WSCF Laboratory
PO Box 650 S3-30
Richland, WA 99352

December 19, 2012

Scot Fitzgerald
CH2M-HILL PRC
PO Box 1600
Richland, WA 99352

Dear Scot Fitzgerald,

REVISED121448 - 699806 [Report ID: 121448]

Reference: (1) SOW, Mod 2, #36587, Release 3
(2) MSC-SD-CD-QAPP-017, current version, Waste Sampling & Characterization Facility Quality Assurance Program Plan

This letter contains the following information for sample delivery group WSCF121448

* Cover Sheet (Attachment 1)
* Narrative (Attachment 2)
* Analytical Results (Attachment 3)
* Sample Receipt Information (Attachment 4)

Very truly yours,

Electronically signed by Joseph Hale
For Lab Manager, Dan T. Smith
WSCF Analytical Lab
(509) 373-4804

Attachments 4
CC: w/Attachments

File/LB

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF Number Cross Reference

Group # WSCF121448
Data Deliverable Date 12/13/12

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
W13-011	B2MN43	121448001	WATER	11/12/12	11/12/12
W13-011	B2MN48	121448002	WATER	11/12/12	11/12/12
W13-011	B2MN76	121448003	WATER	11/12/12	11/12/12
X13-002	B2N2P2	121448004	WATER	11/12/12	11/12/12
W13-011	B2MN77	121448005	WATER	11/12/12	11/12/12
W13-011	B2MN49	121448006	WATER	11/12/12	11/12/12
W13-011	B2MN44	121448007	WATER	11/12/12	11/12/12
W13-011	B2MN75	121448008	WATER	11/12/12	11/12/12
W13-011	B2MN47	121448009	WATER	11/12/12	11/12/12
W13-011	B2MN42	121448010	WATER	11/12/12	11/12/12

ATTACHMENT 2

NARRATIVE

Consisting of 7 pages
Including cover page

Attachment 2
Narrative Rev1
WSCF121448

Revision 1: This case narrative replaces the prior in its entirety. 1,4-Dioxane was added per SDR13-064 to samples B2MN75, B2MN47, and B2MN42.

Introduction

Samples were received at the WSCF laboratory as referenced on the WSCF SAF Number Cross Reference table included in the final report. The samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Statement of Work (SOW), Master Contract 39818, Revision 3, "Laboratory Analytical Services to CHPRC Soil and Groundwater Remediation Project."*

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was not stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving. However, based on procedure LO-090-403 form "NOTICE OF IMPROPER SAMPLE SUBMITTAL" was not submitted and was not stamped "NOT ICED". No anomaly was noted during sample receipt.

- Sample Issue Resolution Form SDR13-012 regarding Hexachlorophene analysis is attached to this report.
- Sample Issue Resolution Form SDR13-030 regarding VOA analytical list is attached to this report.
- Sample Issue Resolution Form SDR13-064 adding 1,4-Dioxane by 8270 is attached to this report.

The following generic data qualifiers (i.e., B, C, D, J and U) may be applicable to this report, as appropriate.

- **B** – Sample results with a concentration greater than the MDL but less than the PQL are B flagged (applies to inorganic and wet chemical analyses), as appropriate.
- **C** – Analyte was detected in the blank and was evaluated. Affected sample results in the batch were C flagged (applies to inorganic and wet chemical analyses).
- **D** – Sample results are D flagged if dilution(s) were required, as appropriate.
- **J** – Sample results with a concentration greater than the MDL but less than the PQL are J flagged (applies to organic analyses), as appropriate.

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Narrative Rev1
WSCF121448

- **B (organic analyses)** – Analyte was detected in the blank and was evaluated. Affected sample results in the batch were B flagged.

- **U** – Analyzed for but not detected above limiting criteria. Relative Percent Difference (RPD) values associated with an analyte qualified with a "U" are not applicable.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report* for a complete listing of approved analytical methods.

Inorganic Comments

Anions – Hold time requirements for this analysis were met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Chloride, Nitrate and Sulfate – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.

- All other applicable QC controls are within the established limits.

Cyanide – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- All applicable QC controls are within the established limits.

ICP-AES Metals – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- Calcium and Sodium were detected in the Blank and evaluated.

- All other applicable QC controls are within the established limits.

ICP-MS Metals – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- All applicable QC controls are within the established limits.

Total Alkalinity – The hold time requirement for this analysis was met. A Duplicate and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- All applicable QC controls are within the established limits.

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Organic Comments

Semi-VOA – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- 3-3'Dichlorobenzidine did not meet the LCS / LCSD RPD acceptance limits. Sample results for this analyte were not flagged. The quality control report was flagged for RPD failure.
- All other applicable QC controls are within the established limits.

VOA – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. Analytical Note(s):

- All applicable QC controls are within the established limits.

We certify that this data package is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this data package has been authorized by the Analytical Laboratory Manager (or designee) and the Client Services representative as verified by electronic signatures shown on the WSCF ANALYTICAL RESULTS REPORT.

Attachment 2
Narrative Rev1
WSCF121448

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR13-012
REV NUM	1
DATE INITIATED	10/15/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	W13-010
OPERABLE UNIT(S)	
PROJECT(S)	RCRA13
SAMPLE EVENT TITLE(S)	RCRA13
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	18
SAMPLE NUMBERS	B2M171, B2M129, B2M135, B2M165, B2M123, B2M177, B2M9W6, B2M0Y3, B2M0Y9, B2M141, B2M147, B2M153, B2M159, B2M111, B2M194, B2M105, B2M117, B2M1B0, B2M183, B2MN99, B2MNB5, B2MN81, B2MN82, B2MN94, B2MN71, B2MN57, B2MN32, B2MN52, B2MN89, B2MNC0, B2MXL9, B2MN75, B2MN47, B2MN42, B2MXM8, B2MXN9, B2MXN8, B2MXM7, B2MN63, B2MN64
SAMPLE MATRIX	WATER
COLLECTION DATE	10/3/2012 - 11/30/2012
SDG NUM	WSCF121223, WSCF121226, WSCF121230, WSCF121232, WSCF121239, WSCF121241, WSCF121242, WSCF121274, WSCF121275, WSCF121284, WSCF121303, WSCF121398, WSCF121401, WSCF121402, WSCF121404, WSCF121439, WSCF121448, WSCF121450, WSCF121456

ISSUE BACKGROUND

CLASS	Laboratory Issue
TYPE	Cancellation of Analyses
DESCRIPTION	WSCF is not currently calibrated for Hexachlorophene by 8270. The compound is polar thus it sticks to the columns. Therefore, it is not able to be routinely measure in the extract. In order to be able to report the compound it would need to be derivatized. WSCF is currently not setup to derivatize Hexachlorophene.

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Report the data without Hexachlorophene and note issue in narrative.
JUSTIFICATION	ACCEPTED DISPOSITION: Accept proposed resolution and request that WSCF send a weekly update of any further SDGs that are affected to be added to this SIR. SUBMITTED BY: Heather Medley/WSCF DATE: 10/15/12 ACCEPTED BY: Karen Waters-Husted/CHPRC DATE: 10/16/12

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Attachment 2
Narrative Rev1
WSCF121448

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR13-030
REV NUM	0
DATE INITIATED	11/2/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	W13-011
OPERABLE UNIT(S)	NONE
PROJECT(S)	RCRA13
SAMPLE EVENT TITLE(S)	RCRA13
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	11
SAMPLE NUMBERS	B2MN32, B2MN52, B2MN57, B2MN71, B2MN81, B2MN82, B2MN89, B2MN94, B2MN99, B2MNB5, B2MNC0, B2MNX8, B2MNX9, B2MP16, B2MP30, B2MP41, B2MP22, B2MP23, B2MXL9, B2MN75, B2MN47, B2MN42, B2MXM8, B2MXN9, B2MXN8, B2MXM7, B2MN63, B2MN64, B2MP06, B2MP07
SAMPLE MATRIX	WATER
COLLECTION DATE	-
SDG NUM	WSCF121398, WSCF121401, WSCF121402, WSCF121404, WSCF121411, WSCF121419, WSCF121437, WSCF121439, WSCF121448, WSCF121450, WSCF121456

ISSUE BACKGROUND

CLASS	General Laboratory Direction
TYPE	Clarification of Direction
DESCRIPTION	The chain of custodies requested service 8260_VOA_GCMS_IX: COMMON. The SAF also requests some of the add-on for 8260_VOA_GCMS_IX: COMMON Add-ons

DISPOSITION

DESCRIPTION	PROPOSED DISPOSITION: Please confirm the service lists/analytes that need to be reported.
JUSTIFICATION	ACCEPTED DISPOSITION: Use the full list under the "COMMON" service list and add ons, as provided by Doris

SUBMITTED BY: Heather Medley/WSCF DATE: 11/2/12

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Attachment 2
Narrative Rev1
WSCF121448

SAMPLE ISSUE RESOLUTION

SIR NUM	SDR13-064
REV NUM	0
DATE INITIATED	12/12/2012

SAMPLE EVENT INFORMATION

SAF NUM(S)	W13-011, X13-012, W13-012, I13-007, W13-002, W13-010
OPERABLE UNIT(S)	NONE, 100-NR-2
PROJECT(S)	SURV13, CERC13, RCRA13
SAMPLE EVENT TITLE(S)	SURV13, CERC13, RCRA13
LABORATORY	Waste Sampling & Characterization

SAMPLING INFORMATION

NUMBER OF SAMPLES	63
SAMPLE NUMBERS	B2M0Y3, B2M0Y9, B2M105, B2M111, B2M117, B2M123, B2M129, B2M135, B2M141, B2M147, B2M153, B2M159, B2M165, B2M171, B2M177, B2M183, B2M194, B2M1B0, B2M9W6, B2MN27, B2MN32, B2MN37, B2MN42, B2MN47, B2MN52, B2MN57, B2MN64, B2MN71, B2MN75, B2MN81, B2MN82, B2MN89, B2MN94, B2MN99, B2MNB5, B2MNC0, B2MXD6, B2MXL9, B2MXM7, B2MXM8, B2MXN9, B2N3D3, B2N3D5, B2N905, B2N906, B2N910, B2N914, B2N915, B2N919, B2N923, B2N926, B2N931, B2N935, B2N938, B2N941, B2N945, B2N946, B2N950, B2N953, B2N957, B2N958, B2N962, B2N965
SAMPLE MATRIX	WATER
COLLECTION DATE	10/3/2012 - 12/6/2012
SDG NUM	WSCF121241, WSCF121242, WSCF121404, WSCF121448, WSCF121284, WSCF121439, WSCF121226, WSCF121555, WSCF121456, WSCF121275, WSCF121230, WSCF121223, WSCF121303, WSCF121402, WSCF121401, WSCF121398, WSCF121274, WSCF121232, WSCF121450, WSCF121239

ISSUE BACKGROUND

CLASS	Sample Management Issues
TYPE	Addition of Analyses
DESCRIPTION	Missed adding Appendix IX constituent 1,4-Dioxane to the new service list.
DISPOSITION DESCRIPTION	Proposed disposition: Request that WSCF report the missing data for 1,4-Dioxane for the listed samples. SMR will add necessary information to the affected data packages.
JUSTIFICATION	Accepted disposition: WSCF understands SMR missed having 1,4-dioxane reported for the Appendix IX 8270 service list. The data is available. WSCF has added 1,4-dioxane to the yellow highlighted samples above in addition to B2MXN8 (121450), and B2MN63 (121456). The samples not highlighted have not been received by WSCF as of 12/17/12. When they are received 1,4-dioxane will be added.

Submitted by: Karen Waters-Husted/CHPRC DATE: 12/12/12
Accepted by: Heather Medley/WSCF DATE: 12/17/12

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ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 110 pages
Including cover page

WSCF ANALYTICAL RESULTS REPORT

For

CH2M Hill Plateau Remediation

PO Box 1600
Richland, WA 99352

Attention: Scot Fitzgerald

Contract # MOA-FH-CHPRC-2008
Group # WSCF121448
Report Date December 19, 2012

Analytical: Electronically signed by Joseph Hale

Client Services: Electronically signed by Heather Medley

Solid samples results that have a 'Percent Solid' test are reported on a "dry weight basis", except results of TCLP, Percent Solid, and Total Activity. If no `Percent Solid' test is reported then the results are reported on an "as received" basis.

Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210216	210216	2	BLANK	84839	BLANK		Anions by Ion Chromatography (Water)
210216	210216	3	LCS	84840	LCS		Anions by Ion Chromatography (Water)
210216	210216	4	DUP	84841	B2MXP1(121449004DUP	121449004	Anions by Ion Chromatography (Water)
210216	210216	5	MS	84842	B2MXP1(121449004MS)	121449004	Anions by Ion Chromatography (Water)
210216	210216	6	MSD	84843	B2MXP1(121449004MSD	121449004	Anions by Ion Chromatography (Water)
210216	210216	8	SAMPLE	121448001	B2MN43		Anions by Ion Chromatography (Water)
210216	210216	9	SAMPLE	121448001	B2MN43		Anions by Ion Chromatography (Water)
210216	210216	10	SAMPLE	121448002	B2MN48		Anions by Ion Chromatography (Water)
210216	210216	11	SAMPLE	121448002	B2MN48		Anions by Ion Chromatography (Water)
210216	210216	12	SAMPLE	121448003	B2MN76		Anions by Ion Chromatography (Water)
210216	210216	13	SAMPLE	121448003	B2MN76		Anions by Ion Chromatography (Water)
210746	210922	5	BLANK	85447	BLANK		ICP-6010 - All possible metals
210746	210922	7	LCS	85449	LCS		ICP-6010 - All possible metals
210746	210922	9	MS	85450	B2MMW5(121446004MS)	121446004	ICP-6010 - All possible metals
210746	210922	10	MSD	85451	B2MMW5(121446004MS	121446004	ICP-6010 - All possible metals
210746	210922	19	SAMPLE	121448005	B2MN77		ICP-6010 - All possible metals
210746	210922	22	SAMPLE	121448006	B2MN49		ICP-6010 - All possible metals
210746	210922	23	SAMPLE	121448007	B2MN44		ICP-6010 - All possible metals
210746	210922	24	SAMPLE	121448008	B2MN75		ICP-6010 - All possible metals
210746	210922	25	SAMPLE	121448009	B2MN47		ICP-6010 - All possible metals
210746	210922	26	SAMPLE	121448010	B2MN42		ICP-6010 - All possible metals
210947	211021	4	BLANK	85772	BLANK		ICP-2008 MS All possible metal
210947	211021	5	LCS	85773	LCS		ICP-2008 MS All possible metal

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Batch QC List

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210947	211021	6	SAMPLE	121448005	B2MN77		ICP-2008 MS All possible metal
210947	211021	7	MS	85774	B2MN77(121448005MS)	121448005	ICP-2008 MS All possible metal
210947	211021	8	MSD	85775	B2MN77(121448005MSD	121448005	ICP-2008 MS All possible metal
211122	211289	4	BLANK	85827	BLANK		ICP-2008 MS All possible metal
211122	211289	5	LCS	85828	LCS		ICP-2008 MS All possible metal
211122	211289	6	SAMPLE	121448006	B2MN49		ICP-2008 MS All possible metal
211122	211289	7	MS	85829	B2MN49(121448006MS)	121448006	ICP-2008 MS All possible metal
211122	211289	8	MSD	85830	B2MN49(121448006MSD	121448006	ICP-2008 MS All possible metal
211122	211289	9	SAMPLE	121448007	B2MN44		ICP-2008 MS All possible metal
211122	211289	10	SAMPLE	121448008	B2MN75		ICP-2008 MS All possible metal
211122	211289	11	SAMPLE	121448009	B2MN47		ICP-2008 MS All possible metal
211122	211289	12	SAMPLE	121448010	B2MN42		ICP-2008 MS All possible metal

Batch QC List

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210318	210418	1	BLANK	85000	BLANK		SW-846 8270D Semivolatiles
210318	210418	2	LCS	85001	LCS		SW-846 8270D Semivolatiles
210318	210418	3	LCSD	85004	LCSD		SW-846 8270D Semivolatiles
210318	210418	4	MS	85002	B2MXL9(121439002MS)	121439002	SW-846 8270D Semivolatiles
210318	210418	5	MSD	85003	B2MXL9(121439002MSD	121439002	SW-846 8270D Semivolatiles
210318	210418	8	SAMPLE	121448008	B2MN75		SW-846 8270D Semivolatiles
210318	210418	10	SAMPLE	121448009	B2MN47		SW-846 8270D Semivolatiles
210318	210418	11	SAMPLE	121448010	B2MN42		SW-846 8270D Semivolatiles

Batch QC List

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210345	210346	1	BLANK	85126	BLANK		SW-846 8260B Volatiles
210345	210346	2	LCS	85127	LCS		SW-846 8260B Volatiles
210345	210346	3	MS	85128	B2MXM8(121450005MS)	121450005	SW-846 8260B Volatiles
210345	210346	4	MSD	85129	B2MXM8(121450005MSD	121450005	SW-846 8260B Volatiles
210345	210346	6	SAMPLE	121448004	B2N2P2		SW-846 8260B Volatiles
210345	210346	7	SAMPLE	121448008	B2MN75		SW-846 8260B Volatiles
210345	210346	9	SAMPLE	121448009	B2MN47		SW-846 8260B Volatiles
210345	210346	10	SAMPLE	121448010	B2MN42		SW-846 8260B Volatiles

Batch QC List

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121448

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210348	210349	1	BLANK	85130	BLANK		Cyanide (W) by Midi/Spectrophotometer
210348	210349	3	LCS	85132	LCS		Cyanide (W) by Midi/Spectrophotometer
210348	210349	4	MS	85133	B2MMC9(121393001MS)	121393001	Cyanide (W) by Midi/Spectrophotometer
210348	210349	5	MSD	85134	B2MMC9(121393001MS	121393001	Cyanide (W) by Midi/Spectrophotometer
210348	210349	24	SAMPLE	121448008	B2MN75		Cyanide (W) by Midi/Spectrophotometer
210348	210349	25	SAMPLE	121448009	B2MN47		Cyanide (W) by Midi/Spectrophotometer
210348	210349	26	SAMPLE	121448010	B2MN42		Cyanide (W) by Midi/Spectrophotometer
210653	210653	1	LCS	85361	LCS		Total Alkalinity as mg/L CaCO3 (Water)
210653	210653	8	SAMPLE	121448008	B2MN75		Total Alkalinity as mg/L CaCO3 (Water)
210653	210653	9	DUP	85362	B2MN75(121448008DUP)	121448008	Total Alkalinity as mg/L CaCO3 (Water)
210653	210653	10	SAMPLE	121448009	B2MN47		Total Alkalinity as mg/L CaCO3 (Water)
210653	210653	11	SAMPLE	121448010	B2MN42		Total Alkalinity as mg/L CaCO3 (Water)
210653	210653	13	LCS	85363	LCS		Total Alkalinity as mg/L CaCO3 (Water)
210653	210653	19	LCS	85364	LCS		Total Alkalinity as mg/L CaCO3 (Water)

Method Reference

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory, industry methods or HEIS methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-505-411	Elemental Analysis by ICP Atomic Emission Spectroscopy (ICP AES)		
	EPA SW-846	6010C	Inductively Coupled Plasma-Atomic Emmision Spectrometry
	HEIS	6010_METALS_ICP	Inductively Coupled Plasma-Atomic Emmision Spectrometry
LA-505-412	Determination of Trace Elements in Waters & Wastes by ICP Mass Spectrometry		
	EPA-600/R-94-111	200.8	Determination of Trace Elements in Waters and Waste by Inductively Coupled Plasma
	HEIS	200.8_METALS_ICPMS	Determination of Trace Elements in Waters and Waste by Inductively Coupled Plasma, Mass Spec.
LA-533-410	Anion Analysis by Ion Chromatography		
	EPA-600/R-94-111	300.0	Determination of Inorganic Anions by Ion Chromatography
	HEIS	300.0_ANIONS_IC	Determination of Inorganic Anions by Ion Chromatography

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

Method Reference

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory, industry methods or HEIS methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-523-456 Semivolatile Sample Analysis by SW-846 Method 8270D

EPA SW-846	8000B	Determinative Chromagraphic Separations
EPA SW-846	3510C	Separatory Funnel Liquid-Liquid Extraction
EPA SW-846	8270D	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
EPA SW-846	3545	Pressurized Fluid Extraction (PFE)
HEIS	8270_SVOA_GCMS	Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry(GC/MS)

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

Method Reference

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory, industry methods or HEIS methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-523-455 Volatile Sample Analysis by SW-846 Method 8260B

EPA SW-846	8000B	Determinative Chromographic Separations
EPA SW-846	8260B	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
HEIS	8260_VOA_GCMS	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

Method Reference

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121448

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory, industry methods or HEIS methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-531-411	Alkalinity		
	SM	2320	Alkalinity
	HEIS	2320_ALKALINITY	Alkalinity
LA-695-402	Determination of Cyanide by Mididistillation and		
	EPA	SW-846 Method 9014/9010	Determination of Cyanide by Midi-Distillation and Spectrophotometric Analysis
	SM	4500 CNE	Cyanide, Total
	HEIS	4500E_CN	Cyanide, Total

Note: A complete list of WSCF analytical procedures and reference regulatory or industry methods is available online at http://www7.rl.gov/rapidweb/AS-DOL/index.cfm

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448001
SAF# W13-011
Sample ID B2MN43

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/12/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	D	0.173		ug/mL	2	0.046	0.14	11/12/12
Chloride	16887-00-6	LA-533-410	D	23.7		ug/mL	2	0.12	0.81	11/12/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/12/12
Nitrate-N	NO3-N	LA-533-410	D	63.6		ug/mL	10	0.19	0.99	11/12/12
Sulfate	14808-79-8	LA-533-410	D	122		ug/mL	2	0.22	2.1	11/12/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448002
SAF# W13-011
Sample ID B2MN48

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/12/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	D	0.208		ug/mL	2	0.046	0.14	11/12/12
Chloride	16887-00-6	LA-533-410	D	21.1		ug/mL	2	0.12	0.81	11/12/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/12/12
Nitrate-N	NO3-N	LA-533-410	D	41.0		ug/mL	10	0.19	0.99	11/12/12
Sulfate	14808-79-8	LA-533-410	D	118		ug/mL	2	0.22	2.1	11/12/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448003
SAF# W13-011
Sample ID B2MN76

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/12/12
Anions by Ion Chromatography (Water)										
Fluoride	16984-48-8	LA-533-410	D	0.380		ug/mL	2	0.046	0.14	11/12/12
Chloride	16887-00-6	LA-533-410	D	36.5		ug/mL	2	0.12	0.81	11/12/12
Nitrite-N	NO2-N	LA-533-410	UD	<0.038		ug/mL	2	0.038	0.20	11/12/12
Nitrate-N	NO3-N	LA-533-410	D	189		ug/mL	20	0.38	2.0	11/12/12
Sulfate	14808-79-8	LA-533-410	D	197		ug/mL	20	2.2	21	11/12/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448005
SAF# W13-011
Sample ID B2MN77

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										**11/28/12**
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411		307		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		42500		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		12900		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		1.71E5		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		104		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	B	18.5		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	5.80		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		1.56E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		816		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448005
SAF# W13-011
Sample ID B2MN77

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										**11/29/12**
ICP-2008 MS All possible metal										
Antimony	7440-36-0	LA-505-412	U	<0.30		ug/L	1	0.30	3.0	11/30/12
Lead	7439-92-1	LA-505-412	B	0.210		ug/L	1	0.050	0.50	11/30/12
Mercury	7439-97-6	LA-505-412		0.508		ug/L	1	0.050	0.20	11/30/12
Thallium	7440-28-0	LA-505-412	U	<0.050		ug/L	1	0.050	0.50	11/30/12
Tin	7440-31-5	LA-505-412	B	0.374		ug/L	1	0.050	0.50	11/30/12
Arsenic	7440-38-2	LA-505-412		7.28		ug/L	1	0.20	2.0	11/30/12
Selenium	7782-49-2	LA-505-412		10.7		ug/L	1	1.0	10	11/30/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
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D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448006
SAF# W13-011
Sample ID B2MN49

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										**11/28/12**
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	B	44.8		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		26100		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		9780		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		34300		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		95.5		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	B	7.40		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	10.9		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		88300		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		424		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448006
SAF# W13-011
Sample ID B2MN49

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										**12/06/12**
ICP-2008 MS All possible metal										
Antimony	7440-36-0	LA-505-412	U	<0.30		ug/L	1	0.30	3.0	12/10/12
Lead	7439-92-1	LA-505-412	B	0.214		ug/L	1	0.050	0.50	12/10/12
Mercury	7439-97-6	LA-505-412	U	<0.050		ug/L	1	0.050	0.20	12/10/12
Thallium	7440-28-0	LA-505-412	U	<0.050		ug/L	1	0.050	0.50	12/10/12
Tin	7440-31-5	LA-505-412		0.663		ug/L	1	0.050	0.50	12/10/12
Arsenic	7440-38-2	LA-505-412		4.90		ug/L	1	0.20	2.0	12/10/12
Selenium	7782-49-2	LA-505-412	B	7.16		ug/L	1	1.0	10	12/10/12

MDL = Minimum Detection Limit
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TP Err = Total Propagated Error
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B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448007
SAF# W13-011
Sample ID B2MN44

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										**11/28/12**
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	B	68.8		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		31200		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		10200		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		37800		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		111		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	B	10.2		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	7.40		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		1.10E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		508		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448007
SAF# W13-011
Sample ID B2MN44

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										**12/06/12**
ICP-2008 MS All possible metal										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Lead	7439-92-1	LA-505-412	BD	0.410		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Thallium	7440-28-0	LA-505-412	BD	0.118		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	D	5.80		ug/L	2	0.40	4.0	12/10/12
Selenium	7782-49-2	LA-505-412	BD	8.25		ug/L	2	2.0	20	12/10/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										**11/28/12**
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411		329		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		43200		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	B	4.10		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		13000		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		1.77E5		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		106		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	B	21.0		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	8.10		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		1.59E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		838		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										**12/06/12**
ICP-2008 MS All possible metal										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Lead	7439-92-1	LA-505-412	BD	0.348		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	D	0.514		ug/L	2	0.10	0.40	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	BD	0.348		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	D	7.45		ug/L	2	0.40	4.0	12/10/12
Selenium	7782-49-2	LA-505-412	BD	11.7		ug/L	2	2.0	20	12/10/12

MDL = Minimum Detection Limit
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TP Err = Total Propagated Error
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B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)
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D - Analyte was reported at a secondary dilution factor.
E - Analyte is an estimate, see comment section.
N - MS and/or MSD recovery outside control limits.

U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										**11/28/12**
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411	B	49.6		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		25900		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		9910		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		34500		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		95.2		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	B	9.20		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	9.80		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		86700		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		420		ug/L	1	9.0	45	11/29/12

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X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
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o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										**12/06/12**
ICP-2008 MS All possible metal										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Lead	7439-92-1	LA-505-412	BD	0.164		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	D	1.07		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	D	5.33		ug/L	2	0.40	4.0	12/10/12
Selenium	7782-49-2	LA-505-412	BD	7.42		ug/L	2	2.0	20	12/10/12

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o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
ICPAES Prep (W)										**11/28/12**
ICP-6010 - All possible metals										
Iron	7439-89-6	LA-505-411		97.4		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		30400		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411	B	5.80		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		9850		ug/L	1	76	380	11/29/12
Silver	7440-22-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Sodium	7440-23-5	LA-505-411		36900		ug/L	1	10	50	11/29/12
Antimony	7440-36-0	LA-505-411	U	<36		ug/L	1	36	180	11/29/12
Barium	7440-39-3	LA-505-411		109		ug/L	1	4.0	20	11/29/12
Cadmium	7440-43-9	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Chromium	7440-47-3	LA-505-411	B	15.3		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	8.90		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411	U	<5.0		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		1.06E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		499		ug/L	1	9.0	45	11/29/12

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PQL is equivalent to Estimated Quantitation Limit (EQL)
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o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
ICPMS Prep (W)										**12/06/12**
ICP-2008 MS All possible metal										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	12/10/12
Lead	7439-92-1	LA-505-412	BD	0.370		ug/L	2	0.10	1.0	12/10/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	12/10/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	12/10/12
Arsenic	7440-38-2	LA-505-412	D	5.24		ug/L	2	0.40	4.0	12/10/12
Selenium	7782-49-2	LA-505-412	BD	7.54		ug/L	2	2.0	20	12/10/12

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PQL is equivalent to Estimated Quantitation Limit (EQL)
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8270 (W) CLE										**11/13/12**
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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D - Analyte was reported at a secondary dilution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
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PQL is equivalent to Estimated Quantitation Limit (EQL)
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Chloroethyl) ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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J - Analyte < lowest calibration but >= MDL.
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
n-Nitrosomethylethylamine	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/15/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/15/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Dinoseb(..dinitromethylphenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosopyrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/15/12
N-Nitrosodiphenylamin/Diphenyl	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methapyrilene	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8270 (W) CLE										**11/13/12**
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Chloroethyl) ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
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Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Sample ID B2MN47

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2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
n-Nitrosomethylethylamine	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/15/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/15/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Matrix WATER
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Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Dinoseb(..dinitromethylphenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosopyrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/15/12
N-Nitrosodiphenylamin/Diphenyl	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methapyrilene	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8270 (W) CLE										**11/13/12**
SW-846 8270D Semivolatiles										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
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Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Chloroethyl) ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Matrix WATER
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Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary dilution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < lowest calibration but >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - MS/MSD recovery outside control limits(GC/MS only).
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
n-Nitrosomethylethylamine	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/15/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/15/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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J - Analyte < lowest calibration but >= MDL.
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/15/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Dinoseb(..dinitromethylphenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/15/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
n-Nitrosopyrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/15/12
N-Nitrosodiphenylamin/Diphenyl	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12
Methapyrilene	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448004
SAF# X13-002
Sample ID B2N2P2

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8260B (W)										**11/15/12**
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroform	67-66-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene chloride	75-09-2	LA-523-455		21		ug/L	1	1	5	11/15/12

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X,Y or Z - See comment detail and/or narrative.
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448004
SAF# X13-002
Sample ID B2N2P2

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	11/15/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
1,4-Dichlorobenzene	106-46-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8260B (W)										**11/15/12**
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroform	67-66-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	11/15/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	11/15/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary dilution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - GC/MS or N - Non GC/MS - MS/MSD recovery outside control limits
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/15/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit
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TP Err = Total Propagated Error
DF = Dilution Factor
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B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary dilution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - GC/MS or N - Non GC/MS - MS/MSD recovery outside control limits
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
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DF = Dilution Factor
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8260B (W)										**11/15/12**
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
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J - Analyte < PQL (or EQL) >= MDL.
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroform	67-66-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	11/15/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/15/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for 8260B (W)										**11/15/12**
SW-846 8260B Volatiles										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit
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TP Err = Total Propagated Error
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REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Carbon tetrachloride	56-23-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
2-Hexanone	591-78-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetone	67-64-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroform	67-66-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromomethane	74-83-9	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloromethane	74-87-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroethane	75-00-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl chloride	75-01-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene chloride	75-09-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Carbon disulfide	75-15-0	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromoform	75-25-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Bromodichloromethane	75-27-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dichloropropane	78-87-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl ethyl ketone	78-93-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1-Butanol	71-36-3	LA-523-455	U	<100		ug/L	1	100	500	11/15/12
Tetrahydrofuran	109-99-9	LA-523-455	U	<2		ug/L	1	2	10	11/15/12

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TP Err = Total Propagated Error
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PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/15/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/15/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary dilution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - GC/MS or N - Non GC/MS - MS/MSD recovery outside control limits
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/15/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/15/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte was detected in both the BLANK and SAMPLE
D - Analyte was reported at a secondary dilution factor.
E - The calibration exceeds the calibration range (GC/MS).
J - Analyte < PQL (or EQL) >= MDL.
N - Presumed evidence based on MS library search(GC/MS only)

T - GC/MS or N - Non GC/MS - MS/MSD recovery outside control limits
U - Analyzed for but not detected above limiting criteria.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121448

Sample # 121448008
SAF# W13-011
Sample ID B2MN75

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										**11/13/12**
Cyanide (W) by Midi/Spectrophotometer										
Cyanide	57-12-5	LA-695-402	D	619		ug/L	5	20	100	11/13/12
										11/14/12
Total Alkalinity as mg/L CaCO3 (Water)										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		95		mg/L	1	1	10	11/14/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
N - MS and/or MSD sample recovery outside control limits.
U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121448

Sample # 121448009
SAF# W13-011
Sample ID B2MN47

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										**11/13/12**
Cyanide (W) by Midi/Spectrophotometer										
Cyanide	57-12-5	LA-695-402		66.2		ug/L	1	4.0	20	11/13/12
										11/14/12
Total Alkalinity as mg/L CaCO3 (Water)										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		110		mg/L	1	1	10	11/14/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
N - MS and/or MSD sample recovery outside control limits.
U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121448

Sample # 121448010
SAF# W13-011
Sample ID B2MN42

Matrix WATER
Sampled 11/12/12
Received 11/12/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
Preparation for Cyanide (W)										**11/13/12**
Cyanide (W) by Midi/Spectrophotometer										
Cyanide	57-12-5	LA-695-402		109		ug/L	1	4.0	20	11/13/12
										11/14/12
Total Alkalinity as mg/L CaCO3 (Water)										
Total Alkalinity as CaCO3	ALKALINITY	LA-531-411		100		mg/L	1	1	10	11/14/12

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor
+ - Indicates more than nine qualifier

B - Analyte < the RDL but >= the IDL/MDL.
C - Analyte was found in the Associated Blank. (Inorganic)
D - Analyte was reported at a secondary dilution factor.
N - MS and/or MSD sample recovery outside control limits.
U - Analyzed for but not detected above limiting criteria.

N - Spike Recovery is Outside Control Limits.
X,Y or Z - See comment detail and/or narrative.
PQL is equivalent to Estimated Quantitation Limit (EQL)
o - LCS recovery outside established laboratory acceptance limits.

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analytical Batch 210216 (QC Batch: 210216) **Test** Anions by Ion Chromatography (Water)
Associated Samples 121448001, 121448002, 121448003

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #84839**							
Fluoride	16984-48-8		<0.023	ug/mL					U	11/12/12
Chloride	16887-00-6		<0.058	ug/mL					U	11/12/12
Nitrite-N	NO2-N		<0.019	ug/mL					U	11/12/12
Nitrate-N	NO3-N		<0.019	ug/mL					U	11/12/12
Sulfate	14808-79-8		<0.11	ug/mL					U	11/12/12
LCS			**QC Sample #84840**							
Fluoride	16984-48-8		0.945	ug/mL	95.4	90 - 110				11/12/12
Chloride	16887-00-6		1.96	ug/mL	99	90 - 110				11/12/12
Nitrite-N	NO2-N		1.04	ug/mL	105.8	90 - 110				11/12/12
Nitrate-N	NO3-N		0.926	ug/mL	104.6	90 - 110				11/12/12
Sulfate	14808-79-8		4.03	ug/mL	102.9	90 - 110				11/12/12
DUP			**QC Sample #84841**							
			Original 121449004							
Fluoride	16984-48-8		<0.046	ug/mL			0.00	20	UD	11/12/12
Chloride	16887-00-6		21.2	ug/mL			1.70	20	D	11/12/12
Nitrite-N	NO2-N		<0.038	ug/mL			0.00	20	UD	11/12/12
Nitrate-N	NO3-N		8.16	ug/mL			0.90	20	D	11/12/12

* - QC result out of range n/a - Not Applicable

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Sulfate	14808-79-8		91.0	ug/mL			0.30	20	D	11/12/12
MS			**QC Sample #84842**							
			Original 121449004							
Fluoride	16984-48-8		0.983	ug/mL	98.3	80 - 120			D	11/12/12
Chloride	16887-00-6		2.28	ug/mL	114.2	80 - 120			DX	11/12/12
Nitrite-N	NO2-N		0.934	ug/mL	94.5	80 - 120			D	11/12/12
Nitrate-N	NO3-N		0.709	ug/mL	79.3	80 - 120			DX	11/12/12
Sulfate	14808-79-8		2.73	ug/mL	68.8	80 - 120			DX	11/12/12
MSD			**QC Sample #84843**							
			Original 121449004					**Paired**	**84842**	
Fluoride	16984-48-8		0.986	ug/mL	98.6	80 - 120	0.30	20	D	11/12/12
Chloride	16887-00-6		2.59	ug/mL	129.6	80 - 120	1.30	20	DX	11/12/12
Nitrite-N	NO2-N		0.939	ug/mL	95.1	80 - 120	0.60	20	D	11/12/12
Nitrate-N	NO3-N		0.829	ug/mL	92.7	80 - 120	1.30	20	DX	11/12/12
Sulfate	14808-79-8		3.66	ug/mL	92.4	80 - 120	1.00	20	DX	11/12/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analytical Batch 210346 (QC Batch: 210345) **Test** SW-846 8260B Volatiles
Associated Samples 121448004, 121448008, 121448009, 121448010

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #85126**						
1,1-Dichloroethene	75-35-4		<1	ug/L				U	11/15/12
Trichloroethene	79-01-6		<1	ug/L				U	11/15/12
Benzene	71-43-2		<1	ug/L				U	11/15/12
Toluene	108-88-3		<1	ug/L				U	11/15/12
Chlorobenzene	108-90-7		<1	ug/L				U	11/15/12
1,1-Dichloroethane	75-34-3		<1	ug/L				U	11/15/12
Ethylbenzene	100-41-4		<1	ug/L				U	11/15/12
Styrene	100-42-5		<1	ug/L				U	11/15/12
cis-1,3-Dichloropropene	10061-01-5		<1	ug/L				U	11/15/12
trans-1,3-Dichloropropene	10061-02-6		<1	ug/L				U	11/15/12
1,2-Dichloroethane	107-06-2		<1	ug/L				U	11/15/12
Methyl isobutyl ketone	108-10-1		<1	ug/L				U	11/15/12
Dibromochloromethane	124-48-1		<1	ug/L				U	11/15/12
Tetrachloroethene	127-18-4		<1	ug/L				U	11/15/12
Total Xylenes	1330-20-7		<1	ug/L				U	11/15/12

* - QC result out of range n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Total 1,2-Dichloroethene	540-59-0		<1	ug/L					U	11/15/12
Carbon tetrachloride	56-23-5		<1	ug/L					U	11/15/12
2-Hexanone	591-78-6		<1	ug/L					U	11/15/12
Acetone	67-64-1		<1	ug/L					U	11/15/12
Chloroform	67-66-3		<1	ug/L					U	11/15/12
1,1,1-Trichloroethane	71-55-6		<1	ug/L					U	11/15/12
Bromomethane	74-83-9		<1	ug/L					U	11/15/12
Chloromethane	74-87-3		<1	ug/L					U	11/15/12
Chloroethane	75-00-3		<1	ug/L					U	11/15/12
Vinyl chloride	75-01-4		<1	ug/L					U	11/15/12
Methylene chloride	75-09-2		<1	ug/L					U	11/15/12
Carbon disulfide	75-15-0		<1	ug/L					U	11/15/12
Bromoform	75-25-2		<1	ug/L					U	11/15/12
Bromodichloromethane	75-27-4		<1	ug/L					U	11/15/12
1,2-Dichloropropane	78-87-5		<1	ug/L					U	11/15/12
Methyl ethyl ketone	78-93-3		<1	ug/L					U	11/15/12
1,1,2-Trichloroethane	79-00-5		<1	ug/L					U	11/15/12
1,1,2,2-Tetrachloroethane	79-34-5		<1	ug/L					U	11/15/12
1-Butanol	71-36-3		<100	ug/L					U	11/15/12
Tetrahydrofuran	109-99-9		<2	ug/L					U	11/15/12
Trichlorofluoromethane	75-69-4		<1	ug/L					U	11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
trans-1,2-Dichloroethene	156-60-5		<1	ug/L					U	11/15/12
Acetonitrile	75-05-8		<2	ug/L					U	11/15/12
cis-1,2-Dichloroethene	156-59-2		<1	ug/L					U	11/15/12
Propionitrile	107-12-0		<2	ug/L					U	11/15/12
1,4-Dichlorobenzene	106-46-7		<1	ug/L					U	11/15/12
Isobutyl alcohol	78-83-1		<200	ug/L					U	11/15/12
Iodomethane	74-88-4		<1	ug/L					U	11/15/12
1,1,1,2-Tetrachloroethane	630-20-6		<1	ug/L					U	11/15/12
1,2,3-Trichloropropane	96-18-4		<1	ug/L					U	11/15/12
1,2-Dibromo-3-chloropropane	96-12-8		<1	ug/L					U	11/15/12
1,2-Dibromoethane	106-93-4		<1	ug/L					U	11/15/12
Acrolein	107-02-8		<1	ug/L					U	11/15/12
Acrylonitrile	107-13-1		<1	ug/L					U	11/15/12
Allyl chloride	107-05-1		<1	ug/L					U	11/15/12
Methylene bromide	74-95-3		<1	ug/L					U	11/15/12
Dichlorodifluoromethane	75-71-8		<1	ug/L					U	11/15/12
Ethyl methacrylate	97-63-2		<1	ug/L					U	11/15/12
Methacrylonitrile	126-98-7		<1	ug/L					U	11/15/12
Methyl methacrylate	80-62-6		<1	ug/L					U	11/15/12
Trans-1,4-dichloro-2-butene	110-57-6		<1	ug/L					U	11/15/12

* - QC result out of range

n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Vinyl acetate	108-05-4		<1	ug/L					U	11/15/12
Chloroprene	126-99-8		<1	ug/L					U	11/15/12
LCS			**QC Sample #85127**							
1,1-Dichloroethene	75-35-4		24	ug/L	96.1	75 - 125				11/15/12
Trichloroethene	79-01-6		28	ug/L	112.4	75 - 125				11/15/12
Benzene	71-43-2		29	ug/L	115.6	75 - 125				11/15/12
Toluene	108-88-3		29	ug/L	115.5	75 - 125				11/15/12
Chlorobenzene	108-90-7		28	ug/L	112.4	75 - 125				11/15/12
1,1-Dichloroethane	75-34-3		26	ug/L	104.6	75 - 125				11/15/12
Ethylbenzene	100-41-4		30	ug/L	121	75 - 125				11/15/12
Styrene	100-42-5		30	ug/L	121	75 - 125				11/15/12
trans-1,3-Dichloropropene	10061-02-6		29	ug/L	117.5	75 - 125				11/15/12
1,2-Dichloroethane	107-06-2		28	ug/L	110.4	75 - 125				11/15/12
1,1,1-Trichloroethane	71-55-6		30	ug/L	119	75 - 125				11/15/12
Dibromochloromethane	124-48-1		28	ug/L	112.2	75 - 125				11/15/12
Carbon disulfide	75-15-0		22	ug/L	88.4	75 - 125				11/15/12
Bromoform	75-25-2		30	ug/L	118.1	75 - 125				11/15/12
Bromodichloromethane	75-27-4		30	ug/L	120.8	75 - 125				11/15/12
1,2-Dichloropropane	78-87-5		28	ug/L	113	75 - 125				11/15/12
1,1,2-Trichloroethane	79-00-5		28	ug/L	112	75 - 125				11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,1,2,2-Tetrachloroethane	79-34-5		27	ug/L	107.7	75 - 125				11/15/12
trans-1,2-Dichloroethene	156-60-5		27	ug/L	107.2	75 - 125				11/15/12
cis-1,2-Dichloroethene	156-59-2		27	ug/L	109.4	75 - 125				11/15/12
MS			**QC Sample #85128**							
			Original 121450005							
1,1-Dichloroethene	75-35-4		23	ug/L	92.2	75 - 125				11/15/12
Trichloroethene	79-01-6		27	ug/L	108.9	75 - 125				11/15/12
Benzene	71-43-2		28	ug/L	112.6	75 - 125				11/15/12
Toluene	108-88-3		28	ug/L	113.6	75 - 125				11/15/12
Chlorobenzene	108-90-7		28	ug/L	111.5	75 - 125				11/15/12
1,1-Dichloroethane	75-34-3		26	ug/L	104.4	75 - 125				11/15/12
Ethylbenzene	100-41-4		30	ug/L	118.2	75 - 125				11/15/12
Styrene	100-42-5		30	ug/L	119.9	75 - 125				11/15/12
trans-1,3-Dichloropropene	10061-02-6		29	ug/L	117.1	75 - 125				11/15/12
1,2-Dichloroethane	107-06-2		27	ug/L	109.7	75 - 125				11/15/12
1,1,1-Trichloroethane	71-55-6		29	ug/L	115.3	75 - 125				11/15/12
Dibromochloromethane	124-48-1		28	ug/L	110.8	75 - 125				11/15/12
Carbon disulfide	75-15-0		21	ug/L	85.1	75 - 125				11/15/12
Bromoform	75-25-2		29	ug/L	117.1	75 - 125				11/15/12
Bromodichloromethane	75-27-4		30	ug/L	119	75 - 125				11/15/12
1,2-Dichloropropane	78-87-5		28	ug/L	113.4	75 - 125				11/15/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,1,2-Trichloroethane	79-00-5		28	ug/L	111.1	75 - 125				11/15/12
1,1,2,2-Tetrachloroethane	79-34-5		26	ug/L	104	75 - 125				11/15/12
trans-1,2-Dichloroethene	156-60-5		27	ug/L	106.1	75 - 125				11/15/12
cis-1,2-Dichloroethene	156-59-2		27	ug/L	106.9	75 - 125				11/15/12
MSD			**QC Sample #85129**							
			Original 121450005						**Paired 85128**	
1,1-Dichloroethene	75-35-4		25	ug/L	98.7	75 - 125	6.90	20		11/15/12
Trichloroethene	79-01-6		28	ug/L	112.8	75 - 125	3.50	20		11/15/12
Benzene	71-43-2		29	ug/L	115.7	75 - 125	2.70	20		11/15/12
Toluene	108-88-3		29	ug/L	116	75 - 125	2.10	20		11/15/12
Chlorobenzene	108-90-7		28	ug/L	113.4	75 - 125	1.70	20		11/15/12
1,1-Dichloroethane	75-34-3		27	ug/L	107.5	75 - 125	2.90	20		11/15/12
Ethylbenzene	100-41-4		30	ug/L	121.1	75 - 125	2.50	20		11/15/12
Styrene	100-42-5		30	ug/L	121	75 - 125	0.90	20		11/15/12
trans-1,3-Dichloropropene	10061-02-6		29	ug/L	117.6	75 - 125	0.40	20		11/15/12
1,2-Dichloroethane	107-06-2		27	ug/L	109.8	75 - 125	0.10	20		11/15/12
1,1,1-Trichloroethane	71-55-6		30	ug/L	118.1	75 - 125	2.40	20		11/15/12
Dibromochloromethane	124-48-1		28	ug/L	113.8	75 - 125	2.60	20		11/15/12
Carbon disulfide	75-15-0		22	ug/L	88.1	75 - 125	3.40	20		11/15/12
Bromoform	75-25-2		30	ug/L	118.8	75 - 125	1.40	20		11/15/12
Bromodichloromethane	75-27-4		30	ug/L	120.8	75 - 125	1.50	20		11/15/12

* - QC result out of range

n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,2-Dichloropropane	78-87-5		28	ug/L	113.7	75 - 125	0.20	20		11/15/12
1,1,2-Trichloroethane	79-00-5		28	ug/L	113	75 - 125	1.60	20		11/15/12
1,1,2,2-Tetrachloroethane	79-34-5		27	ug/L	106.2	75 - 125	2.10	20		11/15/12
trans-1,2-Dichloroethene	156-60-5		28	ug/L	110.9	75 - 125	4.40	20		11/15/12
cis-1,2-Dichloroethene	156-59-2		28	ug/L	110.8	75 - 125	3.60	20		11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Quality Control Report

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121448

Analytical Batch 210349 (QC Batch: 210348) **Test** Cyanide (W) by Midi/Spectrophotometer
Associated Samples 121448008, 121448009, 121448010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #85130**							
Cyanide	57-12-5		<4.0	ug/L					U	11/13/12
LCS			**QC Sample #85132**							
Cyanide	57-12-5		49.3	ug/L	98.7	85 - 115				11/13/12
MS			**QC Sample #85133**							
			Original 121393001							
Cyanide	57-12-5		37.9	ug/L	94.8	75 - 125				11/13/12
MSD			**QC Sample #85134**							
			Original 121393001						**Paired 85133**	
Cyanide	57-12-5		41.0	ug/L	102.4	75 - 125	7.70	20		11/13/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analytical Batch 210418 (QC Batch: 210318)
Associated Samples 121448008, 121448009, 121448010

Test SW-846 8270D Semivolatiles

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #85000**						
4-Nitrophenol	100-02-7		<1	ug/L				U	11/15/12
1,4-Dichlorobenzene	106-46-7		<1	ug/L				U	11/15/12
2,4-Dinitrotoluene	121-14-2		<1	ug/L				U	11/15/12
1,2,4-Trichlorobenzene	120-82-1		<1	ug/L				U	11/15/12
Phenol	108-95-2		<1	ug/L				U	11/15/12
Pyrene	129-00-0		<1	ug/L				U	11/15/12
4-Chloro-3-methylphenol	59-50-7		<1	ug/L				U	11/15/12
n-Nitroso-di-n-propylamine	621-64-7		<1	ug/L				U	11/15/12
Acenaphthene	83-32-9		<1	ug/L				U	11/15/12
Pentachlorophenol	87-86-5		<1	ug/L				U	11/15/12
2-Chlorophenol	95-57-8		<1	ug/L				U	11/15/12
4-Nitroaniline	100-01-6		<1	ug/L				U	11/15/12
4-Bromophenyl-phenylether	101-55-3		<1	ug/L				U	11/15/12
2,4-Dimethylphenol	105-67-9		<2	ug/L				U	11/15/12
4-Chloroaniline	106-47-8		<1	ug/L				U	11/15/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Bis(1-Chloro-2-propyl)ether	108-60-1		<1	ug/L					U	11/15/12
Bis-(2-Chloroethyl) ether	111-44-4		<1	ug/L					U	11/15/12
Bis-(2-Chloroethoxy)methane	111-91-1		<1	ug/L					U	11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7		<1	ug/L					U	11/15/12
Di-n-octylphthalate	117-84-0		<1	ug/L					U	11/15/12
Hexachlorobenzene	118-74-1		<1	ug/L					U	11/15/12
Anthracene	120-12-7		<1	ug/L					U	11/15/12
2,4-Dichlorophenol	120-83-2		<1	ug/L					U	11/15/12
Dimethylphthalate	131-11-3		<1	ug/L					U	11/15/12
Dibenzofuran	132-64-9		<1	ug/L					U	11/15/12
Benzo(g,h,i)perylene	191-24-2		<1	ug/L					U	11/15/12
Indeno(1,2,3-cd)pyrene	193-39-5		<1	ug/L					U	11/15/12
Benzo(b)fluoranthene	205-99-2		<1	ug/L					U	11/15/12
Fluoranthene	206-44-0		<1	ug/L					U	11/15/12
Benzo(k)fluoranthene	207-08-9		<1	ug/L					U	11/15/12
Acenaphthylene	208-96-8		<1	ug/L					U	11/15/12
Chrysene	218-01-9		<1	ug/L					U	11/15/12
Benzo(a)pyrene	50-32-8		<1	ug/L					U	11/15/12
2,4-Dinitrophenol	51-28-5		<1	ug/L					U	11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Dibenzo(a,h)anthracene	53-70-3		<1	ug/L					U	11/15/12
4,6-Dinitro-2-methylphenol	534-52-1		<1	ug/L					U	11/15/12
1,3-Dichlorobenzene	541-73-1		<1	ug/L					U	11/15/12
Benzo(a)anthracene	56-55-3		<1	ug/L					U	11/15/12
2,6-Dinitrotoluene	606-20-2		<1	ug/L					U	11/15/12
4-Chlorophenyl-phenylether	7005-72-3		<1	ug/L					U	11/15/12
Hexachlorocyclopentadiene	77-47-4		<1	ug/L					U	11/15/12
Isophorone	78-59-1		<1	ug/L					U	11/15/12
Diethyl phthalate	84-66-2		<1	ug/L					U	11/15/12
Di-n-butylphthalate	84-74-2		<1	ug/L					U	11/15/12
Phenanthrene	85-01-8		<1	ug/L					U	11/15/12
Butylbenzylphthalate	85-68-7		<1	ug/L					U	11/15/12
Fluorene	86-73-7		<1	ug/L					U	11/15/12
Carbazole	86-74-8		<1	ug/L					U	11/15/12
Hexachlorobutadiene	87-68-3		<1	ug/L					U	11/15/12
2-Nitroaniline	88-74-4		<1	ug/L					U	11/15/12
2-Nitrophenol	88-75-5		<1	ug/L					U	11/15/12
Naphthalene	91-20-3		<1	ug/L					U	11/15/12
2-Methylnaphthalene	91-57-6		<1	ug/L					U	11/15/12
2-Chloronaphthalene	91-58-7		<1	ug/L					U	11/15/12
3,3-Dichlorobenzidine	91-94-1		<1	ug/L					U	11/15/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
2-Methylphenol	95-48-7		<1	ug/L					U	11/15/12
1,2-Dichlorobenzene	95-50-1		<1	ug/L					U	11/15/12
2,4,5-Trichlorophenol	95-95-4		<1	ug/L					U	11/15/12
Nitrobenzene	98-95-3		<1	ug/L					U	11/15/12
3-Nitroaniline	99-09-2		<1	ug/L					U	11/15/12
3 & 4 Methylphenol, Total	65794-96-9		<1	ug/L					U	11/15/12
Hexachloroethane	67-72-1		<1	ug/L					U	11/15/12
2,4,6-Trichlorophenol	88-06-2		<1	ug/L					U	11/15/12
Benzyl alcohol	100-51-6		<1	ug/L					U	11/15/12
Tributyl phosphate	126-73-8		<1	ug/L					U	11/15/12
2-Naphthylamine	91-59-8		<2	ug/L					U	11/15/12
Pyridine	110-86-1		<1	ug/L					U	11/15/12
n-Nitrosopiperidine	100-75-4		<1	ug/L					U	11/15/12
n-Nitrosomethylethylamine	10595-95-6		<1	ug/L					U	11/15/12
p-Phenylenediamine	106-50-3		<1	ug/L					U	11/15/12
2-Picoline	109-06-8		<1	ug/L					U	11/15/12
3,3-Dimethylbenzidine	119-93-7		<4	ug/L					U	11/15/12
Isosafrole	120-58-1		<1	ug/L					U	11/15/12
Phentermine	122-09-8		<5	ug/L					U	11/15/12
1,4-Dioxane	123-91-1		<1	ug/L					U	11/15/12
1,4-Naphthoquinone	130-15-4		<1	ug/L					U	11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
1-Naphthylamine	134-32-7		<2	ug/L				U	11/15/12
Aramite	140-57-8		<1	ug/L				U	11/15/12
Kepone	143-50-0		<1	ug/L				U	11/15/12
Hexachloropropene	1888-71-7		<1	ug/L				U	11/15/12
Diallate	2303-16-4		<1	ug/L				U	11/15/12
Pronamide	23950-58-5		<1	ug/L				U	11/15/12
Isodrin	465-73-6		<1	ug/L				U	11/15/12
Chlorobenzilate	510-15-6		<1	ug/L				U	11/15/12
2-Acetylaminofluorene	53-96-3		<1	ug/L				U	11/15/12
n-Nitrosodiethylamine	55-18-5		<1	ug/L				U	11/15/12
3-Methylcholanthrene	56-49-5		<1	ug/L				U	11/15/12
4-Nitroquinoline-1-oxide	56-57-5		<1	ug/L				U	11/15/12
7,12-Dimethylbenz(a)anthracene	57-97-6		<1	ug/L				U	11/15/12
2,3,4,6-Tetrachlorophenol	58-90-2		<1	ug/L				U	11/15/12
n-Nitrosomorpholine	59-89-2		<1	ug/L				U	11/15/12
Pentachlorobenzene	608-93-5		<1	ug/L				U	11/15/12
Phenacetin	62-44-2		<1	ug/L				U	11/15/12
Ethyl methanesulfonate	62-50-0		<1	ug/L				U	11/15/12
Aniline	62-53-3		<1	ug/L				U	11/15/12
n-Nitrosodimethylamine	62-75-9		<1	ug/L				U	11/15/12

* - QC result out of range n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Methyl methanesulfonate	66-27-3		<1	ug/L					U	11/15/12
Pentachloroethane	76-01-7		<1	ug/L					U	11/15/12
Pentachloronitrobenzene	82-68-8		<2	ug/L					U	11/15/12
2,6-Dichlorophenol	87-65-0		<1	ug/L					U	11/15/12
Dinoseb(..dinitromethylphenol)	88-85-7		<1	ug/L					U	11/15/12
4-Aminobiphenyl	92-67-1		<2	ug/L					U	11/15/12
n-Nitrosodibutylamine	924-16-3		<1	ug/L					U	11/15/12
n-Nitrosopyrolidine	930-55-2		<1	ug/L					U	11/15/12
Safrole	94-59-7		<1	ug/L					U	11/15/12
o-Toluidine	95-53-4		<1	ug/L					U	11/15/12
1,2,4,5-Tetrachlorobenzene	95-94-3		<1	ug/L					U	11/15/12
Acetophenone	98-86-2		<1	ug/L					U	11/15/12
1,3,5-Trinitrobenzene	99-35-4		<1	ug/L					U	11/15/12
2-Methyl-5-nitroaniline	99-55-8		<1	ug/L					U	11/15/12
1,3-Dinitrobenzene	99-65-0		<1	ug/L					U	11/15/12
O,O,O-Triethylthiophosphate	126-68-1		<1	ug/L					U	11/15/12
Parathion	56-38-2		<1	ug/L					U	11/15/12
Dimethylaminoazobenzene	60-11-7		<1	ug/L					U	11/15/12
Dimethoate	60-51-5		<1	ug/L					U	11/15/12
Thionazin	297-97-2		<1	ug/L					U	11/15/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Methyl parathion	298-00-0		<1	ug/L					U	11/15/12
Phorate	298-02-2		<1	ug/L					U	11/15/12
Disulfoton	298-04-4		<1	ug/L					U	11/15/12
Sulfotep	3689-24-5		<1	ug/L					U	11/15/12
Famfur	52-85-7		<5	ug/L					U	11/15/12
N-Nitrosodiphenylamin/ Diphenyl	DPA+NNDPA		<1	ug/L					U	11/15/12
Methapyrilene	91-80-5		<1	ug/L					U	11/15/12
LCS			**QC Sample #85001**							
4-Nitrophenol	100-02-7		15	ug/L	50.9	5 - 88				11/15/12
1,2,4-Trichlorobenzene	120-82-1		21	ug/L	70.3	50 - 105				11/15/12
Phenol	108-95-2		14	ug/L	48.1	18 - 89				11/15/12
1,4-Dichlorobenzene	106-46-7		15	ug/L	73.2	47 - 115				11/15/12
2,4-Dinitrotoluene	121-14-2		24	ug/L	79.8	59 - 110				11/15/12
Pyrene	129-00-0		22	ug/L	73.6	64 - 116				11/15/12
4-Chloro-3-methylphenol	59-50-7		24	ug/L	81.5	62 - 109				11/15/12
n-Nitroso-di-n-propylamine	621-64-7		22	ug/L	74.9	61 - 110				11/15/12
Acenaphthene	83-32-9		23	ug/L	76.9	59 - 113				11/15/12
Pentachlorophenol	87-86-5		24	ug/L	81.5	17 - 125				11/15/12
2-Chlorophenol	95-57-8		22	ug/L	74.1	55 - 109				11/15/12
1,4-Dioxane	123-91-1		20	ug/L	67.1	42 - 99				11/15/12

* - QC result out of range n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
n-Nitrosodimethylamine	62-75-9		22	ug/L	71.7	40 - 103				11/15/12
Benzyl alcohol	100-51-6		24	ug/L	78.8	58 - 108				11/15/12
2-Methylphenol	95-48-7		22	ug/L	74.2	59 - 107				11/15/12
Hexachloroethane	67-72-1		19	ug/L	61.7	43 - 105				11/15/12
2-Nitrophenol	88-75-5		23	ug/L	75.1	48 - 113				11/15/12
2,4-Dimethylphenol	105-67-9		24	ug/L	79.8	58 - 113				11/15/12
2,4-Dichlorophenol	120-83-2		22	ug/L	74.3	52 - 110				11/15/12
Anthracene	120-12-7		24	ug/L	81.3	67 - 113				11/15/12
Naphthalene	91-20-3		21	ug/L	71.5	55 - 110				11/15/12
2-Nitroaniline	88-74-4		26	ug/L	85.2	57 - 114				11/15/12
Dibenzofuran	132-64-9		24	ug/L	79.3	61 - 113				11/15/12
Fluorene	86-73-7		24	ug/L	80	64 - 115				11/15/12
Tributyl phosphate	126-73-8		24	ug/L	79.8	65 - 108				11/15/12
Hexachlorobenzene	118-74-1		24	ug/L	78.4	60 - 117				11/15/12
Dimethoate	60-51-5		13	ug/L	87.8	64 - 108				11/15/12
Carbazole	86-74-8		28	ug/L	92.5	35 - 129				11/15/12
Di-n-butylphthalate	84-74-2		25	ug/L	82.2	70 - 116				11/15/12
3,3-Dichlorobenzidine	91-94-1		18	ug/L	59.6	16 - 117				11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7		24	ug/L	79.6	64 - 133				11/15/12
Di-n-octylphthalate	117-84-0		24	ug/L	79	57 - 134				11/15/12
Benzo(a)pyrene	50-32-8		25	ug/L	82.9	63 - 115				11/15/12
2-Picoline	109-06-8		24	ug/L	81	59 - 102				11/15/12

* - QC result out of range n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Bis(1-Chloro-2-propyl)ether	108-60-1		21	ug/L	71.2	58 - 111				11/15/12
4-Chloroaniline	106-47-8		27	ug/L	89.7	43 - 125				11/15/12
MS			**QC Sample #85002**							
			Original 121439002							
4-Nitrophenol	100-02-7		12	ug/L	42.2	15 - 57				11/15/12
1,2,4-Trichlorobenzene	120-82-1		21	ug/L	74	51 - 104				11/15/12
Phenol	108-95-2		11	ug/L	39.1	24 - 65				11/15/12
1,4-Dichlorobenzene	106-46-7		14	ug/L	75.9	52 - 114				11/15/12
2,4-Dinitrotoluene	121-14-2		22	ug/L	77.6	57 - 112				11/15/12
Pyrene	129-00-0		20	ug/L	71.5	58 - 119				11/15/12
4-Chloro-3-methylphenol	59-50-7		23	ug/L	81	56 - 115				11/15/12
n-Nitroso-di-n-propylamine	621-64-7		22	ug/L	76	60 - 112				11/15/12
Acenaphthene	83-32-9		22	ug/L	76	60 - 113				11/15/12
Pentachlorophenol	87-86-5		24	ug/L	84.4	32 - 127				11/15/12
2-Chlorophenol	95-57-8		21	ug/L	73.5	52 - 113				11/15/12
1,4-Dioxane	123-91-1		17	ug/L	61.4	39 - 93				11/15/12
n-Nitrosodimethylamine	62-75-9		19	ug/L	65.6	41 - 92				11/15/12
Benzyl alcohol	100-51-6		22	ug/L	76.6	56 - 107				11/15/12
2-Methylphenol	95-48-7		21	ug/L	73.1	46 - 114				11/15/12
Hexachloroethane	67-72-1		18	ug/L	64.9	48 - 102				11/15/12
2-Nitrophenol	88-75-5		21	ug/L	75.2	51 - 114				11/15/12

* - QC result out of range n/a - Not Applicable

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Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
2,4-Dimethylphenol	105-67-9		23	ug/L	79.8	46 - 124				11/15/12
2,4-Dichlorophenol	120-83-2		21	ug/L	74.7	50 - 114				11/15/12
Anthracene	120-12-7		23	ug/L	79.9	64 - 116				11/15/12
Naphthalene	91-20-3		21	ug/L	73	57 - 110				11/15/12
2-Nitroaniline	88-74-4		24	ug/L	84.4	60 - 114				11/15/12
Dibenzofuran	132-64-9		23	ug/L	79.8	61 - 114				11/15/12
Fluorene	86-73-7		23	ug/L	80.4	63 - 116				11/15/12
Tributyl phosphate	126-73-8		23	ug/L	79.6	59 - 113				11/15/12
Hexachlorobenzene	118-74-1		22	ug/L	76.8	58 - 119				11/15/12
Dimethoate	60-51-5		12	ug/L	86.3	53 - 119				11/15/12
Carbazole	86-74-8		26	ug/L	90.2	41 - 122				11/15/12
Di-n-butylphthalate	84-74-2		23	ug/L	81.4	67 - 118				11/15/12
3,3-Dichlorobenzidine	91-94-1		14	ug/L	49.9	16 - 121				11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7		23	ug/L	79.5	64 - 134				11/15/12
Di-n-octylphthalate	117-84-0		23	ug/L	82.7	40 - 143				11/15/12
Benzo(a)pyrene	50-32-8		23	ug/L	81.4	61 - 117				11/15/12
2-Picoline	109-06-8		23	ug/L	81.7	50 - 104				11/15/12
Bis(1-Chloro-2-propyl)ether	108-60-1		21	ug/L	73.1	58 - 112				11/15/12
4-Chloroaniline	106-47-8		26	ug/L	91	43 - 118				11/15/12
MSD			**QC Sample #85003**							
			Original 121439002						**Paired 85002**	
4-Nitrophenol	100-02-7		13	ug/L	45.9	15 - 57	8.50	20		11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,2,4-Trichlorobenzene	120-82-1		21	ug/L	75.6	51 - 104	2.10	20		11/15/12
Phenol	108-95-2		12	ug/L	41.1	24 - 65	5.00	20		11/15/12
1,4-Dichlorobenzene	106-46-7		15	ug/L	78.4	52 - 114	3.30	20		11/15/12
2,4-Dinitrotoluene	121-14-2		23	ug/L	79.8	57 - 112	2.80	20		11/15/12
Pyrene	129-00-0		21	ug/L	75.4	58 - 119	5.30	20		11/15/12
4-Chloro-3-methylphenol	59-50-7		23	ug/L	81.4	56 - 115	0.50	20		11/15/12
n-Nitroso-di-n-propylamine	621-64-7		22	ug/L	77.5	60 - 112	2.00	20		11/15/12
Acenaphthene	83-32-9		22	ug/L	79.3	60 - 113	4.20	20		11/15/12
Pentachlorophenol	87-86-5		25	ug/L	89.4	32 - 127	5.70	20		11/15/12
2-Chlorophenol	95-57-8		22	ug/L	76.5	52 - 113	4.00	20		11/15/12
1,4-Dioxane	123-91-1		19	ug/L	65.6	39 - 93	6.60	20		11/15/12
n-Nitrosodimethylamine	62-75-9		20	ug/L	69.5	41 - 92	5.70	20		11/15/12
Benzyl alcohol	100-51-6		22	ug/L	79.3	56 - 107	3.50	20		11/15/12
2-Methylphenol	95-48-7		21	ug/L	75.4	46 - 114	3.10	20		11/15/12
Hexachloroethane	67-72-1		19	ug/L	67.4	48 - 102	3.70	20		11/15/12
2-Nitrophenol	88-75-5		22	ug/L	76.2	51 - 114	1.30	20		11/15/12
2,4-Dimethylphenol	105-67-9		23	ug/L	81.2	46 - 124	1.80	20		11/15/12
2,4-Dichlorophenol	120-83-2		22	ug/L	76.8	50 - 114	2.70	20		11/15/12
Anthracene	120-12-7		24	ug/L	83.2	64 - 116	4.10	20		11/15/12
Naphthalene	91-20-3		21	ug/L	74.7	57 - 110	2.30	20		11/15/12
2-Nitroaniline	88-74-4		24	ug/L	85.8	60 - 114	1.70	20		11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Dibenzofuran	132-64-9		23	ug/L	82.3	61 - 114	3.10	20		11/15/12
Fluorene	86-73-7		23	ug/L	81.9	63 - 116	1.90	20		11/15/12
Tributyl phosphate	126-73-8		23	ug/L	80.2	59 - 113	0.80	20		11/15/12
Hexachlorobenzene	118-74-1		23	ug/L	82.2	58 - 119	6.80	20		11/15/12
Dimethoate	60-51-5		12	ug/L	86.6	53 - 119	0.30	20		11/15/12
Carbazole	86-74-8		27	ug/L	93.7	41 - 122	3.90	20		11/15/12
Di-n-butylphthalate	84-74-2		23	ug/L	82.8	67 - 118	1.70	20		11/15/12
3,3-Dichlorobenzidine	91-94-1		15	ug/L	53.4	16 - 121	6.80	20		11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7		23	ug/L	82.9	64 - 134	4.20	20		11/15/12
Di-n-octylphthalate	117-84-0		22	ug/L	77.9	40 - 143	6.00	20		11/15/12
Benzo(a)pyrene	50-32-8		24	ug/L	83.1	61 - 117	2.10	20		11/15/12
2-Picoline	109-06-8		24	ug/L	85.9	50 - 104	5.10	20		11/15/12
Bis(1-Chloro-2-propyl)ether	108-60-1		21	ug/L	74.5	58 - 112	1.90	20		11/15/12
4-Chloroaniline	106-47-8		25	ug/L	89.4	43 - 118	1.80	20		11/15/12
LCSD			**QC Sample #85004**						**Paired 85001**	
4-Nitrophenol	100-02-7		13	ug/L	43.2	5 - 88	16.40	20		11/15/12
1,2,4-Trichlorobenzene	120-82-1		20	ug/L	68.2	50 - 105	3.00	20		11/15/12
Phenol	108-95-2		14	ug/L	45.4	18 - 89	5.80	20		11/15/12
1,4-Dichlorobenzene	106-46-7		14	ug/L	69.2	47 - 115	5.60	20		11/15/12
2,4-Dinitrotoluene	121-14-2		22	ug/L	73.3	59 - 110	8.60	20		11/15/12
Pyrene	129-00-0		20	ug/L	67.7	64 - 116	8.40	20		11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
4-Chloro-3-methylphenol	59-50-7		23	ug/L	77.2	62 - 109	5.50	20		11/15/12
n-Nitroso-di-n-propylamine	621-64-7		22	ug/L	73.6	61 - 110	1.70	20		11/15/12
Acenaphthene	83-32-9		22	ug/L	72.6	59 - 113	5.80	20		11/15/12
Pentachlorophenol	87-86-5		22	ug/L	72.3	17 - 125	12.00	20		11/15/12
2-Chlorophenol	95-57-8		21	ug/L	69.7	55 - 109	6.10	20		11/15/12
1,4-Dioxane	123-91-1		18	ug/L	60.6	42 - 99	10.00	20		11/15/12
n-Nitrosodimethylamine	62-75-9		20	ug/L	67.4	40 - 103	6.10	20		11/15/12
Benzyl alcohol	100-51-6		23	ug/L	76.2	58 - 108	3.30	20		11/15/12
2-Methylphenol	95-48-7		22	ug/L	72.2	59 - 107	2.80	20		11/15/12
Hexachloroethane	67-72-1		18	ug/L	60	43 - 105	2.80	20		11/15/12
2-Nitrophenol	88-75-5		21	ug/L	70.1	48 - 113	6.90	20		11/15/12
2,4-Dimethylphenol	105-67-9		23	ug/L	77.5	58 - 113	2.90	20		11/15/12
2,4-Dichlorophenol	120-83-2		21	ug/L	70.1	52 - 110	5.80	20		11/15/12
Anthracene	120-12-7		23	ug/L	77.8	67 - 113	4.40	20		11/15/12
Naphthalene	91-20-3		21	ug/L	68.5	55 - 110	4.30	20		11/15/12
2-Nitroaniline	88-74-4		24	ug/L	79.4	57 - 114	7.00	20		11/15/12
Dibenzofuran	132-64-9		22	ug/L	74.9	61 - 113	5.80	20		11/15/12
Fluorene	86-73-7		23	ug/L	76	64 - 115	5.10	20		11/15/12
Tributyl phosphate	126-73-8		22	ug/L	74.9	65 - 108	6.40	20		11/15/12
Hexachlorobenzene	118-74-1		22	ug/L	74.4	60 - 117	5.20	20		11/15/12
Dimethoate	60-51-5		12	ug/L	80.9	64 - 108	8.20	20		11/15/12
Carbazole	86-74-8		26	ug/L	85.7	35 - 129	7.50	20		11/15/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit		RQ	Analyzed
Di-n-butylphthalate	84-74-2		23	ug/L	76.9	70 - 116	6.70	20			11/15/12
3,3-Dichlorobenzidine	91-94-1		13	ug/L	42.9	16 - 117	32.50	20	*	X	11/15/12
Bis-(2-Ethylhexyl)phthalate	117-81-7		23	ug/L	75.3	64 - 133	5.60	20			11/15/12
Di-n-octylphthalate	117-84-0		22	ug/L	74.4	57 - 134	6.10	20			11/15/12
Benzo(a)pyrene	50-32-8		23	ug/L	78.3	63 - 115	5.70	20			11/15/12
2-Picoline	109-06-8		22	ug/L	74.2	59 - 102	8.70	20			11/15/12
Bis(1-Chloro-2-propyl)ether	108-60-1		20	ug/L	67	58 - 111	6.10	20			11/15/12
4-Chloroaniline	106-47-8		25	ug/L	83.8	43 - 125	6.80	20			11/15/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Wet Chemistry

Group # WSCF121448

Analytical Batch 210653 (QC Batch: 210653) **Test** Total Alkalinity as mg/L CaCO3 (Water)
Associated Samples 121448008, 121448009, 121448010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS			**QC Sample #85361**							
Total Alkalinity as CaCO3	ALKALINITY		98	mg/L	97.6	80 - 120				11/14/12
DUP			**QC Sample #85362**							
			Original 121448008							
Total Alkalinity as CaCO3	ALKALINITY	95	95	mg/L			0.00	20		11/14/12
LCS			**QC Sample #85363**							
Total Alkalinity as CaCO3	ALKALINITY		97	mg/L	97.5	80 - 120				11/14/12
LCS			**QC Sample #85364**							
Total Alkalinity as CaCO3	ALKALINITY		98	mg/L	97.7	80 - 120				11/14/12

* - QC result out of range n/a - Not Applicable

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analytical Batch 210922 (QC Batch: 210746) **Test** ICP-6010 - All possible metals
Associated Samples 121448005, 121448006, 121448007, 121448008, 121448009, 121448010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #85447**							
Iron	7439-89-6		<19	ug/L					U	11/29/12
Magnesium	7439-95-4		<4.0	ug/L					U	11/29/12
Manganese	7439-96-5		<4.0	ug/L					U	11/29/12
Nickel	7440-02-0		<4.0	ug/L					U	11/29/12
Potassium	7440-09-7		<76	ug/L					U	11/29/12
Silver	7440-22-4		<4.0	ug/L					U	11/29/12
Sodium	7440-23-5		13.0	ug/L					B	11/29/12
Antimony	7440-36-0		<36	ug/L					U	11/29/12
Barium	7440-39-3		<4.0	ug/L					U	11/29/12
Cadmium	7440-43-9		<4.0	ug/L					U	11/29/12
Chromium	7440-47-3		<5.0	ug/L					U	11/29/12
Cobalt	7440-48-4		<4.0	ug/L					U	11/29/12
Copper	7440-50-8		<4.0	ug/L					U	11/29/12
Vanadium	7440-62-2		<5.0	ug/L					U	11/29/12
Zinc	7440-66-6		<5.0	ug/L					U	11/29/12
Calcium	7440-70-2		89.5	ug/L					B	11/29/12
Strontium	7440-24-6		<9.0	ug/L					U	11/29/12

* - QC result out of range n/a - Not Applicable

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Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Beryllium	7440-41-7		<4.0	ug/L					U	11/29/12
LCS			**QC Sample #85449**							
Iron	7439-89-6		1030	ug/L	103.2	80 - 120				11/29/12
Magnesium	7439-95-4		10500	ug/L	105.2	80 - 120				11/29/12
Manganese	7439-96-5		1040	ug/L	104.2	80 - 120				11/29/12
Nickel	7440-02-0		1020	ug/L	101.5	80 - 120				11/29/12
Potassium	7440-09-7		11000	ug/L	109.8	80 - 120				11/29/12
Silver	7440-22-4		1040	ug/L	104	80 - 120				11/29/12
Sodium	7440-23-5		10700	ug/L	107	80 - 120				11/29/12
Antimony	7440-36-0		1050	ug/L	105.2	80 - 120				11/29/12
Barium	7440-39-3		1060	ug/L	106.3	80 - 120				11/29/12
Cadmium	7440-43-9		1030	ug/L	102.9	80 - 120				11/29/12
Chromium	7440-47-3		1040	ug/L	103.7	80 - 120				11/29/12
Cobalt	7440-48-4		1010	ug/L	101.3	80 - 120				11/29/12
Copper	7440-50-8		1050	ug/L	105.1	80 - 120				11/29/12
Vanadium	7440-62-2		1020	ug/L	102.5	80 - 120				11/29/12
Zinc	7440-66-6		1050	ug/L	105.1	80 - 120				11/29/12
Calcium	7440-70-2		20900	ug/L	104.4	80 - 120				11/29/12
Strontium	7440-24-6		1010	ug/L	100.9	80 - 120				11/29/12
Beryllium	7440-41-7		1040	ug/L	104.2	80 - 120				11/29/12
MS			**QC Sample #85450**							
			Original 121446004							
Iron	7439-89-6		1020	ug/L	102	75 - 125				11/29/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Magnesium	7439-95-4		9890	ug/L	98.9	75 - 125				11/29/12
Manganese	7439-96-5		1020	ug/L	101.8	75 - 125				11/29/12
Nickel	7440-02-0		982	ug/L	98.2	75 - 125				11/29/12
Potassium	7440-09-7		10700	ug/L	106.6	75 - 125				11/29/12
Silver	7440-22-4		1020	ug/L	102.1	75 - 125				11/29/12
Sodium	7440-23-5		10200	ug/L	102.5	75 - 125				11/29/12
Antimony	7440-36-0		1040	ug/L	103.7	75 - 125				11/29/12
Barium	7440-39-3		1040	ug/L	103.6	75 - 125				11/29/12
Cadmium	7440-43-9		1010	ug/L	100.6	75 - 125				11/29/12
Chromium	7440-47-3		1010	ug/L	100.8	75 - 125				11/29/12
Cobalt	7440-48-4		978	ug/L	97.8	75 - 125				11/29/12
Copper	7440-50-8		1030	ug/L	103.3	75 - 125				11/29/12
Vanadium	7440-62-2		1010	ug/L	100.9	75 - 125				11/29/12
Zinc	7440-66-6		1030	ug/L	103.4	75 - 125				11/29/12
Calcium	7440-70-2		19400	ug/L	97.2	75 - 125				11/29/12
Strontium	7440-24-6		971	ug/L	97.1	75 - 125				11/29/12
Beryllium	7440-41-7		1020	ug/L	102.3	75 - 125				11/29/12
MSD			**QC Sample #85451**							
			Original 121446004						**Paired 85450**	
Iron	7439-89-6		1010	ug/L	101.2	75 - 125	0.80	20		11/29/12
Magnesium	7439-95-4		9940	ug/L	99.4	75 - 125	0.20	20		11/29/12
Manganese	7439-96-5		1010	ug/L	101.2	75 - 125	0.60	20		11/29/12
Nickel	7440-02-0		978	ug/L	97.8	75 - 125	0.50	20		11/29/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Potassium	7440-09-7		10700	ug/L	106.7	75 - 125	0.10	20		11/29/12
Silver	7440-22-4		1020	ug/L	101.6	75 - 125	0.50	20		11/29/12
Sodium	7440-23-5		10200	ug/L	102.5	75 - 125	0.00	20		11/29/12
Antimony	7440-36-0		1030	ug/L	102.9	75 - 125	0.80	20		11/29/12
Barium	7440-39-3		1030	ug/L	103	75 - 125	0.50	20		11/29/12
Cadmium	7440-43-9		1000	ug/L	100.3	75 - 125	0.30	20		11/29/12
Chromium	7440-47-3		1000	ug/L	100.2	75 - 125	0.60	20		11/29/12
Cobalt	7440-48-4		976	ug/L	97.6	75 - 125	0.20	20		11/29/12
Copper	7440-50-8		1020	ug/L	102.3	75 - 125	1.00	20		11/29/12
Vanadium	7440-62-2		1000	ug/L	100.2	75 - 125	0.70	20		11/29/12
Zinc	7440-66-6		1020	ug/L	102.5	75 - 125	0.90	20		11/29/12
Calcium	7440-70-2		19800	ug/L	99.2	75 - 125	0.70	20		11/29/12
Strontium	7440-24-6		963	ug/L	96.3	75 - 125	0.70	20		11/29/12
Beryllium	7440-41-7		1020	ug/L	101.8	75 - 125	0.50	20		11/29/12

* - QC result out of range n/a - Not Applicable

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Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analytical Batch 211021 (QC Batch: 210947) **Test** ICP-2008 MS All possible metal
Associated Samples 121448005

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #85772**							
Antimony	7440-36-0		<0.30	ug/L					U	11/30/12
Lead	7439-92-1		<0.050	ug/L					U	11/30/12
Mercury	7439-97-6		<0.050	ug/L					U	11/30/12
Thallium	7440-28-0		<0.050	ug/L					U	11/30/12
Tin	7440-31-5		<0.050	ug/L					U	11/30/12
Arsenic	7440-38-2		<0.20	ug/L					U	11/30/12
Selenium	7782-49-2		<1.0	ug/L					U	11/30/12
LCS			**QC Sample #85773**							
Antimony	7440-36-0		40.8	ug/L	102	85 - 115				11/30/12
Lead	7439-92-1		42.3	ug/L	105.6	85 - 115				11/30/12
Mercury	7439-97-6		1.92	ug/L	95.8	85 - 115				11/30/12
Thallium	7440-28-0		41.4	ug/L	103.5	85 - 115				11/30/12
Tin	7440-31-5		41.0	ug/L	102.5	85 - 115				11/30/12
Arsenic	7440-38-2		39.5	ug/L	98.7	85 - 115				11/30/12
Selenium	7782-49-2		37.3	ug/L	93.2	85 - 115				11/30/12
MS			**QC Sample #85774**							
			Original 121448005							

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	<0.30	41.7	ug/L	104.2	70 - 130				11/30/12
Lead	7439-92-1	0.210	44.2	ug/L	110.5	70 - 130				11/30/12
Mercury	7439-97-6	0.508	2.17	ug/L	108.6	70 - 130				11/30/12
Thallium	7440-28-0	<0.050	43.1	ug/L	107.8	70 - 130				11/30/12
Tin	7440-31-5	0.374	41.3	ug/L	103.3	70 - 130				11/30/12
Arsenic	7440-38-2	7.28	40.6	ug/L	101.6	70 - 130				11/30/12
Selenium	7782-49-2	10.7	37.7	ug/L	94.4	70 - 130				11/30/12
MSD			**QC Sample #85775**							
			Original 121448005					**Paired**	**85774**	
Antimony	7440-36-0	<0.30	41.7	ug/L	104.2	70 - 130	0.10	20		11/30/12
Lead	7439-92-1	0.210	44.1	ug/L	110.2	70 - 130	0.30	20		11/30/12
Mercury	7439-97-6	0.508	2.18	ug/L	108.9	70 - 130	0.20	20		11/30/12
Thallium	7440-28-0	<0.050	43.4	ug/L	108.5	70 - 130	0.70	20		11/30/12
Tin	7440-31-5	0.374	41.7	ug/L	104.1	70 - 130	0.80	20		11/30/12
Arsenic	7440-38-2	7.28	40.5	ug/L	101.3	70 - 130	0.30	20		11/30/12
Selenium	7782-49-2	10.7	36.5	ug/L	91.2	70 - 130	2.60	20		11/30/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analytical Batch 211289 (QC Batch: 211122) **Test** ICP-2008 MS All possible metal
Associated Samples 121448006, 121448007, 121448008, 121448009, 121448010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
BLANK			**QC Sample #85827**							
Antimony	7440-36-0		<0.30	ug/L					U	12/10/12
Lead	7439-92-1		<0.050	ug/L					U	12/10/12
Mercury	7439-97-6		<0.050	ug/L					U	12/10/12
Thallium	7440-28-0		<0.050	ug/L					U	12/10/12
Tin	7440-31-5		<0.050	ug/L					U	12/10/12
Arsenic	7440-38-2		<0.20	ug/L					U	12/10/12
Selenium	7782-49-2		<1.0	ug/L					U	12/10/12
LCS			**QC Sample #85828**							
Antimony	7440-36-0		41.1	ug/L	102.8	85 - 115				12/10/12
Lead	7439-92-1		42.5	ug/L	106.4	85 - 115				12/10/12
Mercury	7439-97-6		1.90	ug/L	94.8	85 - 115				12/10/12
Thallium	7440-28-0		42.0	ug/L	105	85 - 115				12/10/12
Tin	7440-31-5		41.7	ug/L	104.2	85 - 115				12/10/12
Arsenic	7440-38-2		41.9	ug/L	104.7	85 - 115				12/10/12
Selenium	7782-49-2		39.5	ug/L	98.7	85 - 115				12/10/12
MS			**QC Sample #85829**							
			Original 121448006							

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Quality Control Report

Attention Scot Fitzgerald
Department Inorganic

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	<0.30	41.5	ug/L	103.6	70 - 130				12/10/12
Lead	7439-92-1	0.214	41.6	ug/L	103.9	70 - 130				12/10/12
Mercury	7439-97-6	<0.050	2.04	ug/L	102.2	70 - 130				12/10/12
Thallium	7440-28-0	<0.050	41.4	ug/L	103.6	70 - 130				12/10/12
Tin	7440-31-5	0.663	41.3	ug/L	103.2	70 - 130				12/10/12
Arsenic	7440-38-2	4.90	41.4	ug/L	103.4	70 - 130				12/10/12
Selenium	7782-49-2	7.16	39.3	ug/L	98.2	70 - 130				12/10/12
MSD			**QC Sample #85830**							
			Original 121448006					**Paired**	**85829**	
Antimony	7440-36-0	<0.30	40.4	ug/L	100.9	70 - 130	2.70	20		12/10/12
Lead	7439-92-1	0.214	40.3	ug/L	100.8	70 - 130	3.00	20		12/10/12
Mercury	7439-97-6	<0.050	2.03	ug/L	101.3	70 - 130	0.80	20		12/10/12
Thallium	7440-28-0	<0.050	40.5	ug/L	101.2	70 - 130	2.30	20		12/10/12
Tin	7440-31-5	0.663	40.0	ug/L	100.1	70 - 130	3.00	20		12/10/12
Arsenic	7440-38-2	4.90	39.8	ug/L	99.6	70 - 130	3.30	20		12/10/12
Selenium	7782-49-2	7.16	37.7	ug/L	94.2	70 - 130	3.50	20		12/10/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analytical Batch 210346 (QC Batch: 210345) **Test** SW-846 8260B Volatiles
Associated Samples 121448004, 121448008, 121448009, 121448010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #121448004**							
1,2-Dichloroethane-d4	17060-07-0				97.5	75 - 125				11/15/12
Toluene-d8	2037-26-5				94.8	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				99.6	75 - 125				11/15/12
SAMPLE			**Sample #121448008**							
1,2-Dichloroethane-d4	17060-07-0				101.5	75 - 125				11/15/12
Toluene-d8	2037-26-5				93.2	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				99.4	75 - 125				11/15/12
SAMPLE			**Sample #121448009**							
1,2-Dichloroethane-d4	17060-07-0				101.7	75 - 125				11/15/12
Toluene-d8	2037-26-5				93.2	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				100.3	75 - 125				11/15/12
SAMPLE			**Sample #121448010**							
1,2-Dichloroethane-d4	17060-07-0				101.7	75 - 125				11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Toluene-d8	2037-26-5				94.2	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				99	75 - 125				11/15/12
BLANK			**QC Sample #85126**							
1,2-Dichloroethane-d4	17060-07-0				98.5	75 - 125				11/15/12
Toluene-d8	2037-26-5				94.5	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				99.6	75 - 125				11/15/12
LCS			**QC Sample #85127**							
1,2-Dichloroethane-d4	17060-07-0				99.8	75 - 125				11/15/12
Toluene-d8	2037-26-5				92.8	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				94.8	75 - 125				11/15/12
MS			**QC Sample #85128**							
			Original 121450005							
1,2-Dichloroethane-d4	17060-07-0				99.8	75 - 125				11/15/12
Toluene-d8	2037-26-5				93.7	75 - 125				11/15/12
4-Bromofluorobenzene	460-00-4				95.8	75 - 125				11/15/12
MSD			**QC Sample #85129**							
			Original 121450005					**Paired**	**85128**	
1,2-Dichloroethane-d4	17060-07-0				97.9	75 - 125	n/a			11/15/12
Toluene-d8	2037-26-5				93	75 - 125	n/a			11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Quality Control Report

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
4-Bromofluorobenzene	460-00-4				95.3	75 - 125	n/a			11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analytical Batch 210418 (QC Batch: 210318) **Test** SW-846 8270D Semivolatiles
Associated Samples 121448008, 121448009, 121448010

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
SAMPLE			**Sample #121448008**							
2-Fluorophenol	367-12-4				57.4	34 - 103				11/15/12
Phenol-d5	4165-62-2				40.1	10 - 93				11/15/12
Nitrobenzene-d5	4165-60-0				78.5	49 - 133				11/15/12
2-Methylnaphthalene-d10	7297-45-2				80.9	60 - 135				11/15/12
2-Fluorobiphenyl	321-60-8				82.6	48 - 132				11/15/12
2,4,6-Tribromophenol	118-79-6				76.9	33 - 134				11/15/12
Fluoranthene-d10	93951-69-0				90.8	62 - 139				11/15/12
Terphenyl-d14	98904-43-9				83.3	56 - 138				11/15/12
SAMPLE			**Sample #121448009**							
2-Fluorophenol	367-12-4				61.8	34 - 103				11/15/12
Phenol-d5	4165-62-2				42.6	10 - 93				11/15/12
Nitrobenzene-d5	4165-60-0				81.9	49 - 133				11/15/12
2-Methylnaphthalene-d10	7297-45-2				84	60 - 135				11/15/12
2-Fluorobiphenyl	321-60-8				83.8	48 - 132				11/15/12
2,4,6-Tribromophenol	118-79-6				77.6	33 - 134				11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Fluoranthene-d10	93951-69-0				92.5	62 - 139				11/15/12
Terphenyl-d14	98904-43-9				77.8	56 - 138				11/15/12
SAMPLE			**Sample #121448010**							
2-Fluorophenol	367-12-4				57.6	34 - 103				11/15/12
Phenol-d5	4165-62-2				38.7	10 - 93				11/15/12
Nitrobenzene-d5	4165-60-0				78.2	49 - 133				11/15/12
2-Methylnaphthalene-d10	7297-45-2				81.7	60 - 135				11/15/12
2-Fluorobiphenyl	321-60-8				81.7	48 - 132				11/15/12
2,4,6-Tribromophenol	118-79-6				74.6	33 - 134				11/15/12
Fluoranthene-d10	93951-69-0				88.6	62 - 139				11/15/12
Terphenyl-d14	98904-43-9				76.9	56 - 138				11/15/12
BLANK			**QC Sample #85000**							
2-Fluorophenol	367-12-4				59.2	34 - 103				11/15/12
Phenol-d5	4165-62-2				43.1	10 - 93				11/15/12
Nitrobenzene-d5	4165-60-0				75.8	49 - 133				11/15/12
2-Methylnaphthalene-d10	7297-45-2				78	60 - 135				11/15/12
2-Fluorobiphenyl	321-60-8				78	48 - 132				11/15/12
2,4,6-Tribromophenol	118-79-6				74.5	33 - 134				11/15/12
Fluoranthene-d10	93951-69-0				88.4	62 - 139				11/15/12
Terphenyl-d14	98904-43-9				75.6	56 - 138				11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
LCS			**QC Sample #85001**							
2-Fluorophenol	367-12-4				63.6	34 - 103				11/15/12
Phenol-d5	4165-62-2				48	10 - 93				11/15/12
Nitrobenzene-d5	4165-60-0				78.5	49 - 133				11/15/12
2-Methylnaphthalene-d10	7297-45-2				79.6	60 - 135				11/15/12
2-Fluorobiphenyl	321-60-8				80.4	48 - 132				11/15/12
2,4,6-Tribromophenol	118-79-6				84	33 - 134				11/15/12
Fluoranthene-d10	93951-69-0				92.4	62 - 139				11/15/12
Terphenyl-d14	98904-43-9				78.6	56 - 138				11/15/12
MS			**QC Sample #85002**							
			Original 121439002							
2-Fluorophenol	367-12-4				55.1	34 - 103				11/15/12
Phenol-d5	4165-62-2				37.6	10 - 93				11/15/12
Nitrobenzene-d5	4165-60-0				77.4	49 - 133				11/15/12
2-Methylnaphthalene-d10	7297-45-2				79.7	60 - 135				11/15/12
2-Fluorobiphenyl	321-60-8				80.1	48 - 132				11/15/12
2,4,6-Tribromophenol	118-79-6				82.1	33 - 134				11/15/12
Fluoranthene-d10	93951-69-0				90	62 - 139				11/15/12
Terphenyl-d14	98904-43-9				75.8	56 - 138				11/15/12
MSD			**QC Sample #85003**							
			Original 121439002					**Paired 85002**		
2-Fluorophenol	367-12-4				59.5	34 - 103	n/a			11/15/12

* - QC result out of range n/a - Not Applicable

REVISED121448 -

Attention Scot Fitzgerald
Department Organic, Semivolatiles

Group # WSCF121448

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Phenol-d5	4165-62-2				40	10 - 93	n/a			11/15/12
Nitrobenzene-d5	4165-60-0				79.6	49 - 133	n/a			11/15/12
2-Methylnaphthalene-d10	7297-45-2				81.9	60 - 135	n/a			11/15/12
2-Fluorobiphenyl	321-60-8				83.1	48 - 132	n/a			11/15/12
2,4,6-Tribromophenol	118-79-6				85.4	33 - 134	n/a			11/15/12
Fluoranthene-d10	93951-69-0				92.8	62 - 139	n/a			11/15/12
Terphenyl-d14	98904-43-9				78.9	56 - 138	n/a			11/15/12
LCSD			**QC Sample #85004**							
								Paired	**85001**	
2-Fluorophenol	367-12-4				61.9	34 - 103	n/a			11/15/12
Phenol-d5	4165-62-2				47.3	10 - 93	n/a			11/15/12
Nitrobenzene-d5	4165-60-0				76.8	49 - 133	n/a			11/15/12
2-Methylnaphthalene-d10	7297-45-2				71.6	60 - 135	n/a			11/15/12
2-Fluorobiphenyl	321-60-8				73.3	48 - 132	n/a			11/15/12
2,4,6-Tribromophenol	118-79-6				76.8	33 - 134	n/a			11/15/12
Fluoranthene-d10	93951-69-0				89.7	62 - 139	n/a			11/15/12
Terphenyl-d14	98904-43-9				74.7	56 - 138	n/a			11/15/12

* - QC result out of range n/a - Not Applicable

Attention Scot Fitzgerald
Department Organic, Volatiles

Group # WSCF121448

Peak Name		CAS #	RT	RQ	Result	Units
121448010	**B2MN42**					
Unknown		UNKNOWN-01	16.166		44	ug/L

Attention: Scot Fitzgerald **Group #** WSCF121448

Quality Control Comments

Department Inorganic

84842 B2MXP1(121449004MS)

Analyte Chloride - Anions by Ion Chromatography (Water)
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Nitrate-N - Anions by Ion Chromatography (Water)
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Sulfate - Anions by Ion Chromatography (Water)
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

84843 B2MXP1(121449004MSD)

Analyte Chloride - Anions by Ion Chromatography (Water)
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Nitrate-N - Anions by Ion Chromatography (Water)
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Analyte Sulfate - Anions by Ion Chromatography (Water)
[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

Attention: Scot Fitzgerald **Group #** WSCF121448

Quality Control Comments

Department Organic, Semivolatiles

85004 LCSD for HBN 210318 [ORGP/2032

Analyte 3,3-Dichlorobenzidine - SW-846 8270D Semivolatiles

[1] Matrix Spike RPD outside established laboratory limits No flags assigned.

ATTACHMENT4

SAMPLE RECEIPT

Consisting of 13 pages
Including cover page

Waste Sampling and Characterization Facility
P.O. Box 1970 S3-30, Richland WA 99352
Phone: (509) 373-7004/FAX: (509) 373-7134

ACKNOWLEDGEMENT OF SAMPLES RECEIVED

WSCF Laboratory
PO Box 650 S3-30
Richland, WA 99352

ATTN: Scot Fitzgerald

Customer Code: CHPRC
PO #: 401647
Work Order #: 121448
Profile #: W13-011-082
Proj. Mgr.:
Phone:

The following samples were received from you on 11/12/2012 12:45:00 PM. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample #	Sample ID	Matrix	Collected	Received
		Tests scheduled		
121448001	B2MN43	WATER	11/12/2012 11:57	11/12/2012 12:45
		IC-W		
121448002	B2MN48	WATER	11/12/2012 11:07	11/12/2012 12:45
		IC-W		
121448003	B2MN76	WATER	11/12/2012 09:55	11/12/2012 12:45
		IC-W		
121448004	B2N2P2	WATER	11/12/2012 09:55	11/12/2012 12:45
		8260V-W		
121448005	B2MN77	WATER	11/12/2012 09:55	11/12/2012 12:45
		2008-W; 6010-W		
121448006	B2MN49	WATER	11/12/2012 11:07	11/12/2012 12:45
		2008-W; 6010-W		
121448007	B2MN44	WATER	11/12/2012 11:57	11/12/2012 12:45
		2008-W; 6010-W		
121448008	B2MN75	WATER	11/12/2012 09:55	11/12/2012 12:45
		2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W		
121448009	B2MN47	WATER	11/12/2012 11:07	11/12/2012 12:45
		2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W		
121448010	B2MN42	WATER	11/12/2012 11:57	11/12/2012 12:45
		2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W		

Waste Sampling and Characterization Facility
P.O. Box 1970 S3-30, Richland WA 99352
Phone: (509) 373-7004/FAX: (509) 373-7134

Test Acronym Description

Test Acronym	Description
2008-W	ICP-MS (W)
6010-W	ICP-AES (W)
8260V-W	Volatiles by 8260B (W)
8270SV-W	Semivolatiles by 8270D (W)
ALK-W	Total Alkalinity (W)
CN-W	Cyanide (Spectroscopy) (W)
IC-W	Anions by IC (W)

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-082**

Page 1 of 1

Collector B.E. Briggs CHPRC	**Contact/Requester** Karen Waters-Husted	**Telephone No.** 376-4650			
SAF No. W13-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code** 300071ES20			
Project Title RCRA, NOVEMBER 2012	**Logbook No.** HNF-N-506-51/44	**Ice Chest No.** N/A			
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.** N/A			
Protocol RCRA	**Priority:** 31 Days **PRIORITY**	**Offsite Property No.** N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS	**SPECIAL INSTRUCTIONS**	**Hold Time**			
****** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990) 1993)	FY12 and FY13 samples cannot be in the same SDG. Site Wide Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401647.	Total Activity Exemption Yes ☑ No ☐			

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN43	N	W	11-12-12	1157	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	48 Hours	Cool-4C

121448

Relinquished By B.E. Briggs CHPRC Print / Sign	Date/Time NOV 1 2 2012	Received By Cynthia R Johnson Print / Sign	Date/Time NOV 1 2 2012
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method (e.g. Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

* Matrix: S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other

PRINTED ON 11/6/2012

A-6004-842 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company — **CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST** — **C.O.C. # W13-011-084** — Page 1 of 1

Collector B.E. Briggs CHPRC	**Contact/Requester** Karen Waters-Husted	**Telephone No.** 376-4650			
SAF No. W13-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code** 300071ES20			
Project Title RCRA, NOVEMBER 2012	**Logbook No.** HNF-N-506-51, 44	**Ice Chest No.** N/A			
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.** N/A			
Protocol RCRA	**Priority:** 31 Days **PRIORITY**	**Offsite Property No.** N/A			

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
FY12 and FY13 samples cannot be in the same SDG.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN48	N	W	11-12-12	1107	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	48 Hours	Cool-4C

Relinquished By: B.E. Briggs CHPRC — Print / Sign — Date/Time: NOV 1 2 2012 1045
Received By: Cynthia R Johnson — Print / Sign — Date/Time: NOV 1 2 2012 1045

Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *: S = Soil; SE = Sediment; SO = Solid; SL = Sludge; W = Water; O = Oil; A = Air; DS = Drum Solids; DL = Drum Liquids; T = Tissue; WI = Wipe; L = Liquid; V = Vegetation; X = Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PRINTED ON 11/6/2012

A-6004-842 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-096**

Page 1 of 1

Collector	B.E. Briggs CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	W13-011	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071ES20
Project Title	RCRA, NOVEMBER 2012	**Logbook No.**	HNF-N-506 51/44	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	RCRA	**Priority:**	**31 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

*** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 40164?.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN76 7	N	W	11-12-12	0955	1x500-mL P	300.0_ANIONS_IC: List-1 (5)	48 Hours	Cool-4C

Relinquished By	Print B.E. Briggs CHPRC	Sign	Date/Time NOV 1 2 2012	Received By	Print Cynthia R Johnson	Sign	Date/Time NOV 1 2 2012
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

* Matrix: S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PRINTED ON 11/6/2012

A-6004-842 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # X13-002-042

Page 1 of 1

Collector B.E. Briggs CHPRC	**Contact/Requester** WATERS-HUSTED, K	**Telephone No.** 376-4650			
SAF No. X13-002	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code** 300071ES20			
Project Title GW Sitewide Surv, FY13	**Logbook No.** HNF-N-5065 L / 44	**Ice Chest No.** N/A			
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.** N/A			
Protocol SURV	**Priority:** 31 Days **PRIORITY**	**Offsite Property No.** N/A			

POSSIBLE SAMPLE HAZARDS/REMARKS

"Contains Radioactive Material at concentrations that may or may not be regulated for transportation per 49 CFR/IATA Dangerous Goods Regulations but are not releasable per DOE Order 458.1 "

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401617.
FY12 and FY13 samples cannot be in the same SDG.
These samples can be batched with A, 1, 3 and W13 SAMS

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2N2P2 4	N	W	11-12-12	0955	1x20-mL P	Activity Scan	6 Months	None
B2N2P2	N	W	↓	↓	3x40-mL aGs*	8260_VOA_GCMS: List-2 (25)	14 Days	HCl or H2SO4 to pH <2/Cool-4C

Relinquished By: B.E. Briggs CHPRC — Print — Sign — Date/Time: NOV 1 2 2012 1045 — Received By: Cynthia R Johnson — Print — Sign — Date/Time: NOV 1 2 2012 1045

Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil	DS = Drum Solids	SE = Sediment	DL = Drum Liquids
SO = Solid	T = Tissue	SL = Sludge	WI = Wipe
W = Water	L = Liquid	O = Oil	V = Vegetation
A = Air	X = Other		

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) — Disposed By — Date/Time

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A-6004-842 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-095**

Page 1 of 2

Collector	B.E. Briggs CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	W13-011	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071ES20
Project Title	RCRA, NOVEMBER 2012	**Logbook No.**	HNF-N-506 51 / 24	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	RCRA	**Priority:**	**31 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG.
Site Wide Generator Knowledge Information Form applies.
The CAUN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN75	N	W	11-12-12	0955	1x500-mL G/P	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B2MN75	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Antimony (1); 200.8_METALS_ICPMS: Arsenic (1); 200.8_METALS_ICPMS: Lead (1); 200.8_METALS_ICPMS: Selenium (1); 200.8_METALS_ICPMS: Thallium (1); 200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2
B2MN75	N	W			1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C
B2MN75	N	W			1x250-mL P	4500E_CN: Cyanide (1)	14 Days	NaOH to pH >=12
B2MN75	N	W			1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B2MN75	N	W			3x40-mL aGs*	8260_VOA_GCMS_IX: COMMON	14 Days	HCl or H2SO4 to pH <2/Cool~4C
B2MN75	N	W			4x1-L aG	8270_SVOA_GCMS_IX: COMMON	7/40 Days	Cool~4C
B2MN77	Y	W			1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B2MN77	Y	W			1x500-mL G/P	200.8_METALS_ICPMS: Antimony (1); 200.8_METALS_ICPMS: Arsenic (1); 200.8_METALS_ICPMS: Lead (1); 200.8_METALS_ICPMS: Selenium (1); 200.8_METALS_ICPMS: Thallium (1); 200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2

Relinquished By	Print B.E. Briggs CHPRC Sign	Date/Time 11-12-12 0955	Received By	Print Cynthia R Johnson Sign	Date/Time NOV 1 2 2012	Matrix *	
Relinquished By		Date/Time NOV 1 2 2012	Received By		Date/Time	S = Soil SE = Sediment SO = Solid SL = Sludge W = Water O = Oil A = Air	DS = Drum Solids DL = Drum Liquids T = Tissue WI = Wipe L = Liquid V = Vegetation X = Other
Relinquished By		Date/Time	Received By		Date/Time		
Relinquished By		Date/Time	Received By		Date/Time		
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By		Date/Time	

PRINTED ON 11/6/2012

A-6004-342 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-095**

Page 2 of 2

Collector B.E. Briggs CHPRC	**Contact/Requester** Karen Waters-Husted	**Telephone No.** 376-4650	
SAF No. W13-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code** 300071ES20	
Project Title RCRA, NOVEMBER 2012	**Logbook No.** HNF-N-506 51 / 44	**Ice Chest No.** N/A	
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.** N/A	
Protocol RCRA	**Priority:** 31 Days	**PRIORITY**	**Offsite Property No.** N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption Yes [✓] No [ ]

FY12 and FY13 samples cannot be in the same SDG.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN77 5	Y	W	11-12-12	0955	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2

Relinquished By B.E. Briggs CHPRC	Print / Sign	Date/Time NOV 1 2 2012	Received By Cynthia R Johnson	Sign	Date/Time NOV 1 2 2012	Matrix *		
Relinquished By	Date/Time	Received By	Date/Time			S = Soil	DS = Drum Solids	
						SE = Sediment	DL = Drum Liquids	
Relinquished By	Date/Time	Received By	Date/Time			SO = Solid	T = Tissue	
						SL = Sludge	WI = Wipe	
Relinquished By	Date/Time	Received By	Date/Time			W = Water	L = Liquid	
						O = Oil	V = Vegetation	
						A = Air	X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

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A-6004-342 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-083**

Page 1 of 2

Collector: B.E. Briggs CHPRC	Contact/Requester: Karen Waters-Husted	Telephone No.: 376-4650			
SAF No.: W13-011	Sampling Origin: Hanford Site	Purchase Order/Charge Code: 300071ES20			
Project Title: RCRA, NOVEMBER 2012	Logbook No.: HNF-N-506-51 / 44	Ice Chest No.: N/A			
Shipped To (Lab): Waste Sampling & Characterization	Method of Shipment: GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.: N/A			
Protocol: RCRA	Priority: 31 Days **PRIORITY**	Offsite Property No.: N/A			
POSSIBLE SAMPLE HAZARDS/REMARKS	**SPECIAL INSTRUCTIONS**	Hold Time		Total Activity Exemption: Yes ☑ No ☐	

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400.5 (1990/1993)

FY12 and FY13 samples cannot be in the same SDG.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	+	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN49	Y	W	11-28-12	1107	1x500-mL G	200.8_IIG - ICPMS	28 Days	HNO3 to pH <2
B2MN49	Y	W			1x500-mL G/P	200.8_METALS_ICPMS: Antimony (1); 200.8_METALS_ICPMS: Arsenic (1); 200.8_METALS_ICPMS: Lead (1); 200.8_METALS_ICPMS: Selenium (1); 200.8_METALS_ICPMS: Thallium (1); 200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2
B2MN49	Y	W			1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B2MN47	N	W			1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B2MN47	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Antimony (1); 200.8_METALS_ICPMS: Arsenic (1); 200.8_METALS_ICPMS: Lead (1); 200.8_METALS_ICPMS: Selenium (1); 200.8_METALS_ICPMS: Thallium (1); 200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2
B2MN47	N	W			1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C
B2MN47	N	W			1x250-mL P	4500E_CN: Cyanide (1)	14 Days	NaOH to pH >=12
B2MN47	N	W			1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B2MN47	N	W	11-28-12	1107	3x40-mL aGs*	8260_VOA_GCMS_IX: COMMON	14 Days	HCl or H2SO4 to pH <2/Cool~4C

Relinquished By: B.E. Briggs CHPRC (Print)	Sign	Date/Time: NOV 1 2 2012 1845	Received By: Cynthia R. Johnson (Print)	Sign	Date/Time: NOV 1 2 2012 1845	Matrix *: S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other
Relinquished By		Date/Time	Received By		Date/Time	
Relinquished By		Date/Time	Received By		Date/Time	
Relinquished By		Date/Time	Received By		Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer; per lab procedure, used in process)		Disposed By		Date/Time	

PRINTED ON: 11/6/2012

A-6004-842 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-083**

Page 2 of 2

Collector	B.E. Briggs CHPRC	**Contact/Requester**	Karen Waters-Husted	**Telephone No.**	376-4650
SAF No.	W13-011	**Sampling Origin**	Hanford Site	**Purchase Order/Charge Code**	300071ES20
Project Title	RCRA, NOVEMBER 2012	**Logbook No.**	HNF-N-506 51 / 44	**Ice Chest No.**	N/A
Shipped To (Lab)	Waste Sampling & Characterization	**Method of Shipment**	GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.**	N/A
Protocol	RCRA	**Priority:**	**31 Days** **PRIORITY**	**Offsite Property No.**	N/A

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
02MN47	N	W	11-12-12	1107	4x1 L aG	8270_SVOA_GCMS_IX: COMMON	7/40 Days	Cool~4C

Relinquished By: B.E. Briggs CHPRC — Print — Sign — Date/Time: NOV 1 2 2012 1245

Received By: Cynthia R Johnson — Print — Sign — Date/Time: NOV 1 2 2012 1245

Relinquished By — Date/Time — Received By — Date/Time

Relinquished By — Date/Time — Received By — Date/Time

Relinquished By — Date/Time — Received By — Date/Time

FINAL SAMPLE DISPOSITION — Disposal Method (e.g., Return to customer, per lab procedure, used in process) — Disposed By — Date/Time

Matrix *: S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solids, DL = Drum Liquids, T = Tissue, WI = Wipe, L = Liquid, V = Vegetation, X = Other

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A-6004-342 (REV 2)

Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-081**

Page 1 of 2

Collector B.E. Briggs CHPRC	**Contact/Requester** Karen Waters-Husted	**Telephone No.** 376-4650	
SAF No. W13-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code** 300071ES20	
Project Title RCRA, NOVEMBER 2012	**Logbook No.** HNF-N-506 51 / 44	**Ice Chest No.** N/A	
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.** N/A	
Protocol RCRA	**Priority:** 31 Days **PRIORITY**	**Offsite Property No.** N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG
Site Wide Generator Knowledge Information Form applies
The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN42	N	W	11-28-12	1157	1x500-mL G	200.8_HG- ICPMS	28 Days	HNO3 to pH <2
B2MN42	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Antimony (1); 200.8_METALS_ICPMS: Arsenic (1); 200.8_METALS_ICPMS: Lead (1); 200.8_METALS_ICPMS: Selenium (1); 200.8_METALS_ICPMS: Thallium (1); 200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2
B2MN42	N	W			1x250-mL G/P	2320_ALKALINITY: Alkalinity (1)	14 Days	Cool~4C
B2MN42	N	W			1x250-mL P	4500E_CN: Cyanide (1)	14 Days	NaOH to pH >=12
B2MN42	N	W			1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2
B2MN42	N	W			3x40-mL aG's*	8260_VOA_GCMS_IX: COMMON	14 Days	HCl or H2SO4 to pH <2/Cool~4C
B2MN42	N	W			4x1-L aG	8270_SVOA_GCMS_IX: COMMON	7/40 Days	Cool~4C
B2MN44	Y	W			1x500-mL G	200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B2MN44	Y	W			1x500-mL G/P	200.8_METALS_ICPMS: Antimony (1); 200.8_METALS_ICPMS: Arsenic (1); 200.8_METALS_ICPMS: Lead (1); 200.8_METALS_ICPMS: Selenium (1); 200.8_METALS_ICPMS: Thallium (1); 200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2

Relinquished By B.E. Briggs CHPRC	Print	Sign	Date/Time NOV 1 2 2012	Received By Cynthia R Johnson	Print Sign Date/Time NOV 1 2 2012
Relinquished By			Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)			Disposed By	Date/Time

Matrix *

S = Soil	DS = Drum Solids	SF = Sediment	DL = Drum Liquids
SO = Solid	T = Tissue	SL = Sludge	WI = Wine
W = Water	L = Liquid	O = Oil	V = Vegetation
A = Air	X = Other		

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Chain of Custody

CH2MHill Plateau Remediation Company

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-081**

Page 2 of 2

Collector S.E. Briggs CHPRC	**Contact/Requester** Karen Waters-Husted	**Telephone No.** 376-4650	
SAF No. W13-011	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code** 300071ES20	
Project Title RCRA, NOVEMBER 2012	**Logbook No.** HNF-N-506 51/41	**Ice Chest No.** N/A	
Shipped To (Lab) Waste Sampling & Characterization	**Method of Shipment** GOVERNMENT VEHICLE	**Bill of Lading/Air Bill No.** N/A	
Protocol RCRA	**Priority:** 31 Days **PRIORITY**	**Offsite Property No.** N/A	

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CRF but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

FY12 and FY13 samples cannot be in the same SDG.
Site Wide Generator Knowledge Information Form applies.
The CACN for all analytical work at WSCF is 401647.

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN44	Y	W	11-12-12	1157	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2

Relinquished By S.E. Briggs CHPRC	Print / Sign	Date/Time NOV 12 2012 1245	Received By Cynthia R Johnson	Print / Sign	Date/Time NOV 12 2012 1245
Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time
Relinquished By	Print / Sign	Date/Time	Received By	Print / Sign	Date/Time

Matrix *

S = Soil	DS = Drum Solids	SE = Sediment	DL = Drum Liquids
SO = Solid	T = Tissue	SL = Sludge	WI = Wipe
W = Water	L = Liquid	O = Oil	V = Vegetation
A = Air	X = Other		

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer; per lab procedure, used in process)	Disposed By / Date/Time

PRINTED ON 11/6/2012

A-6004-842 (REV 2)