

**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,

REVISED121402 - 699683 [Report ID: 121402]

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 WSCF121402

- \* 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

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**ATTACHMENT 1**

**COVER SHEET**

Consisting of 2 pages  
Including cover page

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**WSCF SAF Number Cross Reference**

Group # WSCF121402  
Data Deliverable Date 12/03/12

SAF #	Sample ID	Sample #	Matrix	Sampled	Received
W13-011	B2MN72	121402001	WATER	11/02/12	11/02/12
W13-011	B2MN58	121402002	WATER	11/02/12	11/02/12
W13-011	B2MN33	121402003	WATER	11/02/12	11/02/12
W13-011	B2MN53	121402004	WATER	11/02/12	11/02/12
W13-011	B2MN71	121402005	WATER	11/02/12	11/02/12
W13-011	B2MN57	121402006	WATER	11/02/12	11/02/12
W13-011	B2MN32	121402007	WATER	11/02/12	11/02/12
W13-011	B2MN52	121402008	WATER	11/02/12	11/02/12
W13-011	B2MN73	121402009	WATER	11/02/12	11/02/12
W13-011	B2MN59	121402010	WATER	11/02/12	11/02/12
W13-011	B2MN34	121402011	WATER	11/02/12	11/02/12
W13-011	B2MN54	121402012	WATER	11/02/12	11/02/12

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ATTACHMENT 2

**NARRATIVE**

Consisting of 7 pages  
Including cover page

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Attachment 2  
**Narrative Rev1**  
WSCF121402

**Revision 1: This case narrative replaces the prior in its entirety. 1,4-Dioxane was added per SDR13-064 to samples B2MN71, B2MN57, B2MN32, and B2MN52.**

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

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- 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):

- The dilution for sample B2MN33 (121402002) was analyzed out of hold time.
- Batch QC 209719
  - Nitrite – Matrix Spike recovery is outside established laboratory limits. Affected sample results in this batch were “N” flagged.
  - Chloride, Nitrate and Sulfate – Exceeded spiking levels by a factor of 4. Spike recoveries and associated RPDs are not valid.
- Batch QC 209834
  - Nitrite – Matrix Spike Duplicate recovery is outside established laboratory limits. Affected sample results in this batch were “N” flagged.
  - Fluoride, 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):

- Sodium was detected in the Blank and evaluated.

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- Sodium and Calcium – 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.

**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.

#### **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):

- All 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  
WSCF121402

## SAMPLE ISSUE RESOLUTION

SIR NUM SDR13-012  
REV NUM 0  
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, B2M180, B2M183, B2MN99, B2MNB5, B2MN81, B2MN82, B2MN94, B2MN71, B2MN57, B2MN32, B2MN52, B2MN89, B2MNCO, B2MXL9, B2MN75, B2MN47, B2MN42, B2MXM8, B2MXN9, B2MXN8, B2MXM7, B2MN63, B2MN64

SAMPLE MATRIX WATER

COLLECTION DATE 10/3/2012 - 10/31/2012

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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WSCF121402

## 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

Attachment 2  
**Narrative Rev1**  
WSCF121402

**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, B2M180, B2M9W6, B2MN27, B2MN32, B2MN37, B2MN42, B2MN47, B2MN52, B2MN57, B2MN64, B2MN71, B2MN75, B2MN81, B2MN82, B2MN89, B2MN94, B2MN99, B2MN85, B2MNCO, 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

ATTACHMENT 3

**ANALYTICAL RESULTS**

Consisting of 125 pages  
Including cover page

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**WSCF ANALYTICAL RESULTS REPORT**

For

CH2M Hill Plateau Remediation

PO Box 1600  
Richland, WA 99352

Attention: Scot Fitzgerald

**Contract #** MOA-FH-CHPRC-2008  
**Group #** WSCF121402  
**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.*

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## Batch QC List

Attention Scot Fitzgerald  
Department Inorganic

Group # WSCF121402

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
209719	209719	2	BLANK	84375	BLANK		Anions by Ion Chromatography (Water)
209719	209719	3	LCS	84376	LCS		Anions by Ion Chromatography (Water)
209719	209719	4	DUP	84377	B2MNC9(121400003DUP	121400003	Anions by Ion Chromatography (Water)
209719	209719	5	MS	84378	B2MNC9(121400003MS)	121400003	Anions by Ion Chromatography (Water)
209719	209719	6	MSD	84379	B2MNC9(121400003MSD	121400003	Anions by Ion Chromatography (Water)
209719	209719	19	SAMPLE	121402001	B2MN72		Anions by Ion Chromatography (Water)
209719	209719	20	SAMPLE	121402001	B2MN72		Anions by Ion Chromatography (Water)
209719	209719	21	SAMPLE	121402002	B2MN58		Anions by Ion Chromatography (Water)
209719	209719	22	SAMPLE	121402002	B2MN58		Anions by Ion Chromatography (Water)
209719	209719	23	SAMPLE	121402003	B2MN33		Anions by Ion Chromatography (Water)
209834	209834	2	BLANK	84464	BLANK		Anions by Ion Chromatography (Water)
209834	209834	3	LCS	84465	LCS		Anions by Ion Chromatography (Water)
209834	209834	4	DUP	84466	B2MNH1(121400001DUP	121400001	Anions by Ion Chromatography (Water)
209834	209834	5	MS	84467	B2MNH1(121400001MS)	121400001	Anions by Ion Chromatography (Water)
209834	209834	6	MSD	84468	B2MNH1(121400001MSD	121400001	Anions by Ion Chromatography (Water)
209834	209834	8	SAMPLE	121402004	B2MN53		Anions by Ion Chromatography (Water)
209834	209834	9	SAMPLE	121402004	B2MN53		Anions by Ion Chromatography (Water)
209843	209843	2	BLANK	84506	BLANK		Anions by Ion Chromatography (Water)
209843	209843	3	LCS	84507	LCS		Anions by Ion Chromatography (Water)
209843	209843	4	DUP	84508	B2M748(121407001DUP)	121407001	Anions by Ion Chromatography (Water)
209843	209843	5	MS	84509	B2M748(121407001MS)	121407001	Anions by Ion Chromatography (Water)
209843	209843	6	MSD	84510	B2M748(121407001MSD)	121407001	Anions by Ion Chromatography (Water)
209843	209843	11	SAMPLE	121402003	B2MN33		Anions by Ion Chromatography (Water)

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## Batch QC List

Attention Scot Fitzgerald  
Department Inorganic

Group # WSCF121402

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210636	210820	5	BLANK	85330	BLANK		ICP-6010 - All possible metals
210636	210820	7	LCS	85332	LCS		ICP-6010 - All possible metals
210636	210820	8	SAMPLE	121402005	B2MN71		ICP-6010 - All possible metals
210636	210820	9	MS	85333	B2MN71(121402005MS)	121402005	ICP-6010 - All possible metals
210636	210820	10	MSD	85334	B2MN71(121402005MSD)	121402005	ICP-6010 - All possible metals
210636	210820	11	SAMPLE	121402006	B2MN57		ICP-6010 - All possible metals
210636	210820	12	SAMPLE	121402007	B2MN32		ICP-6010 - All possible metals
210636	210820	13	SAMPLE	121402008	B2MN52		ICP-6010 - All possible metals
210636	210820	14	SAMPLE	121402009	B2MN73		ICP-6010 - All possible metals
210636	210820	15	SAMPLE	121402010	B2MN59		ICP-6010 - All possible metals
210636	210820	16	SAMPLE	121402011	B2MN34		ICP-6010 - All possible metals
210636	210820	17	SAMPLE	121402012	B2MN54		ICP-6010 - All possible metals
210723	210756	4	BLANK	85396	BLANK		ICP-2008 MS All possible metal
210723	210756	5	LCS	85397	LCS		ICP-2008 MS All possible metal
210723	210756	7	MS	85398	B2LTV2(121489001MS)	121489001	ICP-2008 MS All possible metal
210723	210756	8	MSD	85399	B2LTV2(121489001MSD)	121489001	ICP-2008 MS All possible metal
210723	210756	22	SAMPLE	121402005	B2MN71		ICP-2008 MS All possible metal
210723	210756	23	SAMPLE	121402006	B2MN57		ICP-2008 MS All possible metal
210723	210756	24	SAMPLE	121402007	B2MN32		ICP-2008 MS All possible metal
210723	210756	25	SAMPLE	121402008	B2MN52		ICP-2008 MS All possible metal
210723	210756	26	SAMPLE	121402009	B2MN73		ICP-2008 MS All possible metal
210723	210756	27	SAMPLE	121402010	B2MN59		ICP-2008 MS All possible metal
210723	210756	28	SAMPLE	121402011	B2MN34		ICP-2008 MS All possible metal

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**Batch QC List****DECEMBER 19, 2012****REVISION 1**

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210723	210756	29	SAMPLE	121402012	B2MN54		ICP-2008 MS All possible metal

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## Batch QC List

Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group # WSCF121402

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
209883	210320	1	BLANK	84672	BLANK		SW-846 8270D Semivolatiles
209883	210320	2	LCS	84673	LCS		SW-846 8270D Semivolatiles
209883	210320	3	MS	84674	B2MN94(121401006MS) 121401006		SW-846 8270D Semivolatiles
209883	210320	4	MSD	84675	B2MN94(121401006MSD 121401006		SW-846 8270D Semivolatiles
209883	210320	5	SAMPLE	121402007	B2MN32		SW-846 8270D Semivolatiles
209883	210320	6	SAMPLE	121402006	B2MN57		SW-846 8270D Semivolatiles
209883	210320	8	SAMPLE	121402005	B2MN71		SW-846 8270D Semivolatiles
209883	210320	10	SAMPLE	121402008	B2MN52		SW-846 8270D Semivolatiles

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## Batch QC List

Attention Scot Fitzgerald  
 Department Organic, Volatiles

Group # WSCF121402

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
209922	209924	1	BLANK	84692	BLANK		SW-846 8260B Volatiles
209922	209924	2	LCS	84693	LCS		SW-846 8260B Volatiles
209922	209924	3	MS	84694	B2MRX4(121397007MS) 121397007		SW-846 8260B Volatiles
209922	209924	4	MSD	84695	B2MRX4(121397007MSD 121397007		SW-846 8260B Volatiles
209922	209924	8	SAMPLE	121402007	B2MN32		SW-846 8260B Volatiles
209922	209924	10	SAMPLE	121402006	B2MN57		SW-846 8260B Volatiles
209922	209924	12	SAMPLE	121402005	B2MN71		SW-846 8260B Volatiles
209922	209924	15	SAMPLE	121402008	B2MN52		SW-846 8260B Volatiles

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## Batch QC List

Attention Scot Fitzgerald  
 Department Wet Chemistry

Group # WSCF121402

QC Batch	Analytical Batch	S#	Type	Sample #	Client Sample#	Original	Test
210120	210120	1	LCS	84818	LCS		Total Alkalinity as mg/L CaCO3 (Water)
210120	210120	6	DUP	84819	B2MN81(121401004DUP) 121401004		Total Alkalinity as mg/L CaCO3 (Water)
210120	210120	9	SAMPLE	121402005	B2MN71		Total Alkalinity as mg/L CaCO3 (Water)
210120	210120	10	SAMPLE	121402006	B2MN57		Total Alkalinity as mg/L CaCO3 (Water)
210120	210120	11	SAMPLE	121402007	B2MN32		Total Alkalinity as mg/L CaCO3 (Water)
210120	210120	12	SAMPLE	121402008	B2MN52		Total Alkalinity as mg/L CaCO3 (Water)
210120	210120	13	LCS	84820	LCS		Total Alkalinity as mg/L CaCO3 (Water)
210120	210120	19	LCS	84821	LCS		Total Alkalinity as mg/L CaCO3 (Water)
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	15	SAMPLE	121402005	B2MN71		Cyanide (W) by Midi/Spectrophotometer
210348	210349	18	SAMPLE	121402006	B2MN57		Cyanide (W) by Midi/Spectrophotometer
210348	210349	19	SAMPLE	121402007	B2MN32		Cyanide (W) by Midi/Spectrophotometer
210348	210349	20	SAMPLE	121402008	B2MN52		Cyanide (W) by Midi/Spectrophotometer

REVISED121402 -

Attention Scot Fitzgerald  
Department Inorganic

Group # WSCF121402

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>

REVISED121402 -

Attention Scot Fitzgerald  
Department Organic, Semivolatiles

Group # WSCF121402

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
EPA SW-846	3545	Pressurized Fluid Extraction (PFE)
HEIS	8270_SVOA_GCMS	Chromatography/Mass Spectrometry (GC/MS) 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>

REVISED121402 -

Attention Scot Fitzgerald  
Department Organic, Volatiles

Group # WSCF121402

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.

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LA-523-455	Volatile Sample Analysis by SW-846 Method 8260B	
	EPA SW-846	8000B
	EPA SW-846	8260B
	HEIS	8260_VOA_GCMS
		Determinative Chromographic Separations
		Volatile Organic Compounds by Gas
		Chromatography/Mass Spectrometry (GC/MS)
		Volatile Organic Compounds by Gas
		Chromatography/Mass Spectrometry (GC/MS)

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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>

REVISED121402 -

Attention Scot Fitzgerald  
Department Wet Chemistry

Group # WSCF121402

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>

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402001  
**SAF#** W13-011  
**Sample ID** B2MN72

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
11/02/12										
<b>Anions by Ion Chromatography (Water)</b>										
Fluoride	16984-48-8	LA-533-410	D	0.165		ug/mL	2	0.046	0.14	11/02/12
Chloride	16887-00-6	LA-533-410	D	23.9		ug/mL	2	0.12	0.81	11/02/12
Nitrite-N	NO2-N	LA-533-410	UDN	<0.038		ug/mL	2	0.038	0.20	11/02/12
Nitrate-N	NO3-N	LA-533-410	D	62.0		ug/mL	10	0.19	0.99	11/02/12
Sulfate	14808-79-8	LA-533-410	D	121		ug/mL	2	0.22	2.1	11/02/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402002  
**SAF#** W13-011  
**Sample ID** B2MN58

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
11/02/12										
<b>Anions by Ion Chromatography (Water)</b>										
Fluoride	16984-48-8	LA-533-410	D	0.164		ug/mL	2	0.046	0.14	11/02/12
Chloride	16887-00-6	LA-533-410	D	72.0		ug/mL	2	0.12	0.81	11/02/12
Nitrite-N	NO2-N	LA-533-410	UDN	<0.038		ug/mL	2	0.038	0.20	11/02/12
Nitrate-N	NO3-N	LA-533-410	D	88.4		ug/mL	10	0.19	0.99	11/02/12
Sulfate	14808-79-8	LA-533-410	D	145		ug/mL	2	0.22	2.1	11/02/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402003  
**SAF#** W13-011  
**Sample ID** B2MN33

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
11/02/12										
<b>Anions by Ion Chromatography (Water)</b>										
Fluoride	16984-48-8	LA-533-410	D	0.252		ug/mL	2	0.046	0.14	11/02/12
Chloride	16887-00-6	LA-533-410	D	39.3		ug/mL	2	0.12	0.81	11/02/12
Nitrite-N	NO2-N	LA-533-410	UDN	<0.038		ug/mL	2	0.038	0.20	11/02/12
Nitrate-N	NO3-N	LA-533-410	D	245		ug/mL	20	0.38	2.0	11/05/12
Sulfate	14808-79-8	LA-533-410	D	184		ug/mL	2	0.22	2.1	11/02/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402004  
**SAF#** W13-011  
**Sample ID** B2MN53

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
										11/03/12
<b>Anions by Ion Chromatography (Water)</b>										
Fluoride	16984-48-8	LA-533-410	D	0.186		ug/mL	2	0.046	0.14	11/03/12
Chloride	16887-00-6	LA-533-410	D	19.7		ug/mL	2	0.12	0.81	11/03/12
Nitrite-N	NO2-N	LA-533-410	UDN	<0.038		ug/mL	2	0.038	0.20	11/03/12
Nitrate-N	NO3-N	LA-533-410	D	36.6		ug/mL	10	0.19	0.99	11/03/12
Sulfate	14808-79-8	LA-533-410	D	110		ug/mL	2	0.22	2.1	11/03/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402005  
**SAF#** W13-011  
**Sample ID** B2MN71

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>ICPAES Prep (W)</b>										11/26/12
<b>ICP-6010 - All possible metals</b>										
Iron	7439-89-6	LA-505-411		137		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		33800		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		24.3		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		11800		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		41800		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		119		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		32.0		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	11.3		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		1.16E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		562		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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
<b>ICPMS Prep (W)</b>										
<b>ICP-2008 MS All possible metal</b>										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	11/27/12
Lead	7439-92-1	LA-505-412	BD	0.360		ug/L	2	0.10	1.0	11/27/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	11/27/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Tin	7440-31-5	LA-505-412	BD	0.408		ug/L	2	0.10	1.0	11/27/12
Arsenic	7440-38-2	LA-505-412	D	4.67		ug/L	2	0.40	4.0	11/27/12
Selenium	7782-49-2	LA-505-412	BD	7.58		ug/L	2	2.0	20	11/27/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402006  
**SAF#** W13-011  
**Sample ID** B2MN57

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>ICPAES Prep (W)</b>										11/26/12
<b>ICP-6010 - All possible metals</b>										
Iron	7439-89-6	LA-505-411		110		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		49500		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411		35.5		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411		652		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		14000		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		53300		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		132		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		51.6		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	B	7.60		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411		39.0		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	7.90		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		1.63E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		806		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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
<b>ICPMS Prep (W)</b>										
<b>ICP-2008 MS All possible metal</b>										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	11/27/12
Lead	7439-92-1	LA-505-412	BD	0.734		ug/L	2	0.10	1.0	11/27/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	11/27/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Tin	7440-31-5	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Arsenic	7440-38-2	LA-505-412	D	5.86		ug/L	2	0.40	4.0	11/27/12
Selenium	7782-49-2	LA-505-412	BD	11.1		ug/L	2	2.0	20	11/27/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402007  
**SAF#** W13-011  
**Sample ID** B2MN32

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>ICPAES Prep (W)</b>										11/26/12
<b>ICP-6010 - All possible metals</b>										
Iron	7439-89-6	LA-505-411		201		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		69600		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411		96.6		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		19200		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		1.41E5		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		274		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		58.3		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	U	<5.0		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411		708		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		2.47E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		1290		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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402007  
**SAF#** W13-011  
**Sample ID** B2MN32

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

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
<b>ICPMS Prep (W)</b>										
<b>ICP-2008 MS All possible metal</b>										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	11/27/12
Lead	7439-92-1	LA-505-412	D	2.40		ug/L	2	0.10	1.0	11/27/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	11/27/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Tin	7440-31-5	LA-505-412	BD	0.920		ug/L	2	0.10	1.0	11/27/12
Arsenic	7440-38-2	LA-505-412	BD	3.79		ug/L	2	0.40	4.0	11/27/12
Selenium	7782-49-2	LA-505-412	BD	11.8		ug/L	2	2.0	20	11/27/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402008  
**SAF#** W13-011  
**Sample ID** B2MN52

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>ICPAES Prep (W)</b>										11/26/12
<b>ICP-6010 - All possible metals</b>										
Iron	7439-89-6	LA-505-411	B	57.9		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		26400		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	5.20		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		10300		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		34200		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		98.4		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	10.5		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	12.9		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		89000		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		426		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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
<b>ICPMS Prep (W)</b>										
<b>ICP-2008 MS All possible metal</b>										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	11/27/12
Lead	7439-92-1	LA-505-412	BD	0.270		ug/L	2	0.10	1.0	11/27/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	11/27/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Tin	7440-31-5	LA-505-412	BD	0.758		ug/L	2	0.10	1.0	11/27/12
Arsenic	7440-38-2	LA-505-412	D	5.39		ug/L	2	0.40	4.0	11/27/12
Selenium	7782-49-2	LA-505-412	BD	7.03		ug/L	2	2.0	20	11/27/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402009  
**SAF#** W13-011  
**Sample ID** B2MN73

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>ICPAES Prep (W)</b>										11/26/12
<b>ICP-6010 - All possible metals</b>										
Iron	7439-89-6	LA-505-411	B	65.5		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		33400		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411	B	6.90		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411		53.4		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		11700		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		41100		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		115		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	12.8		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	9.50		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		1.15E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		553		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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402009	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN73	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
<b>ICPMS Prep (W)</b>										
<b>ICP-2008 MS All possible metal</b>										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	11/27/12
Lead	7439-92-1	LA-505-412	BD	0.364		ug/L	2	0.10	1.0	11/27/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	11/27/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Tin	7440-31-5	LA-505-412	BD	0.488		ug/L	2	0.10	1.0	11/27/12
Arsenic	7440-38-2	LA-505-412	D	5.47		ug/L	2	0.40	4.0	11/27/12
Selenium	7782-49-2	LA-505-412	BD	9.00		ug/L	2	2.0	20	11/27/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402010	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN59	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
<b>ICPAES Prep (W)</b>										11/26/12
<b>ICP-6010 - All possible metals</b>										
Iron	7439-89-6	LA-505-411	B	59.8		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		49100		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411		28.7		ug/L	1	4.0	20	11/29/12
Nickel	7440-02-0	LA-505-411		532		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		13800		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		52700		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		132		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		29.4		ug/L	1	5.0	25	11/29/12
Cobalt	7440-48-4	LA-505-411	B	7.70		ug/L	1	4.0	20	11/29/12
Copper	7440-50-8	LA-505-411	B	15.2		ug/L	1	4.0	20	11/29/12
Vanadium	7440-62-2	LA-505-411	B	8.20		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		1.65E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		808		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

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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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402010	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN59	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
<b>ICPMS Prep (W)</b>										
<b>ICP-2008 MS All possible metal</b>										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	11/27/12
Lead	7439-92-1	LA-505-412	BD	0.290		ug/L	2	0.10	1.0	11/27/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	11/27/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Tin	7440-31-5	LA-505-412	BD	0.720		ug/L	2	0.10	1.0	11/27/12
Arsenic	7440-38-2	LA-505-412	D	5.68		ug/L	2	0.40	4.0	11/27/12
Selenium	7782-49-2	LA-505-412	BD	11.2		ug/L	2	2.0	20	11/27/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402011	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN34	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
<b>ICPAES Prep (W)</b>										11/26/12
<b>ICP-6010 - All possible metals</b>										
Iron	7439-89-6	LA-505-411		142		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		68900		ug/L	1	4.0	20	11/29/12
Manganese	7439-96-5	LA-505-411		91.0		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		19000		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		1.37E5		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		271		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		54.2		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	U	<5.0		ug/L	1	5.0	25	11/29/12
Zinc	7440-66-6	LA-505-411		621		ug/L	1	5.0	25	11/29/12
Calcium	7440-70-2	LA-505-411		2.44E5		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		1290		ug/L	1	9.0	45	11/29/12

MDL = Minimum Detection Limit

B - Analyte < the PQL(or EQL)but >= the IDL/MDL(Inorganic)

U - Analyzed for but not detected above limiting criteria.

RQ = Result Qualifier

C - Analyte was found in the Associated Blank. (Inorganic)

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

TP Err = Total Propagated Error

D - Analyte was reported at a secondary dilution factor.

PQL is equivalent to Estimated Quantitation Limit (EQL)

DF = Dilution Factor

E - Analyte is an estimate, see comment section.

o - LCS recovery outside established laboratory acceptance limits.

+ - Indicates more than nine qualifier

N - MS and/or MSD recovery outside control limits.

o - LCS recovery outside established laboratory acceptance limits.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

**Sample #** 121402011  
**SAF#** W13-011  
**Sample ID** B2MN34

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

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
<b>ICPMS Prep (W)</b>										
<b>ICP-2008 MS All possible metal</b>										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	11/27/12
Lead	7439-92-1	LA-505-412	D	1.12		ug/L	2	0.10	1.0	11/27/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	11/27/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Tin	7440-31-5	LA-505-412	BD	0.766		ug/L	2	0.10	1.0	11/27/12
Arsenic	7440-38-2	LA-505-412	BD	3.41		ug/L	2	0.40	4.0	11/27/12
Selenium	7782-49-2	LA-505-412	BD	11.1		ug/L	2	2.0	20	11/27/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402012	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN54	<b>Received</b>	11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>ICPAES Prep (W)</b>										11/26/12
<b>ICP-6010 - All possible metals</b>										
Iron	7439-89-6	LA-505-411	B	40.8		ug/L	1	19	95	11/29/12
Magnesium	7439-95-4	LA-505-411		24800		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	6.60		ug/L	1	4.0	20	11/29/12
Potassium	7440-09-7	LA-505-411		9760		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		32000		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		92.6		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	6.40		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	11.9		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		84900		ug/L	1	49	240	11/29/12
Strontium	7440-24-6	LA-505-411		407		ug/L	1	9.0	45	11/29/12

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

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D - Analyte was reported at a secondary dilution factor.

PQL is equivalent to Estimated Quantitation Limit (EQL)

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E - Analyte is an estimate, see comment section.

o - LCS recovery outside established laboratory acceptance limits.

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Inorganic

**Group #** WSCF121402

<b>Sample #</b>	121402012	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN54	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Beryllium	7440-41-7	LA-505-411	U	<4.0		ug/L	1	4.0	20	11/29/12
<b>ICPMS Prep (W)</b>										
<b>ICP-2008 MS All possible metal</b>										
Antimony	7440-36-0	LA-505-412	UD	<0.60		ug/L	2	0.60	6.0	11/27/12
Lead	7439-92-1	LA-505-412	BD	0.530		ug/L	2	0.10	1.0	11/27/12
Mercury	7439-97-6	LA-505-412	UD	<0.10		ug/L	2	0.10	0.40	11/27/12
Thallium	7440-28-0	LA-505-412	UD	<0.10		ug/L	2	0.10	1.0	11/27/12
Tin	7440-31-5	LA-505-412	BD	0.914		ug/L	2	0.10	1.0	11/27/12
Arsenic	7440-38-2	LA-505-412	D	5.85		ug/L	2	0.40	4.0	11/27/12
Selenium	7782-49-2	LA-505-412	BD	8.49		ug/L	2	2.0	20	11/27/12

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PQL is equivalent to Estimated Quantitation Limit (EQL)

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
<b>Preparation for 8270 (W) CLE</b>										11/07/12
<b>SW-846 8270D Semivolatiles</b>										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
n-Nitrosomethylamin e	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/14/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/14/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/14/12
N-	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Nitrosodiphenylamin/Di phenyl Methapyrilene	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
<b>Preparation for 8270 (W) CLE</b>										11/07/12
<b>SW-846 8270D Semivolatiles</b>										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
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**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
n-Nitrosomethylamin e	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/14/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/14/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/14/12
N- Nitrosodiphenylamin/Di phenyl Methapyrilene	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
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**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
<b>Preparation for 8270 (W) CLE</b>										11/07/12
<b>SW-846 8270D Semivolatiles</b>										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
n-Nitrosomethylamin e	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/14/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/14/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/14/12
N-	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Nitrosodiphenylamin/Di phenyl Methapyrilene	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
<b>Preparation for 8270 (W) CLE</b>										11/07/12
<b>SW-846 8270D Semivolatiles</b>										
4-Nitrophenol	100-02-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenol	108-95-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pyrene	129-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitroso-di-n-propylamine	621-64-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acenaphthene	83-32-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachlorophenol	87-86-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Chlorophenol	95-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Nitroaniline	100-01-6	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
4-Bromophenyl-phenylether	101-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dimethylphenol	105-67-9	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
4-Chloroaniline	106-47-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Bis(1-Chloro-2-propyl)ether	108-60-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Chloroethyl)ether	111-44-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Chloroethoxy)methane	111-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Di-n-octylphthalate	117-84-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorobenzene	118-74-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Anthracene	120-12-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dichlorophenol	120-83-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethylphthalate	131-11-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dibenzofuran	132-64-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(g,h,i)perylene	191-24-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Indeno(1,2,3-cd)pyrene	193-39-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(b)fluoranthene	205-99-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Fluoranthene	206-44-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(k)fluoranthene	207-08-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acenaphthylene	208-96-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Chrysene	218-01-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Benzo(a)pyrene	50-32-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4-Dinitrophenol	51-28-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dibenzo(a,h)anthracene	53-70-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4,6-Dinitro-2-methylphenol	534-52-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3-Dichlorobenzene	541-73-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzo(a)anthracene	56-55-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,6-Dinitrotoluene	606-20-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Chlorophenyl-phenylether	7005-72-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorocyclopentadiene	77-47-4	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
Isophorone	78-59-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Diethyl phthalate	84-66-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Di-n-butylphthalate	84-74-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenanthrene	85-01-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Butylbenzylphthalate	85-68-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Fluorene	86-73-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Carbazole	86-74-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachlorobutadiene	87-68-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
2-Nitroaniline	88-74-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Nitrophenol	88-75-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Naphthalene	91-20-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methylnaphthalene	91-57-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Chloronaphthalene	91-58-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3,3-Dichlorobenzidine	91-94-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methylphenol	95-48-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2-Dichlorobenzene	95-50-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4,5-Trichlorophenol	95-95-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Nitrobenzene	98-95-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3-Nitroaniline	99-09-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3 & 4 Methylphenol, Total	65794-96-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachloroethane	67-72-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,4,6-Trichlorophenol	88-06-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Benzyl alcohol	100-51-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Tributyl phosphate	126-73-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Naphthylamine	91-59-8	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
Pyridine	110-86-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosopiperidine	100-75-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
n-Nitrosomethylamin e	10595-95-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
p-Phenylenediamine	106-50-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Picoline	109-06-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
3,3-Dimethylbenzidine	119-93-7	LA-523-456	U	<4		ug/L	1	4	6	11/14/12
Isosafrole	120-58-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phentermine	122-09-8	LA-523-456	U	<5		ug/L	1	5	9	11/14/12
1,4-Dioxane	123-91-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,4-Naphthoquinone	130-15-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1-Naphthylamine	134-32-7	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
Aramite	140-57-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Kepone	143-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Hexachloropropene	1888-71-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Diallate	2303-16-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pronamide	23950-58-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Isodrin	465-73-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Chlorobenzilate	510-15-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Acetylaminofluorene	53-96-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosodiethylamine	55-18-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
3-Methylcholanthrene	56-49-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Nitroquinoline-1-oxide	56-57-5	LA-523-456	U	<0.9		ug/L	1	0.9	2	11/14/12
7,12-Dimethylbenz(a)anthracene	57-97-6	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2,3,4,6-Tetrachlorophenol	58-90-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosomorpholine	59-89-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachlorobenzene	608-93-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Phenacetin	62-44-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Ethyl methanesulfonate	62-50-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Aniline	62-53-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosodimethylamine	62-75-9	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Methyl methanesulfonate	66-27-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachloroethane	76-01-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Pentachloronitrobenzene	82-68-8	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
2,6-Dichlorophenol	87-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Dinoseb(..dinitromethyl phenol)	88-85-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
4-Aminobiphenyl	92-67-1	LA-523-456	U	<1		ug/L	1	1	2	11/14/12
n-Nitrosodibutylamine	924-16-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
n-Nitrosopyrrolidine	930-55-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Safrole	94-59-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
o-Toluidine	95-53-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,2,4,5-Tetrachlorobenzene	95-94-3	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Acetophenone	98-86-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3,5-Trinitrobenzene	99-35-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
2-Methyl-5-nitroaniline	99-55-8	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
1,3-Dinitrobenzene	99-65-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
O,O,O-Triethylthiophosphate	126-68-1	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Parathion	56-38-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethylaminoazobenzene	60-11-7	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Dimethoate	60-51-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Thionazin	297-97-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Methyl parathion	298-00-0	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Phorate	298-02-2	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Disulfoton	298-04-4	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Sulfotep	3689-24-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
Famfur	52-85-7	LA-523-456	U	<5		ug/L	1	5	9	11/14/12
N- Nitrosodiphenylamin/Di phenyl Methapyrilene	DPA+NNDPA	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12
	91-80-5	LA-523-456	U	<0.9		ug/L	1	0.9	1	11/14/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
<b>Preparation for 8260B (W)</b>										11/08/12
<b>SW-846 8260B Volatiles</b>										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

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J - Analyte < PQL (or EQL) >= MDL.

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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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

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

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

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

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o - LCS recovery outside established laboratory acceptance limits.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402005	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN71	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/09/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/09/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/09/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

MDL = Minimum Detection Limit

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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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

**Sample #** 121402005  
**SAF#** W13-011  
**Sample ID** B2MN71

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

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	11/09/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

**Sample #** 121402006  
**SAF#** W13-011  
**Sample ID** B2MN57

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>Preparation for 8260B (W)</b>										11/08/12
<b>SW-846 8260B Volatiles</b>										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

MDL = Minimum Detection Limit

B - Analyte was detected in both the BLANK and SAMPLE

T - GC/MS or N - Non GC/MS - MS/MSD recovery outside control limits

RQ = Result Qualifier

D - Analyte was reported at a secondary dilution factor.

U - Analyzed for but not detected above limiting criteria.

TP Err = Total Propagated Error

E - The calibration exceeds the calibration range (GC/MS).

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

DF = Dilution Factor

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o - LCS recovery outside established laboratory acceptance limits.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

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

MDL = Minimum Detection Limit

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402006	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN57	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/09/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/09/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/09/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

**Sample #** 121402006  
**SAF#** W13-011  
**Sample ID** B2MN57

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

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	11/09/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
<b>Preparation for 8260B (W)</b>										11/08/12
<b>SW-846 8260B Volatiles</b>										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

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E - The calibration exceeds the calibration range (GC/MS).

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

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N - Presumed evidence based on MS library search(GC/MS only)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

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

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

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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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/09/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/09/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/09/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

MDL = Minimum Detection Limit

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T - GC/MS or N - Non GC/MS - MS/MSD recovery outside control limits

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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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402007	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN32	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

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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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

**Sample #** 121402008  
**SAF#** W13-011  
**Sample ID** B2MN52

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>Preparation for 8260B (W)</b>										11/08/12
<b>SW-846 8260B Volatiles</b>										
1,1-Dichloroethene	75-35-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Trichloroethene	79-01-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Benzene	71-43-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Toluene	108-88-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Chlorobenzene	108-90-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,1-Dichloroethane	75-34-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Ethylbenzene	100-41-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Styrene	100-42-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dichloroethane	107-06-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methyl isobutyl ketone	108-10-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Dibromochloromethane	124-48-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Tetrachloroethene	127-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Total Xylenes	1330-20-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Total 1,2-Dichloroethene	540-59-0	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

MDL = Minimum Detection Limit

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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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

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

MDL = Minimum Detection Limit

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Trichlorofluoromethane	75-69-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
trans-1,2-Dichloroethene	156-60-5	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acetonitrile	75-05-8	LA-523-455	U	<2		ug/L	1	2	10	11/09/12
cis-1,2-Dichloroethene	156-59-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Propionitrile	107-12-0	LA-523-455	U	<2		ug/L	1	2	10	11/09/12
Isobutyl alcohol	78-83-1	LA-523-455	U	<200		ug/L	1	200	1.E3	11/09/12
Iodomethane	74-88-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,1,1,2-Tetrachloroethane	630-20-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2,3-Trichloropropane	96-18-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dibromo-3-chloropropane	96-12-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
1,2-Dibromoethane	106-93-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acrolein	107-02-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Acrylonitrile	107-13-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Allyl chloride	107-05-1	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methylene bromide	74-95-3	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Dichlorodifluoromethane	75-71-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Ethyl methacrylate	97-63-2	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

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PQL is equivalent to Estimated Quantitation Limit (EQL)

o - LCS recovery outside established laboratory acceptance limits.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

<b>Sample #</b>	121402008	<b>Matrix</b>	WATER
<b>SAF#</b>	W13-011	<b>Sampled</b>	11/02/12
<b>Sample ID</b>	B2MN52	<b>Received</b>	11/02/12

<b>Test Performed</b>	<b>CAS #</b>	<b>Method</b>	<b>RQ</b>	<b>Result</b>	<b>TP Err</b>	<b>Units</b>	<b>DF</b>	<b>MDL</b>	<b>PQL</b>	<b>Analyzed</b>
Methacrylonitrile	126-98-7	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Methyl methacrylate	80-62-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Trans-1,4-dichloro-2-butene	110-57-6	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Vinyl acetate	108-05-4	LA-523-455	U	<1		ug/L	1	1	5	11/09/12
Chloroprene	126-99-8	LA-523-455	U	<1		ug/L	1	1	5	11/09/12

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D - Analyte was reported at a secondary dilution factor.

E - The calibration exceeds the calibration range (GC/MS).

J - Analyte < 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)

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Wet Chemistry

**Group #** WSCF121402

**Sample #** 121402005  
**SAF#** W13-011  
**Sample ID** B2MN71

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>Preparation for Cyanide (W)</b>										11/13/12
<b>Cyanide (W) by Midi/Spectrophotometer</b>										11/06/12
Cyanide	57-12-5	LA-695-402		98.8		ug/L	1	4.0	20	11/13/12
<b>Total Alkalinity as mg/L CaCO<sub>3</sub> (Water)</b>										11/06/12
Total Alkalinity as CaCO <sub>3</sub>	ALKALINITY	LA-531-411		110		mg/L	1	1	10	

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.

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Wet Chemistry

**Group #** WSCF121402

**Sample #** 121402006  
**SAF#** W13-011  
**Sample ID** B2MN57

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>Preparation for Cyanide (W)</b>										11/13/12
<b>Cyanide (W) by Midi/Spectrophotometer</b>										11/06/12
Cyanide	57-12-5	LA-695-402		73.3		ug/L	1	4.0	20	11/13/12
<b>Total Alkalinity as mg/L CaCO<sub>3</sub> (Water)</b>										11/06/12
Total Alkalinity as CaCO <sub>3</sub>	ALKALINITY	LA-531-411		110		mg/L	1	1	10	

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

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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)

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REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Wet Chemistry

**Group #** WSCF121402

**Sample #** 121402007  
**SAF#** W13-011  
**Sample ID** B2MN32

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>Preparation for Cyanide (W)</b>										11/13/12
<b>Cyanide (W) by Midi/Spectrophotometer</b>										11/06/12
Cyanide	57-12-5	LA-695-402		104		ug/L	1	4.0	20	11/13/12
<b>Total Alkalinity as mg/L CaCO<sub>3</sub> (Water)</b>										11/06/12
Total Alkalinity as CaCO <sub>3</sub>	ALKALINITY	LA-531-411		92		mg/L	1	1	10	

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.

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**Attention** Scot Fitzgerald  
**Department** Wet Chemistry

**Group #** WSCF121402

**Sample #** 121402008  
**SAF#** W13-011  
**Sample ID** B2MN52

**Matrix** WATER  
**Sampled** 11/02/12  
**Received** 11/02/12

Test Performed	CAS #	Method	RQ	Result	TP Err	Units	DF	MDL	PQL	Analyzed
<b>Preparation for Cyanide (W)</b>										11/13/12
<b>Cyanide (W) by Midi/Spectrophotometer</b>										11/06/12
Cyanide	57-12-5	LA-695-402		62.9		ug/L	1	4.0	20	11/13/12
<b>Total Alkalinity as mg/L CaCO<sub>3</sub> (Water)</b>										11/06/12
Total Alkalinity as CaCO <sub>3</sub>	ALKALINITY	LA-531-411		110		mg/L	1	1	10	

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.

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Attention Scot Fitzgerald  
 Department Inorganic

Group # WSCF121402

Analytical Batch 209719 (QC Batch: 209719) Test Anions by Ion Chromatography (Water)  
 Associated Samples 121402001, 121402002, 121402003

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
<b>BLANK</b>										
<b>QC Sample #84375</b>										
Fluoride	16984-48-8	<0.023	ug/mL					U		11/02/12
Chloride	16887-00-6	<0.058	ug/mL					U		11/02/12
Nitrite-N	NO2-N	<0.019	ug/mL					U		11/02/12
Nitrate-N	NO3-N	<0.019	ug/mL					U		11/02/12
Sulfate	14808-79-8	<0.11	ug/mL					U		11/02/12
<b>LCS</b>										
<b>QC Sample #84376</b>										
Fluoride	16984-48-8	0.930	ug/mL	93.9	90 - 110					11/02/12
Chloride	16887-00-6	1.89	ug/mL	95.6	90 - 110					11/02/12
Nitrite-N	NO2-N	0.953	ug/mL	97.4	90 - 110					11/02/12
Nitrate-N	NO3-N	0.798	ug/mL	90.1	90 - 110					11/02/12
Sulfate	14808-79-8	3.59	ug/mL	91.6	90 - 110					11/02/12
<b>DUP</b>										
<b>QC Sample #84377</b>										
<b>Original 121400003</b>										
Fluoride	16984-48-8	5.15	ug/mL			2.00	20	D		11/02/12
Chloride	16887-00-6	12.2	ug/mL			1.60	20	D		11/02/12
Nitrite-N	NO2-N	<0.038	ug/mL			0.00	20	UD		11/02/12
Nitrate-N	NO3-N	29.3	ug/mL			0.40	20	D		11/02/12

\* - QC result out of range

n/a - Not Applicable

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Sulfate	14808-79-8	42.1	ug/mL				0.00	20	D	11/02/12
<b>MS</b>										
<b>QC Sample #84378</b>										
<b>Original 121400003</b>										
Fluoride	16984-48-8	1.12	ug/mL	112.1	80 - 120				D	11/02/12
Chloride	16887-00-6	1.60	ug/mL	79.8	80 - 120				DX	11/02/12
Nitrite-N	NO2-N	0.777	ug/mL	78.6	80 - 120				DN	11/02/12
Nitrate-N	NO3-N	0.337	ug/mL	37.7	80 - 120				DX	11/02/12
Sulfate	14808-79-8	1.13	ug/mL	28.6	80 - 120				DX	11/02/12
<b>MSD</b>										
<b>QC Sample #84379</b>										
<b>Original 121400003</b>										
<b>Paired 84378</b>										
Fluoride	16984-48-8	1.18	ug/mL	117.5	80 - 120	0.90	20		D	11/02/12
Chloride	16887-00-6	2.27	ug/mL	113.4	80 - 120	4.80	20		DX	11/02/12
Nitrite-N	NO2-N	0.879	ug/mL	88.9	80 - 120	12.30	20		D	11/02/12
Nitrate-N	NO3-N	0.548	ug/mL	61.2	80 - 120	0.70	20		DX	11/02/12
Sulfate	14808-79-8	3.46	ug/mL	87.3	80 - 120	5.20	20		DX	11/02/12

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Inorganic

Group # WSCF121402

Analytical Batch 209834 (QC Batch: 209834) Test Anions by Ion Chromatography (Water)  
 Associated Samples 121402004

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
<b>BLANK</b>										
<b>QC Sample #84464</b>										
Fluoride	16984-48-8	<0.023	ug/mL					U		11/02/12
Chloride	16887-00-6	<0.058	ug/mL					U		11/02/12
Nitrite-N	NO2-N	<0.019	ug/mL					U		11/02/12
Nitrate-N	NO3-N	<0.019	ug/mL					U		11/02/12
Sulfate	14808-79-8	<0.11	ug/mL					U		11/02/12
<b>LCS</b>										
<b>QC Sample #84465</b>										
Fluoride	16984-48-8	0.919	ug/mL	92.8	90 - 110					11/02/12
Chloride	16887-00-6	1.87	ug/mL	94.7	90 - 110					11/02/12
Nitrite-N	NO2-N	0.959	ug/mL	98	90 - 110					11/02/12
Nitrate-N	NO3-N	0.868	ug/mL	98	90 - 110					11/02/12
Sulfate	14808-79-8	3.58	ug/mL	91.2	90 - 110					11/02/12
<b>DUP</b>										
<b>QC Sample #84466</b>										
<b>Original 121400001</b>										
Fluoride	16984-48-8	4.98	ug/mL			4.20	20	D		11/02/12
Chloride	16887-00-6	14.3	ug/mL			6.10	20	D		11/02/12
Nitrite-N	NO2-N	<0.038	ug/mL			0.00	20	UD		11/02/12
Nitrate-N	NO3-N	30.7	ug/mL			0.20	20	D		11/02/12

\* - QC result out of range

n/a - Not Applicable

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Sulfate	14808-79-8	46.5	ug/mL				0.10	20	D	11/02/12
<b>MS</b>										
<b>QC Sample #84467</b>										
<b>Original 121400001</b>										
Fluoride	16984-48-8	1.19	ug/mL	118.6	80 - 120				DX	11/03/12
Chloride	16887-00-6	2.77	ug/mL	138.5	80 - 120				DX	11/03/12
Nitrite-N	NO2-N	0.863	ug/mL	87.3	80 - 120				D	11/03/12
Nitrate-N	NO3-N	0.349	ug/mL	39.1	80 - 120				DX	11/03/12
Sulfate	14808-79-8	2.48	ug/mL	62.7	80 - 120				DX	11/03/12
<b>MSD</b>										
<b>QC Sample #84468</b>										
<b>Original 121400001</b>										
<b>Paired 84467</b>										
Fluoride	16984-48-8	1.25	ug/mL	125.4	80 - 120	1.10	20		DX	11/03/12
Chloride	16887-00-6	2.09	ug/mL	104.7	80 - 120	4.30	20		DX	11/03/12
Nitrite-N	NO2-N	0.765	ug/mL	77.5	80 - 120	12.00	20		DN	11/03/12
Nitrate-N	NO3-N	-0.274	ug/mL	-30.7	80 - 120	2.00	20		DX	11/03/12
Sulfate	14808-79-8	0.0652	ug/mL	1.6	80 - 120	5.10	20		DX	11/03/12

\* - QC result out of range

n/a - Not Applicable

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Analytical Batch 209843 (QC Batch: 209843) Test Anions by Ion Chromatography (Water)  
 Associated Samples 121402003

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed		
<b>BLANK</b>										<b>QC Sample #84506</b>		
Nitrate-N LCS	NO3-N		<0.019	ug/mL					U	11/05/12		
			<b>QC Sample #84507</b>									
Nitrate-N DUP	NO3-N		0.918	ug/mL	103.6	90 - 110				11/05/12		
			<b>QC Sample #84508</b>									
			<b>Original 121407001</b>									
Nitrate-N MS	NO3-N		6.01	ug/mL			2.30	20	D	11/05/12		
			<b>QC Sample #84509</b>									
			<b>Original 121407001</b>									
Nitrate-N MSD	NO3-N		0.720	ug/mL	80.6	80 - 120			D	11/05/12		
			<b>QC Sample #84510</b>									
			<b>Original 121407001</b>									
Nitrate-N	NO3-N		0.738	ug/mL	82.5	80 - 120	0.30	20	D	11/05/12		
<b>Paired 84509</b>												

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Organic, Volatiles

Group # WSCF121402

Analytical Batch 209924 (QC Batch: 209922) Test SW-846 8260B Volatiles  
 Associated Samples 121402005, 121402006, 121402007, 121402008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
<b>BLANK</b>										<b>QC Sample #84692</b>
1,1-Dichloroethene	75-35-4		<1	ug/L				U		11/08/12
Trichloroethene	79-01-6		<1	ug/L				U		11/08/12
Benzene	71-43-2		<1	ug/L				U		11/08/12
Toluene	108-88-3		<1	ug/L				U		11/08/12
Chlorobenzene	108-90-7		<1	ug/L				U		11/08/12
1,1-Dichloroethane	75-34-3		<1	ug/L				U		11/08/12
Ethylbenzene	100-41-4		<1	ug/L				U		11/08/12
Styrene	100-42-5		<1	ug/L				U		11/08/12
cis-1,3-Dichloropropene	10061-01-5		<1	ug/L				U		11/08/12
trans-1,3-Dichloropropene	10061-02-6		<1	ug/L				U		11/08/12
1,2-Dichloroethane	107-06-2		<1	ug/L				U		11/08/12
Methyl isobutyl ketone	108-10-1		<1	ug/L				U		11/08/12
Dibromochloromethane	124-48-1		<1	ug/L				U		11/08/12
Tetrachloroethene	127-18-4		<1	ug/L				U		11/08/12
Total Xylenes	1330-20-7		<1	ug/L				U		11/08/12

\* - QC result out of range

n/a - Not Applicable

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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	11/08/12
Carbon tetrachloride	56-23-5		<1	ug/L				U	11/08/12
2-Hexanone	591-78-6		<1	ug/L				U	11/08/12
Acetone	67-64-1		<1	ug/L				U	11/08/12
Chloroform	67-66-3		<1	ug/L				U	11/08/12
1,1,1-Trichloroethane	71-55-6		<1	ug/L				U	11/08/12
Bromomethane	74-83-9		<1	ug/L				U	11/08/12
Chloromethane	74-87-3		<1	ug/L				U	11/08/12
Chloroethane	75-00-3		<1	ug/L				U	11/08/12
Vinyl chloride	75-01-4		<1	ug/L				U	11/08/12
Methylene chloride	75-09-2		<1	ug/L				U	11/08/12
Carbon disulfide	75-15-0		<1	ug/L				U	11/08/12
Bromoform	75-25-2		<1	ug/L				U	11/08/12
Bromodichloromethane	75-27-4		<1	ug/L				U	11/08/12
1,2-Dichloropropane	78-87-5		<1	ug/L				U	11/08/12
Methyl ethyl ketone	78-93-3		<1	ug/L				U	11/08/12
1,1,2-Trichloroethane	79-00-5		<1	ug/L				U	11/08/12
1,1,2,2-Tetrachloroethane	79-34-5		<1	ug/L				U	11/08/12
1-Butanol	71-36-3		<100	ug/L				U	11/08/12
Tetrahydrofuran	109-99-9		<2	ug/L				U	11/08/12
Trichlorofluoromethane	75-69-4		<1	ug/L				U	11/08/12

\* - QC result out of range

n/a - Not Applicable

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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	11/08/12
Acetonitrile	75-05-8		<2	ug/L				U	11/08/12
cis-1,2-Dichloroethene	156-59-2		<1	ug/L				U	11/08/12
Propionitrile	107-12-0		<2	ug/L				U	11/08/12
Isobutyl alcohol	78-83-1		<200	ug/L				U	11/08/12
Iodomethane	74-88-4		<1	ug/L				U	11/08/12
1,1,1,2-Tetrachloroethane	630-20-6		<1	ug/L				U	11/08/12
1,2,3-Trichloropropane	96-18-4		<1	ug/L				U	11/08/12
1,2-Dibromo-3-chloropropane	96-12-8		<1	ug/L				U	11/08/12
1,2-Dibromoethane	106-93-4		<1	ug/L				U	11/08/12
Acrolein	107-02-8		<1	ug/L				U	11/08/12
Acrylonitrile	107-13-1		<1	ug/L				U	11/08/12
Allyl chloride	107-05-1		<1	ug/L				U	11/08/12
Methylene bromide	74-95-3		<1	ug/L				U	11/08/12
Dichlorodifluoromethane	75-71-8		<1	ug/L				U	11/08/12
Ethyl methacrylate	97-63-2		<1	ug/L				U	11/08/12
Methacrylonitrile	126-98-7		<1	ug/L				U	11/08/12
Methyl methacrylate	80-62-6		<1	ug/L				U	11/08/12
Trans-1,4-dichloro-2-butene	110-57-6		<1	ug/L				U	11/08/12
Vinyl acetate	108-05-4		<1	ug/L				U	11/08/12

\* - QC result out of range

n/a - Not Applicable

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Chloroprene	126-99-8	<1		ug/L					U	11/08/12
<b>LCS</b>										
			<b>QC Sample #84693</b>							
1,1-Dichloroethene	75-35-4	22		ug/L	89.5	75 - 125				11/08/12
Trichloroethene	79-01-6	26		ug/L	103.4	75 - 125				11/08/12
Benzene	71-43-2	26		ug/L	105.2	75 - 125				11/08/12
Toluene	108-88-3	26		ug/L	105.4	75 - 125				11/08/12
Chlorobenzene	108-90-7	26		ug/L	103.3	75 - 125				11/08/12
1,1-Dichloroethane	75-34-3	25		ug/L	99.8	75 - 125				11/08/12
Ethylbenzene	100-41-4	27		ug/L	109.3	75 - 125				11/08/12
Styrene	100-42-5	28		ug/L	110	75 - 125				11/08/12
trans-1,3-Dichloropropene	10061-02-6	27		ug/L	109	75 - 125				11/08/12
1,2-Dichloroethane	107-06-2	26		ug/L	105.4	75 - 125				11/08/12
1,1,1-Trichloroethane	71-55-6	26		ug/L	102.4	75 - 125				11/08/12
Dibromochloromethane	124-48-1	26		ug/L	105.3	75 - 125				11/08/12
Carbon disulfide	75-15-0	21		ug/L	84.6	75 - 125				11/08/12
Bromoform	75-25-2	28		ug/L	110.2	75 - 125				11/08/12
Bromodichloromethane	75-27-4	27		ug/L	108	75 - 125				11/08/12
1,2-Dichloropropane	78-87-5	27		ug/L	107	75 - 125				11/08/12
1,1,2-Trichloroethane	79-00-5	26		ug/L	105.6	75 - 125				11/08/12
1,1,2,2-Tetrachloroethane	79-34-5	27		ug/L	107.3	75 - 125				11/08/12

\* - QC result out of range

n/a - Not Applicable

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
trans-1,2-Dichloroethene	156-60-5	25		ug/L	100.6	75 - 125				11/08/12
cis-1,2-Dichloroethene	156-59-2	26		ug/L	103.6	75 - 125				11/08/12
<b>MS</b>										
<b>QC Sample #84694</b>										
<b>Original 121397007</b>										
1,1-Dichloroethene	75-35-4	22		ug/L	88	75 - 125				11/08/12
Trichloroethene	79-01-6	26		ug/L	104.5	75 - 125				11/08/12
Benzene	71-43-2	26		ug/L	103.9	75 - 125				11/08/12
Toluene	108-88-3	27		ug/L	106.8	75 - 125				11/08/12
Chlorobenzene	108-90-7	26		ug/L	103.7	75 - 125				11/08/12
1,1-Dichloroethane	75-34-3	25		ug/L	98.2	75 - 125				11/08/12
Ethylbenzene	100-41-4	27		ug/L	109.4	75 - 125				11/08/12
Styrene	100-42-5	28		ug/L	110.6	75 - 125				11/08/12
trans-1,3-Dichloropropene	10061-02-6	27		ug/L	108.6	75 - 125				11/08/12
1,2-Dichloroethane	107-06-2	26		ug/L	103.2	75 - 125				11/08/12
1,1,1-Trichloroethane	71-55-6	26		ug/L	102.3	75 - 125				11/08/12
Dibromochloromethane	124-48-1	26		ug/L	104.2	75 - 125				11/08/12
Carbon disulfide	75-15-0	20		ug/L	81.6	75 - 125				11/08/12
Bromoform	75-25-2	27		ug/L	107.5	75 - 125				11/08/12
Bromodichloromethane	75-27-4	27		ug/L	108.6	75 - 125				11/08/12
1,2-Dichloropropane	78-87-5	27		ug/L	107	75 - 125				11/08/12
1,1,2-Trichloroethane	79-00-5	26		ug/L	104.6	75 - 125				11/08/12

\* - QC result out of range

n/a - Not Applicable

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,1,2,2-Tetrachloroethane	79-34-5	26		ug/L	104.8	75 - 125				11/08/12
trans-1,2-Dichloroethene	156-60-5	25		ug/L	99	75 - 125				11/08/12
cis-1,2-Dichloroethene	156-59-2	25		ug/L	101.2	75 - 125				11/08/12
<b>MSD</b>										
<b>QC Sample #84695</b>										
Original    121397007										
Paired    84694										
1,1-Dichloroethene	75-35-4	22		ug/L	89.9	75 - 125	2.20	20		11/08/12
Trichloroethene	79-01-6	26		ug/L	104.3	75 - 125	0.20	20		11/08/12
Benzene	71-43-2	26		ug/L	105.3	75 - 125	1.30	20		11/08/12
Toluene	108-88-3	27		ug/L	107.7	75 - 125	0.80	20		11/08/12
Chlorobenzene	108-90-7	26		ug/L	104	75 - 125	0.30	20		11/08/12
1,1-Dichloroethane	75-34-3	25		ug/L	100.7	75 - 125	2.50	20		11/08/12
Ethylbenzene	100-41-4	28		ug/L	110.8	75 - 125	1.20	20		11/08/12
Styrene	100-42-5	27		ug/L	109.6	75 - 125	0.90	20		11/08/12
trans-1,3-Dichloropropene	10061-02-6	27		ug/L	107	75 - 125	1.50	20		11/08/12
1,2-Dichloroethane	107-06-2	26		ug/L	102.3	75 - 125	0.80	20		11/08/12
1,1,1-Trichloroethane	71-55-6	26		ug/L	103	75 - 125	0.70	20		11/08/12
Dibromochloromethane	124-48-1	26		ug/L	104.2	75 - 125	0.00	20		11/08/12
Carbon disulfide	75-15-0	21		ug/L	82.7	75 - 125	1.40	20		11/08/12
Bromoform	75-25-2	26		ug/L	104.2	75 - 125	3.20	20		11/08/12
Bromodichloromethane	75-27-4	27		ug/L	107.8	75 - 125	0.70	20		11/08/12
1,2-Dichloropropane	78-87-5	26		ug/L	105.9	75 - 125	1.00	20		11/08/12

\* - QC result out of range

n/a - Not Applicable

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**Quality Control Report****DECEMBER 19, 2012****REVISION 1****Attention** Scot Fitzgerald  
**Department** Organic, Volatiles**Group #**

WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,1,2-Trichloroethane	79-00-5	26		ug/L	104.1	75 - 125	0.50	20		11/08/12
1,1,2,2-Tetrachloroethane	79-34-5	26		ug/L	103.3	75 - 125	1.50	20		11/08/12
trans-1,2-Dichloroethene	156-60-5	25		ug/L	99.8	75 - 125	0.80	20		11/08/12
cis-1,2-Dichloroethene	156-59-2	26		ug/L	103.7	75 - 125	2.40	20		11/08/12

\* - QC result out of range

n/a - Not Applicable

**REVISED121402 -**

**Attention** Scot Fitzgerald  
**Department** Wet Chemistry

**Group #** WSCF121402

**Analytical Batch** 210120 (QC Batch: 210120)      **Test** Total Alkalinity as mg/L CaCO<sub>3</sub> (Water)  
**Associated Samples** 121402005, 121402006, 121402007, 121402008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed	
<b>LCS</b>										<b>QC Sample #84818</b>	
Total Alkalinity as CaCO <sub>3</sub>	ALKALINITY	98	mg/L	97.6	80 - 120					11/06/12	
<b>DUP</b>										<b>QC Sample #84819</b>	
		<b>Original 121401004</b>									
Total Alkalinity as CaCO <sub>3</sub>	ALKALINITY	95	mg/L				0.00	20		11/06/12	
<b>LCS</b>										<b>QC Sample #84820</b>	
Total Alkalinity as CaCO <sub>3</sub>	ALKALINITY	98	mg/L	97.5	80 - 120					11/06/12	
<b>LCS</b>										<b>QC Sample #84821</b>	
Total Alkalinity as CaCO <sub>3</sub>	ALKALINITY	98	mg/L	97.7	80 - 120					11/06/12	

\* - QC result out of range

n/a - Not Applicable

REVISED121402 -

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

**Analytical Batch** 210320 (QC Batch: 209883)      **Test** SW-846 8270D Semivolatiles  
**Associated Samples** 121402005, 121402006, 121402007, 121402008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
<b>BLANK</b>										<b>QC Sample #84672</b>
4-Nitrophenol	100-02-7		<1	ug/L				U		11/14/12
1,4-Dichlorobenzene	106-46-7		<1	ug/L				U		11/14/12
2,4-Dinitrotoluene	121-14-2		<1	ug/L				U		11/14/12
1,2,4-Trichlorobenzene	120-82-1		<1	ug/L				U		11/14/12
Phenol	108-95-2		<1	ug/L				U		11/14/12
Pyrene	129-00-0		<1	ug/L				U		11/14/12
4-Chloro-3-methylphenol	59-50-7		<1	ug/L				U		11/14/12
n-Nitroso-di-n-propylamine	621-64-7		<1	ug/L				U		11/14/12
Acenaphthene	83-32-9		<1	ug/L				U		11/14/12
Pentachlorophenol	87-86-5		<1	ug/L				U		11/14/12
2-Chlorophenol	95-57-8		<1	ug/L				U		11/14/12
4-Nitroaniline	100-01-6		<1	ug/L				U		11/14/12
4-Bromophenyl-phenylether	101-55-3		<1	ug/L				U		11/14/12
2,4-Dimethylphenol	105-67-9		<2	ug/L				U		11/14/12
4-Chloroaniline	106-47-8		<1	ug/L				U		11/14/12

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group #

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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	11/14/12
Bis-(2-Chloroethyl)ether	111-44-4		<1	ug/L				U	11/14/12
Bis-(2-Chloroethoxy)methane	111-91-1		<1	ug/L				U	11/14/12
Bis-(2-Ethylhexyl)phthalate	117-81-7		<1	ug/L				U	11/14/12
Di-n-octylphthalate	117-84-0		<1	ug/L				U	11/14/12
Hexachlorobenzene	118-74-1		<1	ug/L				U	11/14/12
Anthracene	120-12-7		<1	ug/L				U	11/14/12
2,4-Dichlorophenol	120-83-2		<1	ug/L				U	11/14/12
Dimethylphthalate	131-11-3		<1	ug/L				U	11/14/12
Dibenzofuran	132-64-9		<1	ug/L				U	11/14/12
Benzo(g,h,i)perylene	191-24-2		<1	ug/L				U	11/14/12
Indeno(1,2,3-cd)pyrene	193-39-5		<1	ug/L				U	11/14/12
Benzo(b)fluoranthene	205-99-2		<1	ug/L				U	11/14/12
Fluoranthene	206-44-0		<1	ug/L				U	11/14/12
Benzo(k)fluoranthene	207-08-9		<1	ug/L				U	11/14/12
Acenaphthylene	208-96-8		<1	ug/L				U	11/14/12
Chrysene	218-01-9		<1	ug/L				U	11/14/12
Benzo(a)pyrene	50-32-8		<1	ug/L				U	11/14/12
2,4-Dinitrophenol	51-28-5		<1	ug/L				U	11/14/12

\* - QC result out of range

n/a - Not Applicable

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Group #

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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	11/14/12
4,6-Dinitro-2-methylphenol	534-52-1		<1	ug/L				U	11/14/12
1,3-Dichlorobenzene	541-73-1		<1	ug/L				U	11/14/12
Benzo(a)anthracene	56-55-3		<1	ug/L				U	11/14/12
2,6-Dinitrotoluene	606-20-2		<1	ug/L				U	11/14/12
4-Chlorophenyl-phenylether	7005-72-3		<1	ug/L				U	11/14/12
Hexachlorocyclopentadiene	77-47-4		<1	ug/L				U	11/14/12
Isophorone	78-59-1		<1	ug/L				U	11/14/12
Diethyl phthalate	84-66-2		<1	ug/L				U	11/14/12
Di-n-butylphthalate	84-74-2		<1	ug/L				U	11/14/12
Phenanthrene	85-01-8		<1	ug/L				U	11/14/12
Butylbenzylphthalate	85-68-7		<1	ug/L				U	11/14/12
Fluorene	86-73-7		<1	ug/L				U	11/14/12
Carbazole	86-74-8		<1	ug/L				U	11/14/12
Hexachlorobutadiene	87-68-3		<1	ug/L				U	11/14/12
2-Nitroaniline	88-74-4		<1	ug/L				U	11/14/12
2-Nitrophenol	88-75-5		<1	ug/L				U	11/14/12
Naphthalene	91-20-3		<1	ug/L				U	11/14/12
2-Methylnaphthalene	91-57-6		<1	ug/L				U	11/14/12
2-Chloronaphthalene	91-58-7		<1	ug/L				U	11/14/12
3,3-Dichlorobenzidine	91-94-1		<1	ug/L				U	11/14/12

\* - QC result out of range

n/a - Not Applicable

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Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
2-Methylphenol	95-48-7		<1	ug/L				U	11/14/12
1,2-Dichlorobenzene	95-50-1		<1	ug/L				U	11/14/12
2,4,5-Trichlorophenol	95-95-4		<1	ug/L				U	11/14/12
Nitrobenzene	98-95-3		<1	ug/L				U	11/14/12
3-Nitroaniline	99-09-2		<1	ug/L				U	11/14/12
3 & 4 Methylphenol, Total	65794-96-9		<1	ug/L				U	11/14/12
Hexachloroethane	67-72-1		<1	ug/L				U	11/14/12
2,4,6-Trichlorophenol	88-06-2		<1	ug/L				U	11/14/12
Benzyl alcohol	100-51-6		<1	ug/L				U	11/14/12
Tributyl phosphate	126-73-8		<1	ug/L				U	11/14/12
2-Naphthylamine	91-59-8		<2	ug/L				U	11/14/12
Pyridine	110-86-1		<1	ug/L				U	11/14/12
n-Nitrosopiperidine	100-75-4		<1	ug/L				U	11/14/12
n-Nitrosomethylethylamine	10595-95-6		<1	ug/L				U	11/14/12
p-Phenylenediamine	106-50-3		<1	ug/L				U	11/14/12
2-Picoline	109-06-8		<1	ug/L				U	11/14/12
3,3-Dimethylbenzidine	119-93-7		<4	ug/L				U	11/14/12
Isosafrole	120-58-1		<1	ug/L				U	11/14/12
Phentermine	122-09-8		<5	ug/L				U	11/14/12
1,4-Dioxane	123-91-1		<1	ug/L				U	11/14/12
1,4-Naphthoquinone	130-15-4		<1	ug/L				U	11/14/12

\* - QC result out of range

n/a - Not Applicable

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Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
1-Naphthylamine	134-32-7		<2	ug/L				U	11/14/12
Aramite	140-57-8		<1	ug/L				U	11/14/12
Kepone	143-50-0		<1	ug/L				U	11/14/12
Hexachloropropene	1888-71-7		<1	ug/L				U	11/14/12
Diallate	2303-16-4		<1	ug/L				U	11/14/12
Pronamide	23950-58-5		<1	ug/L				U	11/14/12
Isodrin	465-73-6		<1	ug/L				U	11/14/12
Chlorobenzilate	510-15-6		<1	ug/L				U	11/14/12
2-Acetylaminofluorene	53-96-3		<1	ug/L				U	11/14/12
n-Nitrosodiethylamine	55-18-5		<1	ug/L				U	11/14/12
3-Methylcholanthrene	56-49-5		<1	ug/L				U	11/14/12
4-Nitroquinoline-1-oxide	56-57-5		<1	ug/L				U	11/14/12
7,12-Dimethylbenz(a)anthracene	57-97-6		<1	ug/L				U	11/14/12
2,3,4,6-Tetrachlorophenol	58-90-2		<1	ug/L				U	11/14/12
n-Nitrosomorpholine	59-89-2		<1	ug/L				U	11/14/12
Pentachlorobenzene	608-93-5		<1	ug/L				U	11/14/12
Phenacetin	62-44-2		<1	ug/L				U	11/14/12
Ethyl methanesulfonate	62-50-0		<1	ug/L				U	11/14/12
Aniline	62-53-3		<1	ug/L				U	11/14/12
n-Nitrosodimethylamine	62-75-9		<1	ug/L				U	11/14/12

\* - QC result out of range

n/a - Not Applicable

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 Department Organic, Semivolatiles

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Analyte	CAS #	Original Found	QC Found	Units	% Recov Limits	RPD	RPD Limit	RQ	Analyzed
Methyl methanesulfonate	66-27-3		<1	ug/L				U	11/14/12
Pentachloroethane	76-01-7		<1	ug/L				U	11/14/12
Pentachloronitrobenzene	82-68-8		<2	ug/L				U	11/14/12
2,6-Dichlorophenol	87-65-0		<1	ug/L				U	11/14/12
Dinoseb(..dinitromethylphenol)	88-85-7		<1	ug/L				U	11/14/12
4-Aminobiphenyl	92-67-1		<2	ug/L				U	11/14/12
n-Nitrosodibutylamine	924-16-3		<1	ug/L				U	11/14/12
n-Nitrosopyridine	930-55-2		<1	ug/L				U	11/14/12
Safrole	94-59-7		<1	ug/L				U	11/14/12
o-Toluidine	95-53-4		<1	ug/L				U	11/14/12
1,2,4,5-Tetrachlorobenzene	95-94-3		<1	ug/L				U	11/14/12
Acetophenone	98-86-2		<1	ug/L				U	11/14/12
1,3,5-Trinitrobenzene	99-35-4		<1	ug/L				U	11/14/12
2-Methyl-5-nitroaniline	99-55-8		<1	ug/L				U	11/14/12
1,3-Dinitrobenzene	99-65-0		<1	ug/L				U	11/14/12
O,O,O-Triethylthiophosphate	126-68-1		<1	ug/L				U	11/14/12
Parathion	56-38-2		<1	ug/L				U	11/14/12
Dimethylaminoazobenzene	60-11-7		<1	ug/L				U	11/14/12
Dimethoate	60-51-5		<1	ug/L				U	11/14/12
Thionazin	297-97-2		<1	ug/L				U	11/14/12

\* - QC result out of range

n/a - Not Applicable

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Group #

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Methyl parathion	298-00-0	<1		ug/L					U	11/14/12
Phorate	298-02-2	<1		ug/L					U	11/14/12
Disulfoton	298-04-4	<1		ug/L					U	11/14/12
Sulfotep	3689-24-5	<1		ug/L					U	11/14/12
Famfur	52-85-7	<5		ug/L					U	11/14/12
N-Nitrosodiphenylamin/ Diphenyl	DPA+NNDPA	<1		ug/L					U	11/14/12
Methapyrilene	91-80-5	<1		ug/L					U	11/14/12
<b>LCS</b>					<b>QC Sample #84673</b>					
4-Nitrophenol	100-02-7	13		ug/L	43.5	5 - 88				11/14/12
1,2,4-Trichlorobenzene	120-82-1	22		ug/L	72.8	50 - 105				11/14/12
Phenol	108-95-2	14		ug/L	48.1	18 - 89				11/14/12
1,4-Dichlorobenzene	106-46-7	15		ug/L	72.9	47 - 115				11/14/12
2,4-Dinitrotoluene	121-14-2	24		ug/L	78.5	59 - 110				11/14/12
Pyrene	129-00-0	23		ug/L	76.7	64 - 116				11/14/12
4-Chloro-3-methylphenol	59-50-7	24		ug/L	80.9	62 - 109				11/14/12
n-Nitroso-di-n-propylamine	621-64-7	24		ug/L	79.2	61 - 110				11/14/12
Acenaphthene	83-32-9	22		ug/L	74.8	59 - 113				11/14/12
Pentachlorophenol	87-86-5	22		ug/L	71.8	17 - 125				11/14/12
2-Chlorophenol	95-57-8	22		ug/L	74.7	55 - 109				11/14/12
1,4-Dioxane	123-91-1	20		ug/L	65.7	42 - 99				11/14/12

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group #

WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
n-Nitrosodimethylamine	62-75-9	23		ug/L	75.8	40 - 103				11/14/12
Benzyl alcohol	100-51-6		24	ug/L	78.7	58 - 108				11/14/12
2-Methylphenol	95-48-7		23	ug/L	76.5	59 - 107				11/14/12
Hexachloroethane	67-72-1		20	ug/L	67.4	43 - 105				11/14/12
2-Nitrophenol	88-75-5		23	ug/L	75.8	48 - 113				11/14/12
2,4-Dimethylphenol	105-67-9		24	ug/L	80.4	58 - 113				11/14/12
2,4-Dichlorophenol	120-83-2		22	ug/L	74.8	52 - 110				11/14/12
Anthracene	120-12-7		24	ug/L	80.1	67 - 113				11/14/12
Naphthalene	91-20-3		22	ug/L	73.7	55 - 110				11/14/12
2-Nitroaniline	88-74-4		25	ug/L	83.3	57 - 114				11/14/12
Dibenzofuran	132-64-9		24	ug/L	78.4	61 - 113				11/14/12
Fluorene	86-73-7		24	ug/L	79.1	64 - 115				11/14/12
Tributyl phosphate	126-73-8		24	ug/L	78.9	65 - 108				11/14/12
Hexachlorobenzene	118-74-1		23	ug/L	76.2	60 - 117				11/14/12
Dimethoate	60-51-5		13	ug/L	85.4	64 - 108				11/14/12
Carbazole	86-74-8		26	ug/L	86.2	35 - 129				11/14/12
Di-n-butylphthalate	84-74-2		25	ug/L	81.9	70 - 116				11/14/12
3,3-Dichlorobenzidine	91-94-1		15	ug/L	49	16 - 117				11/14/12
Bis-(2-Ethylhexyl)phthalate	117-81-7		25	ug/L	83.4	64 - 133				11/14/12
Di-n-octylphthalate	117-84-0		24	ug/L	78.4	57 - 134				11/14/12
Benzo(a)pyrene	50-32-8		24	ug/L	80.4	63 - 115				11/14/12
2-Picoline	109-06-8		25	ug/L	83.4	59 - 102				11/14/12

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group # WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Bis(1-Chloro-2-propyl)ether	108-60-1	22		ug/L	73	58 - 111				11/14/12
4-Chloroaniline	106-47-8	26		ug/L	85.5	43 - 125				11/14/12
<b>MS</b>										
<b>QC Sample #84674</b>										
<b>Original 121401006</b>										
4-Nitrophenol	100-02-7	11		ug/L	39.8	15 - 57				11/14/12
1,2,4-Trichlorobenzene	120-82-1	20		ug/L	71.7	51 - 104				11/14/12
Phenol	108-95-2	11		ug/L	38	24 - 65				11/14/12
1,4-Dichlorobenzene	106-46-7	14		ug/L	73.7	52 - 114				11/14/12
2,4-Dinitrotoluene	121-14-2	22		ug/L	77	57 - 112				11/14/12
Pyrene	129-00-0	20		ug/L	71.6	58 - 119				11/14/12
4-Chloro-3-methylphenol	59-50-7	23		ug/L	79.9	56 - 115				11/14/12
n-Nitroso-di-n-propylamine	621-64-7	22		ug/L	76.6	60 - 112				11/14/12
Acenaphthene	83-32-9	21		ug/L	75.8	60 - 113				11/14/12
Pentachlorophenol	87-86-5	21		ug/L	75.4	32 - 127				11/14/12
2-Chlorophenol	95-57-8	21		ug/L	73.3	52 - 113				11/14/12
1,4-Dioxane	123-91-1	18		ug/L	62.8	39 - 93				11/14/12
n-Nitrosodimethylamine	62-75-9	20		ug/L	69.5	41 - 92				11/14/12
Benzyl alcohol	100-51-6	21		ug/L	75	56 - 107				11/14/12
2-Methylphenol	95-48-7	20		ug/L	72.2	46 - 114				11/14/12
Hexachloroethane	67-72-1	19		ug/L	67.4	48 - 102				11/14/12
2-Nitrophenol	88-75-5	21		ug/L	75	51 - 114				11/14/12

\* - QC result out of range

n/a - Not Applicable

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## Quality Control Report

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Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group #

WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
2,4-Dimethylphenol	105-67-9	22		ug/L	78.8	46 - 124				11/14/12
2,4-Dichlorophenol	120-83-2	21		ug/L	72.6	50 - 114				11/14/12
Anthracene	120-12-7	23		ug/L	82.8	64 - 116				11/14/12
Naphthalene	91-20-3	21		ug/L	72.9	57 - 110				11/14/12
2-Nitroaniline	88-74-4	25		ug/L	86.8	60 - 114				11/14/12
Dibenzofuran	132-64-9	22		ug/L	77.2	61 - 114				11/14/12
Fluorene	86-73-7	22		ug/L	78.2	63 - 116				11/14/12
Tributyl phosphate	126-73-8	22		ug/L	77.7	59 - 113				11/14/12
Hexachlorobenzene	118-74-1	22		ug/L	77.8	58 - 119				11/14/12
Dimethoate	60-51-5	12		ug/L	85.1	53 - 119				11/14/12
Carbazole	86-74-8	26		ug/L	91.3	41 - 122				11/14/12
Di-n-butylphthalate	84-74-2	24		ug/L	83.6	67 - 118				11/14/12
3,3-Dichlorobenzidine	91-94-1	20		ug/L	71.7	16 - 121				11/14/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	23		ug/L	82.8	64 - 134				11/14/12
Di-n-octylphthalate	117-84-0	23		ug/L	81.2	40 - 143				11/14/12
Benzo(a)pyrene	50-32-8	24		ug/L	83.3	61 - 117				11/14/12
2-Picoline	109-06-8	23		ug/L	83	50 - 104				11/14/12
Bis(1-Chloro-2-propyl)ether	108-60-1	20		ug/L	72.1	58 - 112				11/14/12
4-Chloroaniline	106-47-8	26		ug/L	90.9	43 - 118				11/14/12
<b>MSD</b>					<b>QC Sample #84675</b>					
					<b>Original 121401006</b>				<b>Paired 84674</b>	
4-Nitrophenol	100-02-7	10		ug/L	36.9	15 - 57	7.50	20		11/14/12

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group #

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
1,2,4-Trichlorobenzene	120-82-1	20	ug/L	69.4	51 - 104	3.20	20			11/14/12
Phenol	108-95-2	10	ug/L	35.7	24 - 65	6.30	20			11/14/12
1,4-Dichlorobenzene	106-46-7	14	ug/L	71.6	52 - 114	2.80	20			11/14/12
2,4-Dinitrotoluene	121-14-2	22	ug/L	76	57 - 112	1.30	20			11/14/12
Pyrene	129-00-0	22	ug/L	76.3	58 - 119	6.30	20			11/14/12
4-Chloro-3-methylphenol	59-50-7	21	ug/L	75.9	56 - 115	5.10	20			11/14/12
n-Nitroso-di-n-propylamine	621-64-7	22	ug/L	76.3	60 - 112	0.40	20			11/14/12
Acenaphthene	83-32-9	21	ug/L	72.5	60 - 113	4.40	20			11/14/12
Pentachlorophenol	87-86-5	22	ug/L	76.1	32 - 127	1.00	20			11/14/12
2-Chlorophenol	95-57-8	20	ug/L	71.5	52 - 113	2.40	20			11/14/12
1,4-Dioxane	123-91-1	17	ug/L	60.8	39 - 93	3.20	20			11/14/12
n-Nitrosodimethylamine	62-75-9	19	ug/L	68.1	41 - 92	2.10	20			11/14/12
Benzyl alcohol	100-51-6	21	ug/L	73.6	56 - 107	1.90	20			11/14/12
2-Methylphenol	95-48-7	20	ug/L	69.5	46 - 114	3.80	20			11/14/12
Hexachloroethane	67-72-1	18	ug/L	65.3	48 - 102	3.20	20			11/14/12
2-Nitrophenol	88-75-5	21	ug/L	73.1	51 - 114	2.70	20			11/14/12
2,4-Dimethylphenol	105-67-9	22	ug/L	78.5	46 - 124	0.30	20			11/14/12
2,4-Dichlorophenol	120-83-2	21	ug/L	73.2	50 - 114	0.90	20			11/14/12
Anthracene	120-12-7	22	ug/L	77.7	64 - 116	6.30	20			11/14/12
Naphthalene	91-20-3	20	ug/L	71.2	57 - 110	2.40	20			11/14/12
2-Nitroaniline	88-74-4	24	ug/L	83.6	60 - 114	3.80	20			11/14/12

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group #

WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Dibenzofuran	132-64-9	21	ug/L	75.5	61 - 114	2.20	20			11/14/12
Fluorene	86-73-7	22	ug/L	77	63 - 116	1.60	20			11/14/12
Tributyl phosphate	126-73-8	22	ug/L	78.1	59 - 113	0.50	20			11/14/12
Hexachlorobenzene	118-74-1	21	ug/L	74.3	58 - 119	4.60	20			11/14/12
Dimethoate	60-51-5	12	ug/L	82.1	53 - 119	3.60	20			11/14/12
Carbazole	86-74-8	24	ug/L	84	41 - 122	8.20	20			11/14/12
Di-n-butylphthalate	84-74-2	23	ug/L	80.4	67 - 118	3.90	20			11/14/12
3,3-Dichlorobenzidine	91-94-1	19	ug/L	65.7	16 - 121	8.80	20			11/14/12
Bis-(2-Ethylhexyl)phthalate	117-81-7	23	ug/L	83	64 - 134	0.20	20			11/14/12
Di-n-octylphthalate	117-84-0	24	ug/L	83.4	40 - 143	2.60	20			11/14/12
Benzo(a)pyrene	50-32-8	22	ug/L	78.5	61 - 117	5.90	20			11/14/12
2-Picoline	109-06-8	23	ug/L	80.2	50 - 104	3.30	20			11/14/12
Bis(1-Chloro-2-propyl)ether	108-60-1	20	ug/L	71.2	58 - 112	1.20	20			11/14/12
4-Chloroaniline	106-47-8	25	ug/L	86.9	43 - 118	4.60	20			11/14/12

\* - QC result out of range

n/a - Not Applicable

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**Attention** Scot Fitzgerald  
**Department** Wet Chemistry

**Group #** WSCF121402

**Analytical Batch** 210349 (QC Batch: 210348)      **Test** Cyanide (W) by Midi/Spectrophotometer  
**Associated Samples** 121402005, 121402006, 121402007, 121402008

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

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Inorganic

Group # WSCF121402

Analytical Batch 210756 (QC Batch: 210723) Test ICP-2008 MS All possible metal  
 Associated Samples 121402005, 121402006, 121402007, 121402008, 121402009, 121402010, 121402011, 121402012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
<b>BLANK</b>										
<b>QC Sample #85396</b>										
Antimony	7440-36-0	<0.30	ug/L					U		11/27/12
Lead	7439-92-1	<0.050	ug/L					U		11/27/12
Mercury	7439-97-6	<0.050	ug/L					U		11/27/12
Thallium	7440-28-0	<0.050	ug/L					U		11/27/12
Tin	7440-31-5	<0.050	ug/L					U		11/27/12
Arsenic	7440-38-2	<0.20	ug/L					U		11/27/12
Selenium	7782-49-2	<1.0	ug/L					U		11/27/12
<b>LCS</b>										
<b>QC Sample #85397</b>										
Antimony	7440-36-0	40.2	ug/L	100.6	85 - 115					11/27/12
Lead	7439-92-1	41.9	ug/L	104.7	85 - 115					11/27/12
Mercury	7439-97-6	1.97	ug/L	98.3	85 - 115					11/27/12
Thallium	7440-28-0	41.6	ug/L	103.9	85 - 115					11/27/12
Tin	7440-31-5	40.7	ug/L	101.8	85 - 115					11/27/12
Arsenic	7440-38-2	39.2	ug/L	98	85 - 115					11/27/12
Selenium	7782-49-2	36.5	ug/L	91.3	85 - 115					11/27/12
<b>MS</b>										
<b>QC Sample #85398</b>										
Original 121489001										

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
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Group # WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Antimony	7440-36-0	40.6	ug/L	101.6	70 - 130					11/27/12
Lead	7439-92-1	42.3	ug/L	105.7	70 - 130					11/27/12
Mercury	7439-97-6	2.14	ug/L	106.8	70 - 130					11/27/12
Thallium	7440-28-0	42.2	ug/L	105.5	70 - 130					11/27/12
Tin	7440-31-5	41.1	ug/L	102.8	70 - 130					11/27/12
Arsenic	7440-38-2	39.4	ug/L	98.4	70 - 130					11/27/12
Selenium	7782-49-2	37.0	ug/L	92.4	70 - 130					11/27/12
<b>MSD</b>		<b>QC Sample #85399</b>								
		<b>Original 121489001</b>					<b>Paired 85398</b>			
Antimony	7440-36-0	38.7	ug/L	96.8	70 - 130	4.80	20			11/27/12
Lead	7439-92-1	39.7	ug/L	99.2	70 - 130	6.40	20			11/27/12
Mercury	7439-97-6	2.00	ug/L	100	70 - 130	6.60	20			11/27/12
Thallium	7440-28-0	39.6	ug/L	99.1	70 - 130	6.30	20			11/27/12
Tin	7440-31-5	38.9	ug/L	97.2	70 - 130	5.60	20			11/27/12
Arsenic	7440-38-2	37.4	ug/L	93.6	70 - 130	4.90	20			11/27/12
Selenium	7782-49-2	34.6	ug/L	86.6	70 - 130	6.40	20			11/27/12

\* - QC result out of range

n/a - Not Applicable

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Attention Scot Fitzgerald  
 Department Inorganic

Group # WSCF121402

Analytical Batch 210820 (QC Batch: 210636) Test ICP-6010 - All possible metals  
 Associated Samples 121402005, 121402006, 121402007, 121402008, 121402009, 121402010, 121402011, 121402012

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
<b>BLANK</b>										<b>QC Sample #85330</b>
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		11.3	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		<49	ug/L				U		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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## Quality Control Report

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Attention Scot Fitzgerald  
 Department Inorganic

Group # WSCF121402

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
<b>LCS</b>										
Iron	7439-89-6	1050		ug/L	104.7	80 - 120				11/29/12
Magnesium	7439-95-4	10700		ug/L	107.3	80 - 120				11/29/12
Manganese	7439-96-5	1050		ug/L	105.2	80 - 120				11/29/12
Nickel	7440-02-0	975		ug/L	97.5	80 - 120				11/29/12
Potassium	7440-09-7	11500		ug/L	114.8	80 - 120				11/29/12
Silver	7440-22-4	1060		ug/L	106.2	80 - 120				11/29/12
Sodium	7440-23-5	10700		ug/L	106.7	80 - 120				11/29/12
Antimony	7440-36-0	1030		ug/L	102.6	80 - 120				11/29/12
Barium	7440-39-3	1070		ug/L	106.9	80 - 120				11/29/12
Cadmium	7440-43-9	1000		ug/L	100	80 - 120				11/29/12
Chromium	7440-47-3	1040		ug/L	104.5	80 - 120				11/29/12
Cobalt	7440-48-4	996		ug/L	99.6	80 - 120				11/29/12
Copper	7440-50-8	1070		ug/L	106.6	80 - 120				11/29/12
Vanadium	7440-62-2	1050		ug/L	105.2	80 - 120				11/29/12
Zinc	7440-66-6	1040		ug/L	103.6	80 - 120				11/29/12
Calcium	7440-70-2	21400		ug/L	106.8	80 - 120				11/29/12
Strontium	7440-24-6	1020		ug/L	101.5	80 - 120				11/29/12
Beryllium	7440-41-7	1050		ug/L	105.2	80 - 120				11/29/12
<b>MS</b>										
QC Sample #85333										
Original 121402005										
Iron	7439-89-6	137	1010	ug/L	100.8	75 - 125				11/29/12

\* - QC result out of range

n/a - Not Applicable

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## Quality Control Report

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Attention Scot Fitzgerald  
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Group #

WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Magnesium	7439-95-4	33800	9830	ug/L	98.3	75 - 125				11/29/12
Manganese	7439-96-5	<4.0	1030	ug/L	103.1	75 - 125				11/29/12
Nickel	7440-02-0	24.3	949	ug/L	94.9	75 - 125				11/29/12
Potassium	7440-09-7	11800	11300	ug/L	113.4	75 - 125				11/29/12
Silver	7440-22-4	<4.0	1050	ug/L	104.6	75 - 125				11/29/12
Sodium	7440-23-5	41800	9310	ug/L	93.1	75 - 125		X		11/29/12
Antimony	7440-36-0	<36	1100	ug/L	109.9	75 - 125				11/29/12
Barium	7440-39-3	119	1050	ug/L	105.2	75 - 125				11/29/12
Cadmium	7440-43-9	<4.0	1020	ug/L	102	75 - 125				11/29/12
Chromium	7440-47-3	32.0	1020	ug/L	101.9	75 - 125				11/29/12
Cobalt	7440-48-4	<4.0	976	ug/L	97.6	75 - 125				11/29/12
Copper	7440-50-8	<4.0	1050	ug/L	104.6	75 - 125				11/29/12
Vanadium	7440-62-2	11.3	1040	ug/L	103.9	75 - 125				11/29/12
Zinc	7440-66-6	<5.0	1050	ug/L	105.2	75 - 125				11/29/12
Calcium	7440-70-2	1.16E5	18400	ug/L	92	75 - 125		X		11/29/12
Strontium	7440-24-6	562	996	ug/L	99.6	75 - 125				11/29/12
Beryllium	7440-41-7	<4.0	1040	ug/L	104.3	75 - 125				11/29/12
<b>MSD</b>		<b>QC Sample #85334</b>								
		<b>Original 121402005</b>						<b>Paired</b>	<b>85333</b>	
Iron	7439-89-6	137	1010	ug/L	101.4	75 - 125	0.50	20		11/29/12
Magnesium	7439-95-4	33800	9670	ug/L	96.7	75 - 125	0.40	20		11/29/12
Manganese	7439-96-5	<4.0	1030	ug/L	103.1	75 - 125	0.00	20		11/29/12
Nickel	7440-02-0	24.3	948	ug/L	94.8	75 - 125	0.10	20		11/29/12

\* - QC result out of range

n/a - Not Applicable

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Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Potassium	7440-09-7	11800	11200	ug/L	112.4	75 - 125	0.40	20		11/29/12
Silver	7440-22-4	<4.0	1050	ug/L	104.6	75 - 125	0.10	20		11/29/12
Sodium	7440-23-5	41800	8630	ug/L	86.3	75 - 125	1.30	20	X	11/29/12
Antimony	7440-36-0	<36	1080	ug/L	108.1	75 - 125	1.70	20		11/29/12
Barium	7440-39-3	119	1050	ug/L	104.8	75 - 125	0.30	20		11/29/12
Cadmium	7440-43-9	<4.0	1020	ug/L	101.8	75 - 125	0.20	20		11/29/12
Chromium	7440-47-3	32.0	1020	ug/L	102.2	75 - 125	0.30	20		11/29/12
Cobalt	7440-48-4	<4.0	977	ug/L	97.7	75 - 125	0.00	20		11/29/12
Copper	7440-50-8	<4.0	1040	ug/L	104.5	75 - 125	0.10	20		11/29/12
Vanadium	7440-62-2	11.3	1040	ug/L	104.1	75 - 125	0.20	20		11/29/12
Zinc	7440-66-6	<5.0	1050	ug/L	105.4	75 - 125	0.20	20		11/29/12
Calcium	7440-70-2	1.16E5	18800	ug/L	94	75 - 125	0.30	20	X	11/29/12
Strontium	7440-24-6	562	1000	ug/L	100.2	75 - 125	0.40	20		11/29/12
Beryllium	7440-41-7	<4.0	1050	ug/L	104.7	75 - 125	0.40	20		11/29/12

\* - QC result out of range

n/a - Not Applicable

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## Quality Control Report

DECEMBER 19, 2012

REVISION 1

**Attention** Scot Fitzgerald  
**Department** Organic, Volatiles

**Group #** WSCF121402

**Analytical Batch** 209924 (QC Batch: 209922)      **Test** SW-846 8260B Volatiles  
**Associated Samples** 121402005, 121402006, 121402007, 121402008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
<b>SAMPLE</b>		<b>Sample #121402005</b>								
1,2-Dichloroethane-d4	17060-07-0				100	75 - 125				11/09/12
Toluene-d8	2037-26-5				94.3	75 - 125				11/09/12
4-Bromofluorobenzene	460-00-4				100.2	75 - 125				11/09/12
<b>SAMPLE</b>		<b>Sample #121402006</b>								
1,2-Dichloroethane-d4	17060-07-0				99.8	75 - 125				11/09/12
Toluene-d8	2037-26-5				95.4	75 - 125				11/09/12
4-Bromofluorobenzene	460-00-4				100.4	75 - 125				11/09/12
<b>SAMPLE</b>		<b>Sample #121402007</b>								
1,2-Dichloroethane-d4	17060-07-0				103.1	75 - 125				11/09/12
Toluene-d8	2037-26-5				94.5	75 - 125				11/09/12
4-Bromofluorobenzene	460-00-4				101.3	75 - 125				11/09/12
<b>SAMPLE</b>		<b>Sample #121402008</b>								
1,2-Dichloroethane-d4	17060-07-0				101.1	75 - 125				11/09/12

\* - QC result out of range

n/a - Not Applicable

REVISED121402 -

## Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald  
 Department Organic, Volatiles

Group # WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Toluene-d8	2037-26-5				94.7	75 - 125				11/09/12
4-Bromofluorobenzene	460-00-4				102.2	75 - 125				11/09/12
<b>BLANK</b> QC Sample #84692										
1,2-Dichloroethane-d4	17060-07-0				95.6	75 - 125				11/08/12
Toluene-d8	2037-26-5				93.6	75 - 125				11/08/12
4-Bromofluorobenzene	460-00-4				97.7	75 - 125				11/08/12
<b>LCS</b> QC Sample #84693										
1,2-Dichloroethane-d4	17060-07-0				97.3	75 - 125				11/08/12
Toluene-d8	2037-26-5				93.4	75 - 125				11/08/12
4-Bromofluorobenzene	460-00-4				96.2	75 - 125				11/08/12
<b>MS</b> QC Sample #84694 Original 121397007										
4-Bromofluorobenzene	460-00-4				96.8	75 - 125				11/08/12
1,2-Dichloroethane-d4	17060-07-0				95.5	75 - 125				11/08/12
Toluene-d8	2037-26-5				94.3	75 - 125				11/08/12
<b>MSD</b> QC Sample #84695 Original 121397007 Paired 84694										
1,2-Dichloroethane-d4	17060-07-0				94.5	75 - 125	n/a			11/08/12
Toluene-d8	2037-26-5				94	75 - 125	n/a			11/08/12

\* - QC result out of range

n/a - Not Applicable

REVISED121402 -

**Quality Control Report****DECEMBER 19, 2012****REVISION 1****Attention** Scot Fitzgerald  
**Department** Organic, Volatiles**Group #** WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
4-Bromofluorobenzene	460-00-4				98.2	75 - 125	n/a			11/08/12

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

**REVISED121402 -**

## Quality Control Report

DECEMBER 19, 2012

REVISION 1

**Attention** Scot Fitzgerald  
**Department** Organic, Semivolatiles

**Group #** WSCF121402

**Analytical Batch** 210320 (QC Batch: 209883)      **Test** SW-846 8270D Semivolatiles  
**Associated Samples** 121402005, 121402006, 121402007, 121402008

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
<b>SAMPLE</b>										<b>Sample #121402005</b>
2-Fluorophenol	367-12-4				53.5	34 - 103				11/14/12
Phenol-d5	4165-62-2				36.3	10 - 93				11/14/12
Nitrobenzene-d5	4165-60-0				82.5	49 - 133				11/14/12
2-Methylnaphthalene-d10	7297-45-2				79.1	60 - 135				11/14/12
2-Fluorobiphenyl	321-60-8				81	48 - 132				11/14/12
2,4,6-Tribromophenol	118-79-6				68.7	33 - 134				11/14/12
Fluoranthene-d10	93951-69-0				91.3	62 - 139				11/14/12
Terphenyl-d14	98904-43-9				79.8	56 - 138				11/14/12
<b>SAMPLE</b>										<b>Sample #121402006</b>
2-Fluorophenol	367-12-4				55.4	34 - 103				11/14/12
Phenol-d5	4165-62-2				36.7	10 - 93				11/14/12
Nitrobenzene-d5	4165-60-0				86.3	49 - 133				11/14/12
2-Methylnaphthalene-d10	7297-45-2				86.2	60 - 135				11/14/12
2-Fluorobiphenyl	321-60-8				86.6	48 - 132				11/14/12
2,4,6-Tribromophenol	118-79-6				68.4	33 - 134				11/14/12

\* - QC result out of range

n/a - Not Applicable

REVISED121402 -

## Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group # WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Fluoranthene-d10	93951-69-0				92.4	62 - 139				11/14/12
Terphenyl-d14	98904-43-9				87	56 - 138				11/14/12
<b>SAMPLE</b> Sample #121402007										
2-Fluorophenol	367-12-4				52	34 - 103				11/14/12
Phenol-d5	4165-62-2				36.1	10 - 93				11/14/12
Nitrobenzene-d5	4165-60-0				78.8	49 - 133				11/14/12
2-Methylnaphthalene-d10	7297-45-2				80.1	60 - 135				11/14/12
2-Fluorobiphenyl	321-60-8				80.5	48 - 132				11/14/12
2,4,6-Tribromophenol	118-79-6				63.9	33 - 134				11/14/12
Fluoranthene-d10	93951-69-0				90.6	62 - 139				11/14/12
Terphenyl-d14	98904-43-9				83.8	56 - 138				11/14/12
<b>SAMPLE</b> Sample #121402008										
2-Fluorophenol	367-12-4				45.6	34 - 103				11/14/12
Phenol-d5	4165-62-2				29.5	10 - 93				11/14/12
Nitrobenzene-d5	4165-60-0				62.8	49 - 133				11/14/12
2-Methylnaphthalene-d10	7297-45-2				62.8	60 - 135				11/14/12
2-Fluorobiphenyl	321-60-8				64	48 - 132				11/14/12
2,4,6-Tribromophenol	118-79-6				56	33 - 134				11/14/12
Fluoranthene-d10	93951-69-0				71.7	62 - 139				11/14/12
Terphenyl-d14	98904-43-9				61	56 - 138				11/14/12

\* - QC result out of range

n/a - Not Applicable

REVISED121402 -

## Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group # WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed	
<b>BLANK</b>		<b>QC Sample #84672</b>									
2-Fluorophenol	367-12-4				57.2	34 - 103				11/14/12	
Phenol-d5	4165-62-2				40.9	10 - 93				11/14/12	
Nitrobenzene-d5	4165-60-0				80.8	49 - 133				11/14/12	
2-Methylnaphthalene-d10	7297-45-2				77.3	60 - 135				11/14/12	
2-Fluorobiphenyl	321-60-8				77.8	48 - 132				11/14/12	
2,4,6-Tribromophenol	118-79-6				66.6	33 - 134				11/14/12	
Fluoranthene-d10	93951-69-0				87.4	62 - 139				11/14/12	
Terphenyl-d14	98904-43-9				82.1	56 - 138				11/14/12	
<b>LCS</b>		<b>QC Sample #84673</b>									
2-Fluorophenol	367-12-4				65.6	34 - 103				11/14/12	
Phenol-d5	4165-62-2				49.5	10 - 93				11/14/12	
Nitrobenzene-d5	4165-60-0				84.8	49 - 133				11/14/12	
2-Methylnaphthalene-d10	7297-45-2				79.9	60 - 135				11/14/12	
2-Fluorobiphenyl	321-60-8				79.8	48 - 132				11/14/12	
2,4,6-Tribromophenol	118-79-6				79.5	33 - 134				11/14/12	
Fluoranthene-d10	93951-69-0				87.5	62 - 139				11/14/12	
Terphenyl-d14	98904-43-9				82.6	56 - 138				11/14/12	
<b>MS</b>		<b>QC Sample #84674</b>									
<b>Original 121401006</b>											
2-Fluorophenol	367-12-4				56.7	34 - 103				11/14/12	

\* - QC result out of range

n/a - Not Applicable

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## Quality Control Report

DECEMBER 19, 2012

REVISION 1

Attention Scot Fitzgerald  
 Department Organic, Semivolatiles

Group # WSCF121402

Analyte	CAS #	Original Found	QC Found	Units	% Recov	Limits	RPD	RPD Limit	RQ	Analyzed
Phenol-d5	4165-62-2				38.8	10 - 93				11/14/12
Nitrobenzene-d5	4165-60-0				82.7	49 - 133				11/14/12
2-Methylnaphthalene-d10	7297-45-2				79.1	60 - 135				11/14/12
2-Fluorobiphenyl	321-60-8				80.4	48 - 132				11/14/12
2,4,6-Tribromophenol	118-79-6				78.2	33 - 134				11/14/12
Fluoranthene-d10	93951-69-0				93.1	62 - 139				11/14/12
Terphenyl-d14	98904-43-9				76.9	56 - 138				11/14/12
<b>MSD</b>					<b>QC Sample #84675</b>					
					Original	121401006			Paired	84674
2-Fluorophenol	367-12-4				52.4	34 - 103	n/a			11/14/12
Phenol-d5	4165-62-2				36	10 - 93	n/a			11/14/12
Nitrobenzene-d5	4165-60-0				82.5	49 - 133	n/a			11/14/12
2-Methylnaphthalene-d10	7297-45-2				78.3	60 - 135	n/a			11/14/12
2-Fluorobiphenyl	321-60-8				76.3	48 - 132	n/a			11/14/12
2,4,6-Tribromophenol	118-79-6				75.5	33 - 134	n/a			11/14/12
Fluoranthene-d10	93951-69-0				84.9	62 - 139	n/a			11/14/12
Terphenyl-d14	98904-43-9				81.2	56 - 138	n/a			11/14/12

\* - QC result out of range

n/a - Not Applicable

REVISED121402 -

Attention: Scot Fitzgerald

Group #

WSCF121402

121402003

B2MN33

IC: Sample was analyzed within hold time, but required further dilution for nitrate outside of hold time. Original data supports rerun results, data is good.

**Quality Control Comments**

Department Inorganic

84378 B2MNC9(121400003MS)

**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.

84379 B2MNC9(121400003MSD)

**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.

84467 B2MNH1(121400001MS)

**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** Fluoride - 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.

84468 B2MNH1(121400001MSD)

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

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Attention: Scot Fitzgerald

Group #

WSCF121402

**Quality Control Comments****Analyte** Fluoride - 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.

85333 B2MN71(121402005MS)

**Analyte** Calcium - ICP-6010 - All possible metals

[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

**Analyte** Sodium - ICP-6010 - All possible metals

[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

85334 B2MN71(121402005MSD)

**Analyte** Calcium - ICP-6010 - All possible metals

[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

**Analyte** Sodium - ICP-6010 - All possible metals

[1] X5: Sample concentration exceed spiking level by a factor of 4. Spike recoveries are not valid.

REVISED121402 -

ATTACHMENT4

**SAMPLE RECEIPT**

Consisting of 15 pages  
Including cover page

REVISED121402 -

**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 #: 121402

Profile #: W13-011-094

Proj. Mgr.:

Phone:

The following samples were received from you on 11/2/2012 1:00:00 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
<b>Tests scheduled</b>				
121402001	B2MN72	WATER	11/2/2012 10:47	11/2/2012 13:00
		IC-W		
121402002	B2MN58	WATER	11/2/2012 09:34	11/2/2012 13:00
		IC-W		
121402003	B2MN33	WATER	11/2/2012 08:20	11/2/2012 13:00
		IC-W		
121402004	B2MN53	WATER	11/2/2012 12:13	11/2/2012 13:00
		IC-W		
121402005	B2MN71	WATER	11/2/2012 10:47	11/2/2012 13:00
		2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W		
121402006	B2MN57	WATER	11/2/2012 09:34	11/2/2012 13:00
		2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W		
121402007	B2MN32	WATER	11/2/2012 08:20	11/2/2012 13:00
		2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W		
121402008	B2MN52	WATER	11/2/2012 12:13	11/2/2012 13:00
		2008-W; 6010-W; 8260V-W; 8270SV-W; ALK-W; CN-W		
121402009	B2MN73	WATER	11/2/2012 10:47	11/2/2012 13:00
		2008-W; 6010-W		
121402010	B2MN59	WATER	11/2/2012 09:34	11/2/2012 13:00
		2008-W; 6010-W		
121402011	B2MN34	WATER	11/2/2012 08:20	11/2/2012 13:00

REVISED121402 -

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

2008-W; 6010-W

121402012	B2MN54	WATER	11/2/2012 12:13	11/2/2012 13:00
2008-W; 6010-W				

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**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)

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REVISED121402 -

<b>CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST</b>											
<b>W13-011-094</b>											
Page 1 of 1											
<b>C.O.C. #</b>											
<b>Collector</b>	Robert Crow										
<b>SAF No.</b>	W13-011										
<b>Project Title</b>	RCRA, NOVEMBER 2012										
<b>Shipped To (Lab)</b>	Waste Sampling & Characterization										
<b>Protocol</b>	RCRA										
<b>Possible Sample Hazards/Remarks</b>											
*** Certain Recyclable Material & Concentrations that are not regulated for transportation per 49 CFR but are not releasable (per DOE Order 5400.5 (1990/1993))											
<b>Sample No</b>	<b>Filter</b>	<b>Date</b>	<b>Time</b>	<b>No./Type Container</b>	<b>Sample Analysis</b>	<b>Holding Time</b>	<b>Preservative</b>				
B2MN72	I	N	W	1/21/12	1047	1x500-mL P	300 0_ANIONS_SIC: List-1 (5)	121403			
48 Hours											
Code-4C											

POSSIBLE SAMPLE HAZARDS/REMARKS  
\*\*\* Certain Recyclable Material & Concentrations that are not regulated for transportation per 49 CFR but are not releasable (per DOE Order 5400.5 (1990/1993))

Sample No	Filter	Date	Time	No./Type Container	Sample Analysis	Holding Time	Preservative				
B2MN72	I	N	W	1/21/12	1047	1x500-mL P	300 0_ANIONS_SIC: List-1 (5)	121403			

Relinquished By	Print Name	Date/Time	Received By	Date/Time	Sign	Date/Time	3CO	Date/Time	Matrix *
Robert Crow	R Crow	NOV 02 2012 1200	TA Fornell	NOV 02 2012 1200		NOV 02 2012 1200			S = Sol
Reinquished By			Received By						SE = Sediment
									SO = Solid
									SL = Sludge
Reinquished By			Received By						W = Water
									O = Oil
Reinquished By			Received By						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 10/12/2012			A 6004-B42 (REV 2)

REVISED121402 -

## Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST												
C.O.C. # <b>W13-011-088</b>											Page 1 of 1	
Collector	Robert Crow	Contact/Requester	Karen Walters-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 <b>36/33</b>			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			Offsite Property No.	N/A					
POSSIBLE SAMPLE HAZARDS/REMARKS												
*** Contains Radioactive Material. All concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/99.)												
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Hold Time	48 Hours	Preservative	Cold/4C		
B2NN58	2	N	W	11/22/12	0934	1x500-mL P	3000_ANIONS_IC_List-(5)					
Relinquished By Print Sign Date/Time /300 Received By Date/Time /300 Sign Date/Time /300												
Robert Crow	<i>R. Crow</i>		NOV 02 2012	<i>TA Enzani</i>		NOV 02 2012				Matrix *		
Relinquished By			Date/Time	Received By	Date/Time	Received By	Date/Time	Received By	Date/Time	S = Soil	DS = Drum Solids	
Relinquished By										SE = Sediment	DL = Drum Liquids	
Relinquished By										SO = Solid	T = Tissue	
Relinquished By										SL = Sludge	W = Wire	
Relinquished By										W = Water	L = Liquid	
Relinquished By										O = Oil	V = Vegetation	
Relinquished By										A = Air	X = Other	
FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Date/Time												
PRINTED ON 10/10/2012 Date/Time A-6004-842 (REV 2)												

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## Chain of Custody

CH2M Hill Plateau Remediation Company		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST										
Collector	Robert Crow	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.	LHN-N-506 <u>36 / 33</u>		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		Office Property No.	N/A						
POSSIBLE SAMPLE HAZARD/REMARKS *** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1996/1993)												
SPECIAL INSTRUCTIONS 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 61647.												
Sample No.	Filter	*	Date	Time	No/Type Contained	Sample Analysis	Holding Time	Preservative				
BZMN33	3	N	W	11-2-12	0820	1x500-mL P	3000_ANIONS_IC_List-1 (5)	48 Hours	Cool-4C			

Relinquished By	Print	Sign	Date/Time	Received By	Date/Time	Disposed By	Date/Time
Robert Crow	R Crow		NOV 02 2012 13:00	TA FNUZIE, JESSICA	Sign	NOV 02 2012	Matrix *
Relinquished By			Date/Time	Received By	Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received By	Date/Time	Received By	Date/Time
Relinquished By			Date/Time	Received 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	10/10/2012		

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## Chain of Custody

## CH2MHill Plateau Remediation Company

## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C #

W13-011-086

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Collector	Robert Crow	Contact/Requester	Karen Waters-Husted	Telephone No.	376-4650
SAF No.	W13-011	Sampling Origin	Hanford Site	Purchase Order/Charge Code	3000711sS20
Project Title	RORA NOVEMBER 2012	Logbook No.	HNF-N-506 36 / 33	Ice Chest No.	N/A
Shipped To (Lab)	Waste Sampling & Characterization				
Protocol	RCRA	Method of Shipment	GOVERNMENT VEHICLE	Bill of Lading/Air Bill No.	N/A
		Priority:	31 Days	Offsite Property No.	N/A
				Total Activity Exemption	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
				Hold Time	17
				SPECIAL INSTRUCTIONS	FY12 and FY13 samples cannot be in the same SDG. Site Wide Generator Knowledge information from applies. The CACN for all analytical work at WSCF-1 is 401637
				Sample Analysis	Preservative
				Time	Cool-4C
				No/Type Container	
				Date	48 Hours
				Time	
Sample No.	Filter *				
BZMN53	4	N	W	11-2-12	1/21/3
				1x500-mL P	3000_ANIONS_IC_List-(5)

## 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 (1996/1997)

Sample No.	Filter *	Date	Time	No/Type Container	Sample Analysis	Preservative
BZMN53	4	N	W	11-2-12	1/21/3	1x500-mL P

Relinquished By	Print	Sign	Date/Time	Received By	Date/Time	Sign	Date/Time	Sign	Date/Time	Matrix *	
Robert Crow	R Crow	NOV 02 2012 13:00	NOV 02 2012 13:00	Received By	Date/Time	NOV 02 2012 13:00	Date/Time	NOV 02 2012 13:00	Date/Time	S = Soil	
Relinquished By										SE = Sediment	
Relinquished By										SO = Solid	
Relinquished By										SL = Sludge	
Relinquished By										W = Water	
Relinquished By										O = Oil	
Relinquished By										A = Air	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g. Return to customer, per lab procedure, used in process)					Disposed By					Date/Time
PRINTED ON	10/10/2012										A-8004-842 (REV 2)

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## Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST										
CH2MHill Plateau Remediation Company		W13-011-093								
Collector	Robert Crow	Contact/Requester	Karen Waters-Husted							
SAF No.	W13-011	Sampling Origin	Hanford Site							
Project Title	RCRA NOVEMBER 2012	Logbook No.	HNF-N-506 36 / 37							
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE							
Protocol	RCRA	Priority	31 Days	SPECIAL INSTRUCTIONS	Hold Time		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			
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)										
Sample No	Filter	Date	Time	No/Type Container	Sample Analysis	Preservative	Holding Time			
B2MN71	N	W	1/27/12	1047	1x500-mL G	200.8_HG -ICPMS	28 Days	HNO3 to pH <2		
B2MN71	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Antimony (1)	6 Months	HNO3 to pH <2		
B2MN71	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Arsenic (1)	6 Months	HNO3 to pH <2		
B2MN71	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Lead (1)	6 Months	HNO3 to pH <2		
B2MN71	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Selenium (1)	6 Months	HNO3 to pH <2		
B2MN71	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Thallium (1)	6 Months	HNO3 to pH <2		
B2MN71	N	W			1x500-mL G/P	200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2		
B2MN71	N	W			1x500-mL G/P	2520_ALKALINITY: Alkalinity (1)	14 Days	CoO+4C		
B2MN71	N	W			1x250-mL P	4500E_CN_Cyanide (1)	14 Days	NaCl to pH >=12		
B2MN71	N	W			1x250-mL P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2		
B2MN71	N	W			1x500-mL G/P	8260_VOA_GCMS_IK: COMMON	14 Days	HCl or HPSO4 to pH <2/Cool+4C		
B2MN71	N	W			3x50-mL aGs*	8270_SVOA_GCMS_IK: COMMON	7/40 Days	CoO+4C		
B2MN73	9	Y	W		4x1-L aG		28 Days	HNO3 to pH <2		
B2MN73	1	Y	W	1/27/12	1x500-mL G/P	200.8_METALS_ICPMS: Antimony (1)	6 Months	HNO3 to pH <2		
Received By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *		
Robert Crow	<i>R. Crow</i>		NOV 01 2012 13:00	JFA F192-12A			NOV 02 2012 13:00	S = Soil		
Relinquished By			Date/Time	Received By			Date/Time	SE = Sediment	DS = Drum Solids	
Relinquished By			Date/Time	Received By			Date/Time	SL = Sludge	DL = Drum Liquids	
Relinquished By			Date/Time	Received By			Date/Time	W = Water	T = Tissue	
Relinquished By			Date/Time	Received By			Date/Time	O = Oil	L = Liquid	
Relinquished By			Date/Time	Received By			Date/Time	V = Vegetation		
Relinquished By			Date/Time	Received By			Date/Time	A = Air	X = Other	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)							Date/Time		
PRINTED ON								A-6004-842 (REV 2)		
December 19, 2012 13:12:09										
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3004.1.1084.3										
Report ID: 121402										
Group # WSCF121402										

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## Chain of Custody

## CH2MHill Plateau Remediation Company

## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. #

W13-011-093

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Collector	Robert Crow	Contact/Requester	Karen Waters-Husted				
SAF No.	W13-011	Sampling Origin	Hanford Site				
Project Title	RCRA, NOVEMBER 2012	Logbook No.	HNF-N-506 <u>22</u>				
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE				
Protocol	RCRA	Priority:	PRIORITY				
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 5406.5 (1990/1993)							
Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN/3	Y	W	11-2-12	1047	1x500-mL G/P	200.8_METALS_ICPMS_Arsenic (1)	HNO3 to pH <2
B2MN73	Y	W			1x500-mL G/P	200.8_METALS_ICPMS_Lead (1)	HNO3 to pH <2
B2MN73	Y	W			1x500-mL G/P	200.8_METALS_ICPMS_Selenium (1)	HNO3 to pH <2
B2MN73	Y	W			1x500-mL G/P	200.8_METALS_ICPMS_Tellurium (1)	HNO3 to pH <2
B2MN73	Y	W			1x500-mL G/P	200.8_METALS_ICPMS_Tin (1)	HNO3 to pH <2
B2MN73	Y	W	11-2-12	1047	1x500-mL G/P	6010_METALS_ICP-Lit3-3 (18)	HNO3 to pH <2

\*\*\* Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5406.5 (1990/1993)

Relinquished By	Print Name	Sign	Date/Time	Received By	Date/Time	Received By	Date/Time	Matrix *
Robert Crow		NOV 02 2012	1047		NOV 02 2012			S - Soil
Relinquished By			Date/Time	Received By	Date/Time	Received By	Date/Time	SD - Sediment
Relinquished By			Date/Time	Received By	Date/Time	Received By	Date/Time	SO - Solid
Relinquished By			Date/Time	Received By	Date/Time	Received By	Date/Time	SL - Sludge

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
PRINTED ON 10/10/2012	A-6004-842 (REV 2)		

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## Chain of Custody

CH12MHill Plateau Remediation  
Company

Collector Robert Crow  
 SAF No. W13-011  
 Project Title RCRA, NOVEMBER 2012

Shipped To (Lab) Waste Sampling & Characterization

Protocol RCRA

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)

## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN57	N	W	1/2-12	09:34	1x500-mL G/P	200.8_HG - ICPMS	HNO3 to pH <2
B2MN57	N	W			1x500-mL G/P	200.8_METALS_ICPMS_Antimony (1)	HNO3 to pH <2
B2MN57	N	W			1x500-mL G/P	200.8_METALS_ICPMS_Arsenic (1)	HNO3 to pH <2
B2MN57	N	W			1x500-mL G/P	200.8_METALS_ICPMS_Lead (1)	HNO3 to pH <2
B2MN57	N	W			1x500-mL G/P	200.8_METALS_ICPMS_Selenium (1)	HNO3 to pH <2
B2MN57	N	W			1x500-mL G/P	200.8_METALS_ICPMS_Thallium (1)	HNO3 to pH <2
B2MN57	N	W			1x500-mL G/P	200.8_METALS_ICPMS_Tin (1)	HNO3 to pH <2
B2MN57	N	W			1x250-mL G/P	2320_ALKALINITY_Alkalinity (1)	Cool~4C
B2MN57	N	W			1x250-mL P	4500E_CN_Cyanide (1)	NaOH to pH >=12
B2MN57	N	W			1x500-mL G/P	6010_METALS_ICP_Li+3 (18)	HNO3 to pH <2
B2MN57	N	W			3x40-mL aGs*	8260_VOA_GCMS_IX_COMMON	HCl or H2SO4 to pH <2/Cool~4C
B2MN57	N	W			4x1-L aG	8270_SVOA_GCMS_IX_COMMON	Cool~4C
B2MN59	Y	W	1		1x500-mL G	200.8_HG - ICPMS	HNO3 to pH <2
B2MN59	I	Y	W	1/2-12	09:34	1x500-mL G/P	HNO3 to pH <2

Reinquished By	Print	Sign	Date/Time	Received By	Date/Time	Date/Time	Matrix *
Robert Crow	R. Crow	J. S.	NOV 02 2012 /30:0	TA F. 12/15/2012	NOV 02 2012 /30:0		S = Soil
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	DS = Drum Solids
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	SE = Sediment
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	SC = Solid
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	SL = Sludge
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	WI = Wise
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	L = Lland
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	O = Oil
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	V = Vegetation
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	A = Air
Reinquished By			Date/Time	Received By	Date/Time	Date/Time	X = Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
PRINTED ON 10/10/2012			A-6004-842 (REV 2)

## **Chain of Custody**

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST									
Collector	Robert Crow	Contact/Requester	Karen Waters-Hussted	Telephone No.	376-4650	Date/Time	Page 2 of 2	C.O.C. #	W13-011-087
SAF No.	W13-011	Sampling Origin	Hanford Site	Purchase Order/Charge Code	300071ES20				
Project Title	RCRA, NOVEMBER 2012	Logbook No.	HNF-N-506 <u>36 / 33</u>	Ice Chest No.	N/A				
Shipped To (Lab)	<u>Waste Sampling &amp; Characterization</u>	Method of Shipment	GOVERNMENT VEHICLE	BILL of Lading/Air Bill No.	N/A				
Protocol	RCRA	Priority:	31 Days	Office Property No.	N/A				
<b>SPECIAL INSTRUCTIONS</b>					<b>Hold Time</b>				
*** Contains Radioactive Material or concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5410.5 (1990/1993)					Site Wide Generator Knowledgeable Information Form applies. The CACN for all analytical work at WSCE is 401-647.				
<b>POSSIBLE SAMPLE HAZARDS/REMARKS</b>									
Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time		Preservative	
B2MN99	Y	W	11-2-12	0934	1x500-mL G/P	200 B_METALS_ICPMS: Arsenic (1)	6 Months	HNO3 to pH <2	
B2MN99	Y	W	/	/	1x500-mL G/P	200 B_METALS_ICPMS: Lead (1)	6 Months	HNO3 to pH <2	
B2MN99	Y	W	/	/	1x500-mL G/P	200 B_METALS_ICPMS: Selenium (1)	6 Months	HNO3 to pH <2	
B2MN99	Y	W	/	/	1x500-mL G/P	200 B_METALS_ICPMS: Thallium (1)	6 Months	HNO3 to pH <2	
B2MN99	Y	W	/	/	1x500-mL G/P	200 B_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2	
B2MN99	Y	W	11-2-12	0934	1x500-mL G/P	6010 METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2	
Reninguished By	Robert Crow	Print	Sign	Date/Time 13/09	Received By	Date/Time 02/2012	Sign	Date/Time 13/09	Matrix *
Reninguished By				Date/Time	Received By				
Reninguished By				Date/Time	Received By				
Reninguished By				Date/Time	Received By				
FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process)									
Disposed By Date/Time									

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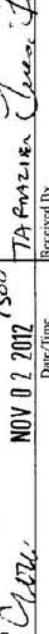
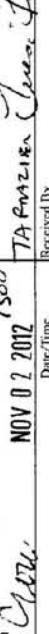
## Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST												
											C.O.C. # <b>W13-011-077</b>	
											Page 1 of 2	
Collector	Robert Crow	Contact/Requester	Karen Waters-Husted									
SAF No.	W13-011	Sampling Origin	Hanford Site									
Project Title	RCRA, NOVEMBER 2012	Logbook No.	HNF-N-506	<u>36 / 33</u>	Telephone No.	376-4650	Purchase Order/Charge Code	300071ES20	Ice Chest No.	N/A	Bill of Lading/Air Bill No.	N/A
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE	Offsite Property No.	N/A	Total Activity Exemption. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
Protocol	RCRA	Priority:	31 Days	PRIORITY	SPECIAL INSTRUCTIONS	Hold Time			Preservative			
FY12 and FY13 samples cannot be in the same SDG. Site Wk Generator Knowledge Information Form applies. The CACN for all analytical work at WSCF is 401641.												
POSSIBLE SAMPLE HAZARDS/REMARKS  *** Contains Reductive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)												
Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Hold Time	Total Activity Exemption	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Preservative		
B2MN32	7	N	W	11-2-12	c820	1x500-mL G	2008_HG-ICPMS	28 Days		HNO3 to pH <2		
B2MN32	1	N	W			1x500-mL G/P	2008_METALS_ICPMS_Antimony (1)	6 Months		HNO3 to pH <2		
B2MN32	N	W				1x500-mL G/P	2008_METALS_ICPMS_Arsenic (1)	6 Months		HNO3 to pH <2		
B2MN32	N	W				1x500-mL G/P	2008_METALS_ICPMS_Lead (1)	6 Months		HNO3 to pH <2		
B2MN32	N	W				1x500-mL G/P	2008_METALS_ICPMS_Selenium (1)	6 Months		HNO3 to pH <2		
B2MN32	N	W				1x500-mL G/P	2008_METALS_ICPMS_Tellurium (1)	6 Months		HNO3 to pH <2		
B2MN32	N	W				1x500-mL G/P	2008_METALS_ICPMS_Tin (1)	6 Months		HNO3 to pH <2		
B2MN32	N	W				1x250-mL G/P	2320_ALKALINITY_Alkalinity (1)	14 Days		Cool ~4C		
B2MN32	N	W				4500E-CN	Cyanide (1)	14 Days		NaOH to pH >=12		
B2MN32	N	W				1x250-mL P		6 Months		HNO3 to pH <2		
B2MN32	N	W				1x500-mL G/P	6010_METALS_ICP_Li+3 (18)	14 Days		HCl or H2SO4 to pH <2/Cool ~4C		
B2MN32	N	W				3x40-mL ags*	8260_VOA_GCMS_X COMMON	7/40 Days		Cool ~4C		
B2MN32	N	W				4x1-L ag	8270_SVOA_GCMS_X COMMON	28 Days		HNO3 to pH <2		
B2MN34	1	Y	W	11-2-12	0820	1x500-mL G	2008_HG-ICPMS	6 Months		HNO3 to pH <2		
B2MN34	1	Y	W	11-2-12	0820	1x500-mL G/P	2008_METALS_ICPMS_Antimony (1)					
Relinquished By	Print	Sign	Date/Time	Received By	Date/Time	Step	Date/Time	Matrix *				
Robert Crow	R. Crow		NOV 02 2012 13:00	TIA FNAZ 12-12			NOV 02 2012 13:00	S = Soil				
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	SE = Sediment				
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	SO = Solid				
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	SL = Sludge				
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	W = Water				
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	O = Oil				
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	V = Vegetation				
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	A = Air				
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	X = Other				
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure used in process)										Date/Time	
PRINTED ON 10/10/2012											A-6004-842 (REV 2)	

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## Chain of Custody

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST									
C.O.C. # <b>W13-011-077</b>									
Page 2 of 2									
Collector	Robert Crow	Contact/Requester	Karen Waters-Husted						
SAF No.	W13-011	Sampling Origin	Hanford Site						
Project Title	RCRA, NOVEMBER 2012	Logbook No.	HNF-N-506 <b>J6 / 33</b>						
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE						
Protocol	RCRA	Priority:	<b>31 Days</b>	<b>PRIORITY</b>	SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Preservative									
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 401547.									
POSSIBLE 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)									
Sample No.	Filter	Date	Time	No/Type Container	Sample Analysis	Holding Time			
B2MN34	Y	W	11-2-12	0820	1x500-mL G/P	200.8_METALS_ICPMS: Arsenic (1)	6 Months	HNO3 to pH <2	
B2MN34	Y	W	/	/	1x500-mL G/P	200.8_METALS_ICPMS: Lead (1)	6 Months	HNO3 to pH <2	
B2MN34	Y	W	/	/	1x500-mL G/P	200.8_METALS_ICPMS: Selenium (1)	6 Months	HNO3 to pH <2	
B2MN34	Y	W	/	/	1x500-mL G/P	200.8_METALS_ICPMS: Thallium (1)	6 Months	HNO3 to pH <2	
B2MN34	Y	W	/	/	1x500-mL G/P	200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2	
B2MN34	Y	W	11-2-12	0820	1x500-mL G/P	6010_METALS_ICP: List-3 (18)	6 Months	HNO3 to pH <2	

Relinquished By <b>Robert Crow</b>	Print <b>R. Crow</b>	Sign 	Date/Time <b>NOV 02 2012 13:00</b>	Received By <b>TA PMA 2148, Chester J. T. T.</b>	Date/Time <b>NOV 02 2012 13:00</b>	Sign 	Date/Time <b>NOV 02 2012 13:00</b>	Matrix *	
Relinquished By			Date/Time	Received By	Date/Time	Sign	Date/Time	S =	D =
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	St =	Drum Solids
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	SO =	Drum Liquids
Relinquished By			Date/Time	Received By	Date/Time		Date/Time	SL =	Tissue
FINAL SAMPLE DISPOSITION	Dispose Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time	PRINTED ON	PRINTED ON			WI =	Wine
								L =	Liquid
								O =	Vegetation
								A =	Other

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## Chain of Custody

## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # W13-011-085

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Collector	Robert Crow	Contact/Requester	Karen Waters-Husted
SAF No.	W13-011	Sampling Origin	Hanford Site
Project Title	RCRA, NOVEMBER 2012	Logbook No.	HNF-N-506 34 / 35
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE
Protocol	RCRA	Priority:	31 Days
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 (1990/1991)			

Sample No.	Filter *	Date	Time	No/Type Container	Sample Analysis	Holding Time	Preservative
B2MN54 1Q	Y	W	/1-2-/12	1/2/3	1x500-mL G 200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B2MN54	Y	W			1x500-mL G/P 200.8_METALS_ICPMS: Antimony (1)	6 Months	HNO3 to pH <2
B2MN54	Y	W			1x500-mL G/P 200.8_METALS_ICPMS: Arsenic (1)	6 Months	HNO3 to pH <2
B2MN54	Y	W			1x500-mL G/P 200.8_METALS_ICPMS: Lead (1)	6 Months	HNO3 to pH <2
B2MN54	Y	W			1x500-mL G/P 200.8_METALS_ICPMS: Selenium (1)	6 Months	HNO3 to pH <2
B2MN54	Y	W			1x500-mL G/P 200.8_METALS_ICPMS: Thallium (1)	6 Months	HNO3 to pH <2
B2MN54	Y	W			1x500-mL G/P 200.8_METALS_ICPMS: Tin (1)	6 Months	HNO3 to pH <2
B2MN54	Y	W			1x500-mL G/P 6010_METALS_ICP>List-3 (18)	6 Months	HNO3 to pH <2
B2MN52 8	N	W			1x500-mL G 200.8_HG - ICPMS	28 Days	HNO3 to pH <2
B2MN52	N	W			1x500-mL G/P 200.8_METALS_ICPMS: Antimony (1)	6 Months	HNO3 to pH <2
B2MN52	N	W			1x500-mL G/P 200.8_METALS_ICPMS: Arsenic (1)	6 Months	HNO3 to pH <2
B2MN52	N	W			1x500-mL G/P 200.8_METALS_ICPMS: Lead (1)	6 Months	HNO3 to pH <2
B2MN52	N	W			1x500-mL G/P 200.8_METALS_ICPMS: Selenium (1)	6 Months	HNO3 to pH <2
B2MN52	N	W			1x500-mL G/P 200.8_METALS_ICPMS: Thallium (1)	6 Months	HNO3 to pH <2

Relinquished By	Name	Date/Time	Received By	Date/Time	Printed	Date/Time	Received By	Date/Time	Matrix *
Robert Crow	R Crow	NOV 02 2012 13:00	Jessie	NOV 02 2012 13:00		NOV 02 2012 13:00			S = Soil
Relinquished By		Date/Time	Received By	Date/Time					SE = Sediment
Relinquished By		Date/Time	Received By	Date/Time					SO = Solid
Relinquished By		Date/Time	Received By	Date/Time					SL = Sludge
Relinquished By		Date/Time	Received By	Date/Time					W = Water
Relinquished By		Date/Time	Received By	Date/Time					O = Oil
Relinquished By		Date/Time	Received By	Date/Time					V = Vegetation
Relinquished By		Date/Time	Received By	Date/Time					A = Air
Relinquished By		Date/Time	Received By	Date/Time					X = Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g. Return to customer, per lab procedure, used in process)	Disposed By	Date/Time
PRINTED ON 10/10/2012			A-6004-842 (REV 2)

## Chain of Custody

## CH2MHill Plateau Remediation Company

Collector	Robert Crow	Contact/Requester	Karen Waters-Husted
SAF No.	W13-011	Sampling Origin	Hanford Site
Project Title	RCRA NOVEMBER 2012	Logbook No.	HNF-N-506 <u>36 / 23</u>
Shipped To (Lab)	Waste Sampling & Characterization	Method of Shipment	GOVERNMENT VEHICLE
Protocol	RCRA	Priority:	<b>PRIORITY</b>

## POSSIBLE SAMPLE HAZARDS/RI/ MARKS

\*\*\* Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR, but are not releasable per DOE Order 5400.5 (1990) 993)

## CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W13-011-085**

Page 2 of 2

Telephone No.	376-4650
Purchase Order/Charge Code	300071ES20
Ice Chest No.	N/A
Bill of Lading/Air Bill No.	N/A
Offsite Property No.	N/A
Total Activity Exemption Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Sample No.	Filter	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B2MN52	N	W	11-2 -12	12/13	1x500-mL G/P	200.8_METALS_ICPMS_Tin (1)	HNO3 to pH <2
B2MN52	N	W	/	/	1x250-mL G/P	2320_ALKALINITY_Alkalinity (1)	Cool~4C
B2MN52	N	W	/	/	1x250-mL P	4500E_CN_Cyanide (1)	NaOH pH >=12
B2MN52	N	W	/	/	1x500-mL G/P	6010_METALS_ICP_Lst-3 (18)	HNO3 to pH <2
B2MN52	N	W	/	/	3x40-mL Ag*	8260_VOA_GCMS_ix_COMMON	HCl or H2SO4 to pH <2/Cool~4C
B2MN52	N	W	11-2 -12	12/13	4x1-L Ag	8270_SVOA_GCMS_ix_COMMON	Cool~4C

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
Robert Crow	<i>R. Crow</i>		NOV 02 2012 13:20	TJ Fjord			NOV 02 2012 13:20	S = Soil
Relinquished By			Date/Time	Received By			Date/Time	DS = Drum Solids
Relinquished By			Date/Time	Received By			Date/Time	SE = Sediment
Relinquished By			Date/Time	Received By			Date/Time	SL = Sludge
Relinquished By			Date/Time	Received By			Date/Time	WI = Wine
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, test lab procedure, used in process)			Disposed By			Date/Time	L = Liquid
PRINTED ON	10/10/2012							O = Oil
								V = Vegetation
								A = Air
								X = Other

A 6004-842 (REV 2)  
Date/Time  
A 6004-842 (REV 2)  
Date/Time

REVISED121402 -