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211141-02RE1	C	WC_ANIONS_300.0 (Regular)	11/21/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211141-03RE1	C	WC_ANIONS_300.0 (Regular)	11/21/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211141-05RE1	C	WC_ANIONS_300.0 (Regular)	11/21/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211141-06RE1	C	WC_ANIONS_300.0 (Regular)	11/21/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211141-07RE1	C	WC_ANIONS_300.0 (Regular)	11/21/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211141-09RE1	C	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211141-09RE1	C	WC_ANIONS_300.0 (Short Hol	11/20/2012	5	5					NA	Added for BatchQC in: 2K21012
1211147-01	J	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl, SO4
1211149-01	C	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211149-01	C	WC_ANIONS_300.0 (Short Hol	11/20/2012	5	5					NA	Added for BatchQC in: 2K21012
1211149-02	C	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211149-03	C	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211149-04	C	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211149-05	C	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211149-06	C	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211149-07	C	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl SO4/ version set up for SO4 only
1211180-04	B	WC_ANIONS_300.0 (Short Hol	11/20/2012	5	5					NA	see versions
1211186-04	G	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl, SO4
1211186-04	G	WC_ANIONS_300.0 (Short Hol	11/20/2012	5	5					NA	NO2, NO3
1211186-06	G	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl, SO4
1211186-06	G	WC_ANIONS_300.0 (Short Hol	11/20/2012	5	5					NA	NO2, NO3
1211186-08	G	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl, SO4

PREPARATION BENCH SHEET

2K21012

Empirical Laboratories, LLC

Printed: 12/10/2012 11:44:04AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211186-08	G	WC_ANIONS_300.0 (Short Hol	11/20/2012	5	5					NA	NO2, NO3
1211186-10	G	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl, SO4
1211186-10	G	WC_ANIONS_300.0 (Short Hol	11/20/2012	5	5					NA	NO2, NO3
1211186-12	G	WC_ANIONS_300.0 (Regular)	11/20/2012	5	5					NA	Cl, SO4
1211186-12	G	WC_ANIONS_300.0 (Short Hol	11/20/2012	5	5					NA	NO2, NO3
2K21012-BLK1		QC	11/21/2012	5	5					NA	
2K21012-BS1		QC	11/21/2012	5	5	12K0289		5000		NA	
2K21012-DUP1		QC	11/21/2012	5	5		1211141-09RE1			NA	
2K21012-DUP2		QC	11/21/2012	5	5		1211149-01			NA	
2K21012-MS1		QC	11/21/2012	22.5	25	12J0966	1211141-09RE1	5000		NA	
2K21012-MS2		QC	11/21/2012	22.5	25	12J0966	1211149-01	2500		NA	
2K21012-MSD1		QC	11/21/2012	22.5	25	12J0966	1211141-09RE1	5000		NA	
2K21012-MSD2		QC	11/21/2012	22.5	25	12J0966	1211149-01	2500		NA	

Reagents Used:

Standard	Description

From 2K20017 on 11/21/2012 by ELJ

PREPARATION BENCH SHEET

2K21016

Empirical Laboratories, LLC

Printed: 11/28/2012 9:03:47AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211091-01	J	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211091-03	K	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211093-01	E	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211093-02	E	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211093-03	E	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211093-04	E	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211093-05	E	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211093-06	E	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211133-01	K	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211147-01	K	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211166-01	K	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
1211175-01	A	WC_NO3NO2_N_353.2	11/21/2012	4	20					NA	
2K21016-BLK1		QC	11/21/2012	20	20					NA	
2K21016-BS1		QC	11/21/2012	1	20	12G0617		1000		NA	
2K21016-MS1		QC	11/21/2012	4	20	12J0190	1211166-01	500		NA	
2K21016-MSD1		QC	11/21/2012	4	20	12J0190	1211166-01	500		NA	

Reagents Used:

Standard	Description
12K0110	NO2/NO3 Buffer
12K0603	NO3/NO2 Carrier (Acid DI)
12K0617	NO2/NO3 Sulfanilimide Color Reagent

PREPARATION BENCH SHEET

2K29003

Empirical Laboratories, LLC

Printed: 12/5/2012 10:28:02AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211120-01	B	WC_AMMONIA_PHENATE_45	11/29/2012	100	100					NA	
1211120-02	B	WC_AMMONIA_PHENATE_45	11/29/2012	100	100					NA	
1211133-01	K	WC_AMMONIA_PHENATE_45	11/29/2012	100	100					NA	
1211168-01	A	WC_AMMONIA_PHENATE_45	11/29/2012	10	100					NA	
1211168-03	A	WC_AMMONIA_PHENATE_45	11/29/2012	100	100					NA	
1211168-04	A	WC_AMMONIA_PHENATE_45	11/29/2012	10	100					NA	
1211180-01	A	WC_AMMONIA_PHENATE_45	11/29/2012	10	100					NA	
1211180-03	A	WC_AMMONIA_PHENATE_45	11/29/2012	100	100					NA	
1211180-04	A	WC_AMMONIA_PHENATE_45	11/29/2012	10	100					NA	
1211182-01	A	WC_AMMONIA_PHENATE_45	11/29/2012	10	100					NA	
1211182-03	A	WC_AMMONIA_PHENATE_45	11/29/2012	100	100					NA	
1211195-01	B	WC_AMMONIA_PHENATE_45	11/29/2012	100	100					NA	
1211195-02	B	WC_AMMONIA_PHENATE_45	11/29/2012	100	100					NA	
2K29003-BLK1		QC	11/29/2012	100	100					NA	9.53
2K29003-BS1		QC	11/29/2012	100	100	12J0868		100000		NA	9.47
2K29003-DUP1		QC	11/29/2012	100	100		1211120-01			NA	9.45
2K29003-MS1		QC	11/29/2012	100	100	12A0397	1211120-02	500		NA	9.43

PREPARATION BENCH SHEET

2K29003

Empirical Laboratories, LLC

Printed: 12/5/2012 10:28:02AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments

Reagents Used:

Standard	Description
12B0874	pH 4.0 Buffer
12B0877	10.00 pH Buffer
12G0038	10 N NaOH
12G0053	1N H2SO4
12G0621	1N NaOH Solution
12I0495	Boric Acid
12J0158	pH 7.0 Buffer Yellow
12K0255	Borate Buffer
12K0543	NH3 Sodium Phenolate Reagent
12K0937	NH3 Buffer
12K0941	NH3 Sodium Hypochlorite Reagent

PREPARATION BENCH SHEET

2L04002

Empirical Laboratories, LLC

Printed: 12/10/2012 11:46:14AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments
1211147-01	K	WC_AMMONIA_PHENATE_45	12/04/2012	100	100					NA	
1211196-01	A	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	
1211196-03	A	WC_AMMONIA_PHENATE_45	12/04/2012	100	100					NA	
1211196-04	A	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	
1211208-01	A	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	
1211208-03	A	WC_AMMONIA_PHENATE_45	12/04/2012	100	100					NA	
1211218-01	B	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	
1211219-01	A	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	Sample will not preserve. pH 9.57, preserved by RB to pH of 0.85 Sample was OLR for NH3. Diluted a
1211219-01RE1	A	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	Sample will not preserve. pH 9.57, preserved by RB to pH of 0.85 Sample was OLR for NH3. Diluted a
1211225-01	A	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	
1211225-03	A	WC_AMMONIA_PHENATE_45	12/04/2012	100	100					NA	
1211234-01	A	WC_AMMONIA_PHENATE_45	12/04/2012	100	100					NA	
1211234-03	A	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	
1212010-01	A	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	
1212014-01	D	WC_AMMONIA_PHENATE_45	12/04/2012	10	100					NA	
2L04002-BLK1		QC	12/04/2012	100	100					NA	9.53
2L04002-BS1		QC	12/04/2012	100	100	12J0868		100000		NA	9.55
2L04002-DUP1		QC	12/04/2012	100	100		1211196-03			NA	9.57
2L04002-MS1		QC	12/04/2012	100	100	12A0397	1211208-03	500		NA	9.46

PREPARATION BENCH SHEET

2L04002

Empirical Laboratories, LLC

Printed: 12/10/2012 11:46:14AM

Instrument:

Matrix: Water **Prepared using: WC - pNone** **(No Surrogate)**

Lab Number	Cont ID	Analysis	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	ul Surrogate	PH	Extraction Comments

Reagents Used:

Standard	Description
12B0874	pH 4.0 Buffer
12B0877	10.00 pH Buffer
12G0038	10 N NaOH
12G0053	1N H2SO4
12G0621	1N NaOH Solution
12I0495	Boric Acid
12J0158	pH 7.0 Buffer Yellow
12K0255	Borate Buffer
12K0937	NH3 Buffer
12L0028	NH3 Sodium Phenolate Reagent
12L0029	NH3 Sodium Nitroprusside Reagent
12L0043	NH3 Sodium Hypochlorite Reagent